Delivery of Services

Specifications and Standards:

Service Delivery Agency

Schedule 1: Catch Effort Data Quality Specifications and Standards

Catch Effort Data Quality Specifications and Standards

Table of Contents

1. Overview

These specifications and standards are to be read as part of the Catch Effort Services specifications and form Schedule 1 of that document. They are intended to ensure that an appropriate level of data quality is obtained for catch effort information. They are based on a re-prioritisation of the catch effort validation rules and they incorporate a number of changes in both the rules themselves, including addition of new rules, and the standard to which the different rules are followed that were implemented between October 2000 and October 2001. The required level of quality for specific fields of information has been determined through examination of the Ministry's functions and a determination of the priority of the fields in relation to those functions.

It is important to note that these specifications and standards support the reporting framework as documented in the fisheries reporting regulations and the explanatory notes provided with catch effort forms. The permit holder is still legally obliged to follow the reporting framework, even if it exceeds these specifications. These specifications simply describe the minimum performance standards that are expected of the Service Delivery Agency (SDA) who is providing catch effort data entry and validation services for the Ministry of Fisheries.

2. Interpretation of the Specifications

The catch effort forms that permit holders return to the Ministry of Fisheries contain a large number of errors and omissions. The specifications provided in this document comprise the rule set against which these returns will be tested.

The SDA is tasked with contacting the permit holders concerned to request clarification or rectification of mistakes. The SDA cannot be made responsible for the final quality of the data provided by permit holders, but the SDA does have responsibility for identifying the permit holders' errors and giving the permit holders the opportunity to alter their declarations. If the permit holder continues to insist upon an apparently erroneous declaration then this is not the responsibility of the SDA. Hence, it is not appropriate to require that the SDA achieve 100% compliance with a particular validation rule. These data quality specifications are therefore of the form:

"the data must follow this rule OR a given procedure must be followed".

It is within the SDA's power to ensure that this specification is met 100% of the time. For every piece of data of this type either the rule must be followed or the proper procedure must have been followed. The procedures (referred to as Procedure A, B, or C) are described in Section 5.

For errors or omissions in fields such as dates, FIN numbers and weights, all contact with the permit holder must be in writing since data in these fields are likely to be used on occasions in formal proceedings such as evidence in court or to establish a catch history. Specifications for these fields refer to "Procedure A" (see Section 5.1). Other fields, such as effort fields, are less likely to be required in formal proceedings. Therefore it is unreasonable to expect the SDA to contact fishers about these errors in writing. These fields are of great importance for stock assessment and policy purposes, but it is reasonable for this information to be gathered from a telephone call or by email rather than in writing if the service provider feels that it would improve efficiency to do it this way. Specifications for these fields refer to "Procedure B" (see Section 5.2.). In addition to "Procedure A" and "Procedure B" follow ups, there are

some errors on some fields that do not require contact with the fishers at all. These are usually "errors" where the validation rule has detected something that is unlikely, but not impossible. In these cases the SDA must check that what has been entered into the database is in fact what was recorded on the form and make reasonable data interpretations. Otherwise, if the fisher made a definite and unambiguous declaration, then no further action is required (beyond setting an appropriate error status). These specifications refer to "Procedure C" (see Section 5.3).

3. Interpretation of the Standards

Catch effort information is an extremely large and complex data set. It is highly probable that there will always be insufficient resources for every error detected on every field to be followed up. In the current validation system, some errors are therefore sent to an error queue that will be acted upon by the SDA, and some errors are sent to a log where they are recorded but not acted upon.

The data quality specifications ensure that the most important errors on the most important fields are always followed up. To achieve this, the most important specifications have been given a standard (in the column headed "Standard") of 100%. This means that in 100 percent of cases, these data must meet the rule described in the specification, or, the procedure (A, B, or C) that was specified in the specification must have been followed.

There are other specifications that are not so crucial, but are sufficiently important for the Ministry to require that the data quality not fall any further than is currently being achieved. Usually, these specifications are for errors that are currently not acted upon. So, unless permit holders fill in their forms worse than they do now, these specifications should continue to require no resources to achieve. These types of specifications have been given a standard that reflects the current level of compliance with the relevant specifications[1] (as measured prior to any validation effort being expended). These standards are always greater than 0% and less than 100%. It should be noted that in some cases, these standards are only an approximation and may need to be refined with further analyses.

Other specifications are either completely out of date, or are of extremely low importance and the Ministry does not wish to expend resources to achieve them. These specifications have been given a standard of 0% in this document and the SDA is not expected to expend any resources on them.

Until these specifications and standards have been fully implemented, it will not be possible to completely determine whether some of these specifications and standards are unrealistic to achieve. A comment has been placed beside those specifications where this is most likely to be the case.

[1] There are 4 exceptions, in which the standard has been set at a higher level than is currently being achieved. In these cases, additional work will be required. A footnote has been added to the relevant standards to state where this has occurred. The actual standards that are currently being achieved are also provided in these footnotes.

4. Layout of the Specifications and Standards

The data quality specifications and standards begin with a definition of the three types of procedures (A, B, C) that must be conducted when a data item does not meet a specified rule. Then, there is one set of specifications for each type of catch effort form for both positive returns (fishing conducted, or landing made) and for "nil" returns. Specifications have been defined for each of the eight types of catch effort returns that currently exist. These are:

- Catch Effort Landing Return (CELR);
- Catch Landing Return (CLR);
- Trawl Catch Effort Processing Return (TCEPR);
- Tuna Longline Catch Effort Return (TLCER);
- Squid Jig Catch Effort Return (SJCER);
- Paua Catch Effort Landing Return (PCELR);
- Freshwater Eel Catch Landing Return (ECLR);
- Freshwater Eel Catch Effort Return (ECER)

The specifications for the high seas (HS) forms HS-CELR, HS-TCER and HS-TLCER are the same as the specifications for the CELR, TCEPR and TLCER respectively, except where noted in the specifications. Specifications have also been written for a new version of the TLCER return which is planned for introduction in December 2002.

The specifications for each type of form are arranged in the order that the relevant fields appear on the form. Each specification is stated in black, and may be followed with a brief explanation in blue of what this specification is for and why it is given the stated standard. Specifications or modifications to specifications that are planned but have not yet been implemented are stated in red.

5. Data Quality Specifications and Standards Procedures

The procedures are an important component of the data quality specifications and standards. All of the data quality specifications are of the form:

"the data must follow this rule OR a given procedure must be followed".

Furthermore, each specification refers to a specific procedure, these being, Procedure A, Procedure B, or Procedure C. These procedures are defined in sections 5.1, 5.2 and 5.3 respectively.

Since there is a "choice" of the data satisfying a given rule OR a given procedure being followed, a data item is only considered to be inconsistent with a specification when it does not meet the rule and the procedure has not been followed. The SDA must keep sufficient documentation (e.g. records of correspondence) to demonstrate that the procedure was followed correctly for those cases where the data does not meet the rule.

5.1 Procedure A

This procedure is required for fields that are of a nature that require the process to be managed to evidential standards. The principle feature of Procedure A is that corrections to returns must be provided in writing.

The required steps for Procedure A are provided in the following table. Some iterations of these steps may be required in certain circumstances. The procedure finishes at any step, once the error has been corrected.

Step	Action	Compulsory	Pre-requisites
1	Check entered data against the original form and correct the entry if the error was caused by the SDA.	Yes	
2	If the error is of a nature where it is reasonable to interpret what the permit holder meant, then the error can be corrected by interpretation.	No	Only permitted if the SDA has developed and documented a validation procedure for this specific type of interpretation and the Ministry of Fisheries has approved this validation procedure[2].
3	In certain circumstances specified by the Ministry of Fisheries in the document "Guidelines for MFish notification", notify the Ministry of the error and/or do not conduct further processing of the error.	Yes	This is only a required step when specifically requested by the Ministry. It is likely to be a rare event[2].
4	Write to the permit holder, providing details of the problem and a copy of the return that requires amendment. Where a fisher has given a species code that is reserved for research use only or the fisher has used the UNX code on a high seas return, the fisher should be provided with a copy of the form "Confirmation of Species Identification" for them to properly identify the species".	Yes	A record of correspondence must be kept and the "Fisher Diary" section of the catch effort system must be updated[2].

[2] This requirement is specified in the document "Standards and Specifications for Catch Effort Services" and is only repeated here for the sake of clarity.

5	Receive corrected, signed (or initialled) alterations from the permit holder. Correct the database according to the amended form, or, if the fisher confirmed the previously supplied information, record this as a comment in the database.	Yes	A record of correspondence must be kept and the "Fisher Diary" section of the catch effort system must be updated[2].

5.2 Procedure B

This procedure is required for fields that are of a nature where the true value is important (particularly for stock assessment or policy purposes) but that does not require the process to be managed to evidential standards. The principle feature of Procedure B is that corrections to returns can be made through informal contact with a fisher.

The Procedure B process may lead to changes in the database that have not been approved in writing by the fisher. Hence, this procedure is not specified for fields that are likely to be used in formal proceedings (e.g. court, catch history determinations) in relation to a permit holder.

The required steps for Procedure B are provided in the following table. Some iterations of these steps may be required in certain circumstances. The procedure finishes at any step, once the error has been corrected.

Step	Action	Compulsory	Pre-requisites
1	Check entered data against the original form and correct the entry if the error was caused by the SDA.	Yes	
2	If the error is of a nature where it is reasonable to interpret what the permit holder meant, then the error can be corrected by interpretation.	No	Only permitted if the SDA has developed and documented a validation procedure for this specific type of interpretation and the Ministry of Fisheries has approved this validation procedure[2].
3	In certain circumstances specified by the Ministry of Fisheries in the document "Guidelines for MFish notification", notify the Ministry of the error and/or do not conduct further processing of the error.	Yes	This is only a required step when specifically requested by the Ministry. It is likely to be a rare event[2].
4	Contact the permit holder by any means (e.g. phone, e-mail, or writing), and obtain the correct details or obtain verification that the details are correct.	Yes	A record of contact (including the method of contact and outcomes) must be kept and the "Fisher Diary" section of the catch effort system must be updated[2].
5	Correct the database according to the information obtained in step 4, or, if the fisher confirmed the previously supplied information, record this as a comment in the database.	Yes	A record of correspondence must be kept and the "Fisher Diary" section of the catch effort system must be updated[2].

5.3 Procedure C

This procedure is required for errors that need to be corrected for data entry mistakes, misinterpretations by the SDA, or where the error can be corrected by interpretation, but where contact with the fisher is either not appropriate or not necessary. The principle feature of Procedure C is that corrections do not extend as far as contact with the fisher.

The required steps for Procedure C are provided in the following table. The procedure finishes at any step, once the error has been corrected.

Step	Action	Compulsory	Pre-requisites
1	Check entered data against the original form and correct the entry if the error was caused by the SDA.	Yes	
2	If the error is of a nature where it is reasonable to interpret what the permit holder meant, then the error should be corrected by interpretation.	Yes	Requires that a validation procedure has been written for this specific type of interpretation and the Ministry of Fisheries has approved this validation procedure[2].
3	If the error remains after following the above steps, record this by setting the appropriate error status.	Yes	

6. Catch Effort Specifications and Standards

6.1. Specifications for information collected on a Catch Effort Landing Return

Field name on form	**Specification**	Standard
	1. Form structure must be correct for the form type (see Table 1 for details) otherwise Procedure A must be followed– this is only likely to occur if there are problems sending the form in via EDT	100%
	2. If the page is from a single page return then it must have some effort records (so that it is not a nil return) otherwise Procedure A must be followed. If the page is from a multi-page return then it must have some effort records or some catch records otherwise Procedure A must be followed. – For a nil return, the fisher must explicitly write "NIL" on the return. If there are no effort or landing records and the fisher has not explicitly indicated that it is a nil return then it should go back to the fisher for confirmation. Note that it is possible for a single page return to have reports of landing fish that had been retained on board or held in a holding receptacle, in which case there will genuinely be no effort associated. If a form has been incorrectly recorded as a non-nil return then this can be corrected without going back to the fisher.	100%
Form number	3. Form must not previously have been cancelled otherwise Procedure A must be followed- this is currently not validated using this mechanism, however all errors of this kind must be detected somehow	100%
First day of trip	4. Start date must be present and a valid date otherwise Procedure A must be followed-important field	100%
	5. Start date must not be before book was issued otherwise Procedure C must be followed-this is a quick check that the date has not been incorrectly entered. If the cause of the problem is that the book has been recently reissued to the fisher returning the form, then this error may be ignored.	100%
	6. Start and end dates of trip must not overlap other CELR returns (or CLR or CELR nil returns) by this client-vessel combination, unless they are all different pages of the same return (or unless the target species was crayfish or eels, where trips are poorly defined) otherwise Procedure A must be followed- this is an important check that something has not gone wrong with the dates. Note that eel fishing should now be reported on an ECER anyway.	100%
	7. Start date must be before earliest Electronic timestamp	100%

	otherwise Procedure A must be followed- consistency check on the validity of the date 8. Start date must not be after the last day of trip otherwise Procedure A must be followed- important to ensure that something has not gone wrong with the dates 9. Start date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100% 100%
Last day of trip	10. End date must be present (after derivations) and a valid date otherwise Procedure A must be followed-important field	100%
Landing date	11. Landing date must be present (after derivations) and a valid date otherwise Procedure A must be followed- important field 12. Landing date must be between 0 and 60 days after start of trip otherwise Procedure A must be followed- this is a range check on the length of trip. Longer trips are not considered likely 13. Landing date must not be more than 60 days after last effort (if there is any effort) otherwise Procedure A must be followed – this is a range check on the landing date. 14. Landing date must not be more than 10 days after last effort (if there is any effort) otherwise Procedure C must be followed – this is a range check on the landing date. 15. Vessel must be registered on date of landing otherwise Procedure C must be followed- this is a data entry check on the landing date to check that an incorrect date has not been entered by mistake 16. Landing with destination type L or W must not occur before end of trip otherwise Procedure A must be followed - it is possible for some types of landing (for example transhipments) to occur within a trip, but a landing to a LFR on shore or for sale at the wharf clearly marks the end of a trip	100% 100% 100% 100% 100% 100%
Vessel registration number	17. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid unless: • all effort on the form is associated with methods that do not have a vessel such as H and MH or • all effort on the form is associated with methods that may not require a vessel such as BS, DI, EP, FN, FP or HL and the fisher's FIN number or the word "NONE" have been entered in the vessel registration number field as a positive declaration that no vessel was used otherwise Procedure A must be followed – if the effort was using a non-vessel method then no vessel id is required. If the effort was using a method that may not require a vessel then a positive declaration is required that	100%

	no vessel was used. If the effort was by a method that does require a vessel then a vessel registration number is required. 18. Vessel must be registered for fishing throughout the trip otherwise Procedure A must be followed – the vessel should be registered from start date to end date of the trip 19. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed –-this is mainly to check for data entry errors, and does not require following up if there is in fact no error 20. If pair fishing, then the other vessel in the pair must report corresponding effort on the same form type otherwise Procedure A must be followed- this is likely to have many false errors	100% 100% 0%
Vessel name	21. The vessel name must agree with vessel id otherwise Procedure A must be followed-important check against the vessel id. If a vessel id is present the vessel name must be present and must match the vessel id. If the vessel id is missing, "NONE" or a FIN number then the vessel name should be blank.	100%
Vessel registration number of other vessel (if pair fishing)	22. The vessel id of the pair vessel must be valid otherwise Procedure A must be followed -pair vessel is reasonably important for correct measurement of catch and effort if pair fishing has occurred 23. The vessel id of the pair vessel must not be same as the vessel id of the vessel submitting the form otherwise Procedure A must be followed-the procedure should ask the validator to try to resolve the error without sending back, for example by determining whether there was in fact no pair fishing at all. There is an automatic derivation that removes the pair vessel id if it is the same as the vessel completing the form and if there was no pair fishing method used on the form. 24. The vessel id of the pair vessel must be registered at the time of fishing otherwise Procedure A must be followed- this is not really a problem for this form, and will be picked up when the other vessel submits its form	100% 100% 95%
Point of landing	25. For a non-high seas return the point of landing must be present otherwise Procedure A must be followed – important field, even though the data can be hard to interpret 26. For a non-high seas return the point of landing must have at least two characters otherwise Procedure A must be followed –if it is important that the landing be present, it must be important that it have some value other than a blank. A two character string is the smallest string that could conceivably convey information about the point of landing eg WN. An exception to this is that the character	100% 100%

	"T" has sometimes been used to indicate that a transhipment has occurred.	
Page (sequence)	27. Page (sequence) number must be valid otherwise Procedure A must be followed (these do not seem like very useful checks and perhaps should be removed altogether, except that we want to be able to detect gaps)	95%
	28. Page (sequence) number must be between 1 and 99 otherwise Procedure A must be followed	95%
	29. Page (sequence) number must not be greater than total page count otherwise Procedure A must be followed	95%
	30. Page (sequence) number must be present if page count is present otherwise Procedure A must be followed	95%
	31. Page sequence number must start at 1 and go to page count with no gaps otherwise procedure A must be followed – A gap in page sequence number may indicate that a page is missing which would be of vital importance to follow up. However it must be clear in the procedures manual that where this does not seem to be the case, then a follow up is not required.	100%
Of (count of how many pages)	32. Page count must be valid otherwise Procedure A must be followed	95%
	33. Page count must be between 1 and 99 otherwise Procedure A must be followed	95%
	34. Page count must be present if page sequence is present otherwise Procedure A must be followed (Page count is not quite as important as page sequence number for identifying missing pages, except as used with page sequence number to identify missing pages at the end of the sequence)	95%
Day and Month	35. The day and month of fishing must be present and a valid day month combination otherwise Procedure A must be followed- important field	100%
	36. The day and month of fishing must be before the earliest Electronic timestamp and between (or equal to) dates of start and end of trip otherwise Procedure A must be followed –important checks for validity of date.	100%
Method Code	37. The method code must be present and a valid method at time of fishing as specified in Table 2 otherwise Procedure A must be followed- on a CELR the method code is a very important field for determining what occurred and how to interpret the other fields on the form	100%
	38. The fishing must not be such that (in the particular circumstances as specified in Table 3) is not permitted on a CELR otherwise Procedure A must be followed.– For example, there is a set of vessels targeting snapper in SNA 1 which should not be reporting trawling on a CELR because they have been required to complete TCEPRs.	100%
	39. The method code must be consistent with presence/absence of pair vessel id otherwise Procedure A must be followed – we do not want to expend too much	15%

	validator resource on checking the pair vessel id field	
Position	40. The location of fishing must be present otherwise Procedure A must be followed- vital field	100%
	41. The location of fishing must be given in the correct format (ie statistical area or latitude/longitude) otherwise Procedure A must be followed-some methods may require positions given as latitudes and longitudes while others may require statistical areas. It is also possible for the Ministry to require particular fishers to provide latitude and longitude information	100%
	42. The statistical area given must be a valid statistical area otherwise Procedure A must be followed- this is a vital field, and must be correct. The area where fishing occurred is likely to be important information for Compliance as well as stock assessment.	100%
	43. If the statistical area is 001 and the permit holder's address is not in Northland then Procedure A must be followed – Statistical area 001 is often written down when the fisher meant FMA 1. Because statistical area 001 is in a remote area only a small proportion of the reported fishing within this area actually occurred there. This rule checks all fishing reported as occurring within statistical area 001 except when it was done by those few fishers who actually live in that area and routinely fish there.	100%
	44. If the location is given as a latitude and longitude then it must be a reasonable fishing location and not inland otherwise Procedure A must be followed unless the return is for high seas fishing in which case Procedure C must be followed- this is an important field, and this checks for unreasonable results (the current definition of reasonable locations is not robust for all high seas fishing, so for these forms the rule is only used as a check). The precise definition of what are reasonable fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The "defined grids" are obtained as follows: • The grid is not a totally land bound grid; AND • The grid: ⇒ Is within the New Zealand continental shelf (as defined by the 1,000m contour); OR ⇒ Is within some large southern ocean grids (south of latitude 62S) that have been drawn around fishing that has been conducted in the southern ocean over the last three years; OR ⇒ Is a grid that had been commonly fished or near areas that had been commonly fished (according	100%

	to CELR returns) in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions. 45. If the location is given as a latitude and longitude then it must be within likely fishing locations otherwise Procedure C must be followed– this is a range beyond which it is unlikely that fishers will fish, however it is not impossible, so this is just used for a quick check to confirm what is actually written on the form. The precise definition of what are likely fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The "defined grids" are obtained as follows: • The grid is not totally land bound AND • The grid ⇒ Is within some large southern ocean grids (south of latitude 62S) that have been drawn around fishing that has been conducted in the southern ocean over the last three years; OR ⇒ Is an area that had been commonly fished or near areas that had been commonly fished (according to CELR returns) in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions. These "commonly fished" areas used for this check are a subset of the "commonly fished" areas used for the procedure A check. 46. If the location is given as a statistical area then the minimum distance (without crossing land) between this statistical area and the previous reported statistical area on this form must not be more than 160 n.mile otherwise Procedure C must be followed – it is unreasonable for a vessel to move from statistical area 005 to 050 from one shot to the next, so this should be a good way to detect data entry errors. 47. If the location is given as a latitude and longitude then the displacement between this position and the last reported position on this form must not be more than 215 n. miles multiplied by the time in days between the two position reports otherwise Procedure A must be followed –this is to detect errors which imply unrealistic vessel movements. This allows a maximum travel of 215 n. miles per day.	100% 100% 100%
Effort data Time	See method specific specifications below	
Effort data A	See method specific specifications below	
Effort data B	See method specific specifications below	
Effort data C	See method specific specifications below	

Effort data D	See method specific specifications below	
	48. For Lining methods (BLL, SLL, DL, TL), require:	
	a) Total hook number must be present in effort column (e.c.)A otherwise Procedure B must be followed-this is a primary effort field for this method and it is important that it be provided accurately. However, because it mainly of interest for stock assessment, a phone call to contact the fisher is all that is necessary.	100%
	b) Total hook number must be a valid number otherwise Procedure B must be followed- primary effort field	100%
	c) Total hook number should be within range of possible values (dependent on the method) as specified in Table 4 otherwise Procedure B must be followed- this is a range beyond which it is believed to be impossible that the hook number could really fall, so it is reasonable to contact the fisher to confirm any other values.	100%
	d) Total hook number should be within range of likely values (dependent on the method) as specified in Table 4 otherwise Procedure C must be followed-this is a range beyond which it is possible but not likely that the hook number could really fall, so it will be used as a check for data entry errors.	100%
	e) Number of sets must be present in ec B otherwise Procedure B must be followed- this is not a primary effort field for this method, but we do not want to discourage fishers from providing this information	90%
	f) If present, the number of sets must be a valid number otherwise Procedure C must be followed- if the data is provided, we do not want incorrect data entry to destroy its usefulness. This rule asks for a quick data entry check on invalid numbers.	100%
	g) If present, the number of sets should be within range (dependent on the method) as specified in Table 4 otherwise Procedure C must be followed-similarly a quick data entry check on out of range numbers	100%
	h) The number of hooks must be greater than the number of sets, otherwise Procedure B must be followed – if the number of sets is greater than the number of hooks, then the columns have clearly been misused.	100%
	i) There must be a NULL in e.c. C otherwise Procedure B must be followed-this should be null, but we do not have the resources to follow up every case. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education.	90%[3]
	j) There must be a NULL in e.c. D otherwise Procedure B must be followed- similarly this should be null, and fisher education is needed for fishers who	90%

[3] The current standard achieved on this is only 77% but we believe that a fisher education campaign will allow 90% to be quickly achieved.

	systematically enter something in this field.	
	k) There must be a NULL in fishing duration otherwise Procedure B must be followed- because of the design of the forms, fishers may fill this in even though it is not required.	0%
	Ø For Trawling/Dredging methods (BT, BPT, MW, MPT, D or MH) require:	
	a) Number of shots must be present in e.c. A (unless the method is MH) otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate. For mechanical harvesting (MH) the concept of a shot is not relevant.	100%
	b) The number of shots must be a valid integer (except for MH) otherwise Procedure B must be followed- primary effort field	100%
	c) Number of shots must be within possible range specified in Table 4 (except for MH) otherwise Procedure B must be followed- this is a range beyond which the number of shots is implausible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	d) Number of shots must be within likely range specified in Table 4 (except for MH) otherwise Procedure C must be followed-this is a range beyond which the number of shots is possible but unlikely, and this will only be used as a data entry error check	100%
	e) Wing spread or dredge width must be present in e.c. B otherwise Procedure B must be followed-this is not a primary effort field for these methods, but we do not want to discourage fishers from providing this useful information	95%
	f) If present, wing spread or dredge width must be a valid number or Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	g) If present the width must have no more than 1 decimal place otherwise Procedure B must be followed- this is not an important check on this field, but a large number of decimal places would probably indicate an error	95%
	h) Width must be in range as specified in Table 4 otherwise Procedure C must be followed-this is not a primary effort field, but it is still worth checking that the data is within a reasonable range	100%

[4] The current standard achieved on this is only 64% but we believe that a fisher education campaign will allow 90% to be quickly achieved.
[5] The current standard achieved on this is only 65% but we believe that a fisher education campaign will allow 90% to be quickly achieved.
[6] The current standard achieved on this is only 68% but we believe that a fisher education campaign will allow 90% to be quickly achieved.

	i) Headline height must be present in e.c. C (except for methods D or MH) otherwise Procedure B must be followed- this is not a primary effort field for these methods, but we do not want to discourage fishers from providing this useful information	95%
	j) If present, headline height must be a valid number (except for methods D or MH) otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	k) If present, height must have no more than 1 decimal place (except for methods D or MH) otherwise Procedure B must be followed- this is not an important check on this field, but a large number of decimal places would probably indicate an error	95%
	l) If present, height must be in range specified in Table 4 (except for methods D or MH) otherwise Procedure C must be followed-this is not a primary effort field, but it is still worth checking that the data is within a reasonable range	100%
	m) Wingspread must be greater than or equal to the headline height otherwise Procedure B must be followed if the headline height is greater than the wingspread, then the columns have probably been misused	95%
	n) There must be a NULL in e.c. D otherwise Procedure B must be followed-this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education.	90%
	o) The fishing duration must be present in the fishing duration column otherwise Procedure B must be followed- this is important information for this method group and should be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	p) Fishing duration must be a valid number otherwise Procedure B must be followed –important field	100%
	q) Fishing duration must be within possible range as specified in Table 4 otherwise Procedure B must be followed- this is a range beyond which the fishing duration is implausible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	r) Fishing duration must be within likely range as specified in Table 4 otherwise Procedure C must be followed –it is possible but not likely for a vessel to fish outside this range, so if reported, a data entry check will be done	100%
	Ø For Seining methods other than PS (DS, DPS, L, BS, RN,	

	DPN, SCN) require:	
	a) The number of sets or shots in the day must be present in e.c. A otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	b) The number of sets or shots in the day must be a valid integer otherwise Procedure B must be followed- primary effort field	100%
	c) Number of sets should be within range (dependent on the method) as specified in Table 4 otherwise Procedure B must be followed-this is a range that beyond which the number of sets is considered to be implausible, so that contact with the fisher is justified	100%
	d) Number of sets must be within likely range as specified in Table 4 otherwise Procedure C must be followed – this is a range beyond which the number of sets is unlikely but not impossible, so a quick check for data entry errors is warranted	100%
	e) Total net length must be present in e.c. B unless the method is DPN or SCN otherwise Procedure B must be followed- this is not a primary effort field for these methods, but we do not want to discourage fishers from providing this useful information	70%
	f) If present, total net length must be a valid number (except for DPN and SCN) otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	g) If present, total net length should be within range as specified in Table 4 (except for DPN and SCN) otherwise Procedure C must be followed this is not a primary effort field, but it is still worth checking that the data is within a reasonable range	100%
	h) There must be a NULL in e.c. C otherwise Procedure B must be followed-this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education.	90%[4]
	i) There must be a NULL in e.c. D otherwise Procedure B must be followed-this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education.	90%
	j) There must be a NULL in fishing duration otherwise Procedure B must be followed- because of the design of the forms, fishers may fill this in even though it is not required.	0%

	Ø For PS method require: a) Number of sets or shots in the day must be present in e.c. A otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	b) The number of sets or shots in the day must be a valid integer otherwise Procedure B must be followed- primary effort field	100%
	c) Number of sets should be within range (dependent on the method) as specified in Table 4 otherwise Procedure B must be followed- this is a range beyond which the number of sets is implausible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	d) Number of sets must be within likely range as specified in Table 4 otherwise procedure C must be followed – this is a range beyond which the number of sets is considered unlikely, but not impossible, so it is reasonable to check for data entry errors	100%
	e) The total net length must be present in e.c. B otherwise Procedure B must be followed- this is not a primary effort field for these methods, but we do not want to discourage fishers from providing this useful information	95%
	f) If present, the total net length must be a valid number otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	g) If present, the total net length should be within range as specified in Table 4 otherwise Procedure C must be followed this is not a primary effort field, but it is still worth checking that the data is within a reasonable range	100%
	h) Call sign of spotter plane must be present in e.c. C otherwise Procedure B must be followed- this is not a primary effort field for these methods, but we do not want to discourage fishers from providing this useful information	85%
	i) Valid Sea surface temperature must be present in e.c. D otherwise Procedure B must be followed- this is not considered reliable information because of unknown calibration details	0%
	j) Temperature must have no more than one decimal place otherwise Procedure C must be followed- unreliable	0%
	k) Temperature must be in range 4-24 degrees otherwise Procedure C must be followed- unreliable	0%

	l) There must be a NULL in fishing duration otherwise Procedure B must be followed- because of the design of the forms, fishers may fill this in even though it is not required.	0%
	Ø For potting methods (CP, RLP, FP, FN, SCP, CRP or OCP) require:	
	a) The total number of pot lifts must be present in e.c. A otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	b) The total number of pot lifts must be a valid integer otherwise Procedure B must be followed-primary effort field	100%
	c) Number of pot lifts must be in possible range specified in Table 4 otherwise Procedure B must be followed- this is a range beyond which the number of pots is not possible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	d) Number of pot lifts must be in likely range specified in Table 4 otherwise Procedure C must be followed-this is a range beyond which the number of pots is possible but unlikely, and this will only be used as a data entry error check	100%
	e) The number of pots in the water at midnight must be present in e.c. B otherwise Procedure B must be followed- this is not a primary effort field for these methods, but we do not want to discourage fishers from providing this useful information	90%
	f) If present, the number of pots in the water at midnight must be a valid integer otherwise Procedure B must be followed- not a primary effort field but potentially useful information	95%
	g) If present, the number of pots in the water must be within range specified in Table 4 otherwise Procedure B must be followed- not a primary effort field, but potentially useful information	95%
	h) There must be a NULL in e.c. C otherwise Procedure B must be followed this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education.	90%
	i) There must be a NULL in e.c. D otherwise Procedure B must be followed – this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education.	90%
	j) There must be a NULL in fishing duration otherwise Procedure B must be followed- because of the design of the forms, fishers may fill this in even though it is	0%

	not required.	
	Ø For Handgathering and diving methods (H and DI) require	95%
	a) The number of people gathering or diving must be present in e.c. A otherwise Procedure B must be followed- not a primary effort field, but potentially useful information	
	b) If present, the number of people gathering or diving must be a valid integer otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	c) If present, the number of people should be in range specified in Table 4 otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	d) There must be a NULL in e.c. B otherwise Procedure B must be followed- this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education	90%
	e) There must be a NULL in e.c. C otherwise Procedure B must be followed- this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education	90%
	f) There must be a NULL in e.c. D otherwise Procedure B must be followed- this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education	90%
	g) The duration must be present in fishing duration otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	h) The fishing duration must be a valid number otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	i) The fishing duration must be in possible range as given in Table 4 otherwise Procedure B must be followed- this is a range beyond which the fishing duration is implausible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	j) The fishing duration must be in likely range as given in Table 4 otherwise Procedure C must be followed- this is a range beyond which the fishing duration is considered unlikely, but not impossible, so it is	100%

	reasonable to do a quick check for data entry errors	
	Ø For passive net methods (DN, PSN and SN) require	
	a) Total net length must be present in e.c A otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	b) Total net length must be valid otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	c) Total net length must be in possible range specified in Table 4 otherwise Procedure B must be followed- this is a range beyond which the total net length is implausible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	d) Total net length must be in likely range specified in Table 4 otherwise Procedure C must be followed –this is a range beyond which the total net length is unlikely but not impossible, so it is reasonable to do a quick check for data entry errors	100%
	e) There must be a NULL in e.c. B otherwise Procedure B must be followed- this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education	90%[5]
	f) The mesh width must be present in e.c. C otherwise Procedure B must be followed - not a primary effort field, but potentially useful information	90%
	g) If present, the mesh width must be valid otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	h) If present, the mesh width must be in likely range specified in Table 4 otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	i) If present, the mesh width must have only 1 decimal place. otherwise Procedure B must be followed- this is not an important check on this field, but a large number of decimal places would probably indicate an error	95%
	j) There must be a NULL in e.c. D otherwise Procedure B must be followed- this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education	90%[6]

	k) The fishing duration must be present in fishing duration otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	l) The fishing duration must be valid otherwise Procedure B must be followed- primary effort field	100%
	m) The fishing duration must be in possible range specified in Table 4 otherwise Procedure B must be followed- this is a range beyond which the fishing duration is implausible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	n) The fishing duration must be in likely range specified in Table 4 otherwise Procedure C must be followed – this is a range beyond which the fishing duration is unlikely but not impossible, so it is reasonable to do a quick check for data entry errors	100%
	Ø For other lining methods (HL,T,PL) require:	
	a) The maximum number of lines must be present in e.c. A otherwise Procedure B must be followed-this is not a primary effort field, but contains useful information	90%
	b) If present, the maximum number of lines must be valid otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	c) If present, the maximum number of lines must be in range specified in Table 4 otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	d) The maximum number of hooks must be present in e.c. B otherwise Procedure B must be followed- this is a primary effort field for this method group and must be reported correctly. However since it is primarily of use for stock assessment, Procedure B seems appropriate	100%
	e) The maximum number of hooks must be valid otherwise Procedure B must be followed-primary effort field	100%
	f) The number of hooks must be in possible range specified in Table 4 otherwise Procedure B must be followed- this is a range beyond which the number of hooks is implausible, so it would be reasonable to contact the fisher to ask them to confirm the number	100%
	g) The number of hooks must be in likely range specified in Table 4 otherwise Procedure C must be followed – this is a range beyond which the number of hooks is unlikely but not impossible, so it is reasonable to do a quick check for data entry errors	100%

	h) The maximum number of lines must not exceed the maximum number of hooks otherwise Procedure B must be followed- if the number of lines is more than the number of hooks then the columns have definitely been misused	100%
	i) There must be a NULL in e.c. C otherwise Procedure B must be followed- this should be null. Perhaps a routine check could be run periodically to detect fishers who systematically enter something in this field, so they can be contacted for fisher education	90%
	j) There must be a NULL in e.c. D otherwise Procedure B must be followed – as above, should be null	90%
	k) Total catching time must be present in fishing duration otherwise Procedure B must be followed-this is not a primary effort field, but contains useful information	90%
	l) If present, total catching time must be a valid time otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
	m) If present, total catching time must be in likely range specified in Table 4 otherwise Procedure C must be followed- if fishers have provided this information we do not want a data entry error to destroy its usefulness, so this is a quick check on data entry	100%
Target species	49. Target species must be present otherwise Procedure A must be followed-important field	100%
	50. Target species must be an ITQ species or a non-ITQ species that the permit holder has a permit to target in that area otherwise Procedure A must be followed -the procedure in this case would include checking for data entry or interpretation errors and if requested contacting compliance instead of the fisher. Ideally the target species would be compared with the list of non-ITQ species that the permit holder actually has a permit to target. However, if this information is not available, the target species could be compared with the generic list of non-ITQ species for which a permit to target can be issued in each area. This generic list is in Table 5.	100%
	51. Target species code must be a valid or passable code for use as a target species (usage code T or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed– this check is less specific than the previous check, and is put in for consistency with a check on the species caught. There should be no way for this check to be triggered without the previous check being triggered. Species codes with usage code T are valid codes for commercial species that would be expected in this field. Species codes with usage code P are codes for unusual species which are acceptable and do	100%

	not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	
	52. Target species code must be a valid code for use as a target species (usage code T and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed. – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check.	100%
	53. The target species must be compatible with the type of statistical area otherwise Procedure A must be followed – for example, an CRA statistical area may only be used when targetting CRA or PCH	100%
	54. The target species must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure A must be followed-if the method/species combination is impossible or unreasonable, for example, the dredging method for paua, then it should be sent back to the fisher for correction or clarification.	100%
	55. Target species must have an associated estimated catch after approved derivations (this is to ensure that data entry or bad handwriting has not missed the target species from the list of estimated catches) except when: • the total catch is zero or • there were 4 or fewer species reported caught and the sum of the estimated catches is within 20% of the total catch or • there were 5 species reported caught and the sum of the estimated catches is less than the total catch or • there is an associated estimated catch for another species of the same group (see Table 8) otherwise Procedure A must be followed –Generally this would not require sending back unless it seemed that the "total catch" column was being used to store the catch of the target species. This would generally be indicated by the sum of the estimated catches not equalling the total catch.	100%
Total (kg)	56. Total catch weight must be a valid weight otherwise Procedure B must be followed – important field for telling us about catches beyond the top 5 species	100%
	57. Total catch weight must have correct format (no more than 2 decimal places) otherwise Procedure C must be followed- if there are many decimal places then there has probably been an error, possibly the misinterpretation of a comma as a decimal place	100%
	58. Total catch weight must be greater than or equal to zero and less than or equal to the maximum for this method and formtype as shown in Table 9 otherwise Procedure C must be followed-must be in a reasonable range	100%
	59. Total catch weight must not be greater than the sum of estimated catches (by more than 40% and 100kg) or less	100%

	than the sum of estimated catches (by more than 20% and 100kg) unless the target species is one where the estimated catches are given in units other than greenweight (such as tuna species) otherwise Procedure C must be followed –if the total catch is not near to the sum of the estimated catches, it may be that the total catch column is being mis-interpreted or that some estimated catches are missing. For tuna species, OYS and SCA the estimated catches are not in units of greenweight and fishers may not realise that the total greenweight column should be a simple sum of the estimated catches anyway.	
	60. If landing information is on the form then either a total catch or some species weights must be present otherwise Procedure B must be followed- this specification is not important	0%
Species Code	61. Species caught must be a valid or a passable code for use on the effort part of the form (usage code E or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed – Species codes with usage code E are valid codes for commercial species that would be expected on the effort part of the form. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	100%
	62. Species caught must be a valid code for use on the effort part of the form (usage code E and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check.	100%
	63. Species caught must not be duplicated within species list otherwise Procedure A must be followed -This is to detect data entry errors or cases where the fisher has reported more than required, for example both a weight and a number of fish. The problem should be resolved from the form if possible.	100%
	64. Species caught must be present if estimated catch is present otherwise Procedure A must be followed -again, this is an important error to follow up, but in many cases the problem should be resolved from the form	100%
	65. The species caught must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed- if the method/species combination is impossible or unreasonable, for example, the dredging method for paua, then it is worth a check.	100%
Weight (kg)	66. Estimated quantity must be valid otherwise Procedure A must be followed -this is an important field for stock	100%

	assessment and requires validation	
	67. Estimated quantity must be of correct format (no more than 2 decimal places) otherwise Procedure C must be followed –just a check for data entry or interpretation errors, since a fisher is unlikely to make an estimate that is accurate to 3 decimal places. A comma may have been misread as a decimal place, changing the figure by 3 orders of magnitude	100%
	68. Estimated quantity must be greater than or equal to zero and less than the maximum for that species/method combination as specified in Table 10 otherwise Procedure A must be followed -if the estimated catch is really impossible, then the form should be sent back to the fisher	100%
	69. Estimated quantity must be greater than or equal to zero and less than the likely maximum for that species/method combination as specified in Table 10 otherwise Procedure C must be followed -if the estimated catch is an unlikely but not impossible figure, then the form should be checked	100%
	70. Estimated quantity must be present if species code is present otherwise Procedure A must be followed -this is of some importance, but should be resolved from the form if at all possible	100%
	71. If total catch is present, then at least one estimated catch must be present (after allowed derivations) otherwise Procedure A must be followed -if the fisher has filled in a total catch but no estimated catches, it really must be investigated	100%
Fishstock (Species/Area)	72. Fishstock code must be present and valid otherwise Procedure A must be followed-important field	100%
	73. Fishstock code must have been valid at time of fishing otherwise Procedure A must be followed-important field	100%
	74. Fishstock code must be for a species with a valid or a passable code for use on the landing part of the form (usage code L or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed – Species codes with usage code L are valid codes for commercial species that would be expected on the landing part of the form. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	100%
	75. Fishstock code must be for a species with a valid code for use on the landing part of the form (usage code L and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check	100%
	76. Unless this is a high seas return or a multiple page form,	100%

	all species listed in the estimated catch part of the form must be listed in the landed part of the form (unless the species is part of a species group, as specified in Table 8, in which case the species code for the species group may be used instead) otherwise Procedure A must be followed.- this is likely to lead to a large number of errors, particularly where minor species are not reported on the landing part of the form. Therefore species present in the estimated catch part of the form in a quantity of less than 10kg need not be returned to the fisher. However, the information is of importance, particularly for developing a catch history for minor species or for monitoring environmental performance.	
	77. The fishstock must be consistent with the statistical area that this species was reported caught in otherwise Procedure A must be followed–this is considered to be a difficult validation rule to follow up, as it may require comparison of a number of forms.	100%
	78. The fishstock must be consistent with the method used to take this species otherwise Procedure A must be followed – this is for those species where there are fishstocks that specify the method to be used to take the fish. For example KAH1P must be used where the fish are taken with purse seining, and KAH1 must be used when the fish are taken using some other method. Again, this would be a difficult validation rule to follow up, and we have not given it high priority. However it may be important for monitoring some competitive catch quotas, and could be given higher priority in future.	0%
Landed state	79. The landed state must be present and a valid code otherwise Procedure A must be followed –important field	100%
	80. The landed state must be a valid landed state code at the time of landing and must be either a gazetted state code or an Admin state code that was valid at the time of landing (as listed in Table 11) otherwise Procedure A must be followed-important field and this should be correct. However, there should be some automatic derivations allowed, for example deriving a “Food” or “Disc” code to “GRE”.	100%
	81. The landed state must be consistent with species (ie this species/state code combination must exist) otherwise Procedure A must be followed- - the conversion factors table has been revised so that all valid state codes for any species (QMS or non-QMS) should be in this table	100%
	82. If this is an additional state code (as listed in Table 13), then there must also be a record for the same species in the same landing with a primary state code (unless the species code is OFF and the state code is MEB) otherwise Procedure A must be followed. –the primary state fish does not need to be landed within the same landing, but it	100%

	should at least be recorded as retained on board. Offal is a place-holder species code that may be used with the additional state code MEB (Fish meal by-product). 83. If the destination type is A or D then the state code should be GRE otherwise Procedure C must be followed– it is likely that fish that is accidentally lost will be green, but it is possible that they have been processed before being lost. If this is the case, then we want to know. However it is useful to check whether an error has occurred. Under the Fisheries (Reporting) Regulations 2001 destination type H was changed to include fish that was lost from any holding receptacle including (for example) a freezer. Therefore fish with destination type H can now be of any state.	100%
Containers-Number	84. The number of containers must be a valid number otherwise Procedure C must be followed –if this data is given to us, we want to check that it has not been entered incorrectly 85. The number of containers must be in range 0-50 000 otherwise Procedure C must be followed – again, just a data entry check 86. The number of containers must be present unless the state code is an additional state code or the greenweight is present otherwise Procedure A must be followed – We are not that interested in the number of containers except where that is the only information available to determine the greenweight, and then it becomes very important 87. For destination types other than A and D the container details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification.	100% 100% 100% 0%
Containers-Type	88. The type of container must be a valid type of unit (as listed in Table 12) otherwise Procedure A must be followed –This information will still be available on the form for use in the field by Fisheries Officers, but we do not feel that it warrants validator resource 89. For destination types other than A and D the container details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification 86.	0% 0%
Containers-Content Weight	90. The container content weight must be a valid number otherwise Procedure C must be followed – if this data is submitted, we want to ensure that it has been entered correctly 91. The container content weight must be of correct format (no more than 1 decimal places) otherwise Procedure C must be followed – if this data is submitted, we want to ensure that it has been entered correctly 92. The container content weight must be between 0.1 and 5 000kg otherwise Procedure C must be followed – just for	100% 100% 100%

	a data entry check 93. The container content weight must be within correct range for the type of unit (as listed in Table 12) otherwise Procedure C must be followed – because the type of container is not to be followed up, neither will this one 94. Must be present unless the state code is an additional state code or the greenweight is present or the destination type is F otherwise Procedure A must be followed– We are not that interested in the weight of containers except where that is the only information available to determine the greenweight, and then it becomes very important 95. For destination types other than A and D the container details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification.	0% 100% 0%
Quota registration no. fish caught against	96. For ITQ species where the fishstock is not Extra-territorial, then a valid QRN id must be entered otherwise Procedure A must be followed –The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE. 97. The QRN must be one that this permit holder has fished against the quota of previously (within the past 12 months) otherwise Procedure C should be followed–The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE.. 98. The QRN must be the permit holder or a QRN with whom this permit holder has a valid fishing against quota agreement otherwise Procedure A should be followed– The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE. 99. If not ITQ then the QRN id may be blank, but if present it must be valid otherwise Procedure A must be followed - The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE.	0% 0% 0% 0%
Destination type	100. Must be present and valid otherwise Procedure A must be followed- important field for determining how a particular parcel of fish should be counted or tracked 101. For destination type D, species should not be ITQ otherwise Procedure C must be followed –it is not permitted to discard ITQ species. However, this is not a major problem for data quality and will be left for Compliance to follow up as they see fit. 102. For destination type A, species should not be non-ITQ otherwise Procedure A must be followed – again, this is not seen to be a major problem for data quality. 103. For destination types other than A and D the container	100% 100% 0% 0%

	details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification.	
	104. For destination types A and D the container details (number, type and weight) should be null otherwise Procedure A must be followed –we would rather have this information than not, especially if there is no greenweight information available.	0%
	105. For destination type C the QRN must be for an appropriate Crown account otherwise Procedure C should be followed – Destination type C was removed under the Fisheries (Reporting) Regulations 2001	0%
Destination LFR no. or vessel reg no.	106. For destination types A,B,D,E,H,R,O, P, Q, F and U the destination number should be empty (although the vessel's own vessel id is acceptable) otherwise Procedure C must be followed – we are not usually concerned if the fisher gives extra information that is not required. This check may be useful however to discover that a code has been misused or misentered. On the other hand, it may just cause a large number of false errors where the LFR number has been filled in down the page, and some of the rows actually have one of these non landed codes. Whether or not it is worthwhile depends on the proportion of false errors generated and the time taken to deal with each one.	100%
	107. For destination type L the destination should be a valid client number that is an LFR otherwise Procedure A must be followed- important to be able to track fish and compare data between systems. Where fish has been seized, the fisher may not know the LFR to which the fish has been sent.	100%
	108. For destination type L the LFR must be an LFR that this permit holder has landed to within the past year otherwise Procedure C must be followed – this may be a useful check to identify mistakes in the LFR code. There will inevitably be a small number of false errors the first time that each permit holder lands to a new LFR.	100%
	109. For destination type T the destination should be a valid registered vessel that is not the same as the vessel on the form otherwise Procedure C must be followed –in some cases the vessel does not need to be registered, but this is a quick check in case there was a data entry error on the vessel id.	100%
	110. The transhipment vessel must be registered in the same region as the vessel landing the fish (this is to ensure that an incorrect vessel id has not been entered) otherwise Procedure A must be followed –this was potentially a useful check if the vessels are small local vessels, but these days, it is probably not a useful check	0%
	111. For destination type W then if a valid client number	0%

	has been entered, then this client must have a role of "wharf seller" otherwise Procedure A must be followed – this is inconsistent with the explanatory notes. 112. For destination type S the LFR number should be for a regional office otherwise Procedure C must be followed – seized fish may be sent by the fisheries officer to any LFR	0%
Greenweight (kilograms) when advised by LFR	113. For all destination types the greenweight must be present unless the state code is one of the state codes listed in Table 13 otherwise Procedure A must be followed – vital information for determining total landings	100%
	114. For additional state (Table 13) codes greenweight should be null otherwise Procedure A must be followed-	100%
	115. Greenweight must be a valid weight otherwise Procedure A must be followed –important field	100%
	116. Greenweight must be greater than or equal to zero and less than the maximum for this species as specified in Table 14 otherwise Procedure A must be followed – if this greenweight is not possible for this species then it should be sent back to the fisher for correction	100%
	117. Greenweight must be greater than or equal to zero and less than the likely maximum specified in Table 14 for this species otherwise Procedure C must be followed – if this greenweight is unlikely for this species, then it should at least be checked to see whether a data entry error or misinterpretation (for example the interpretation of a decimal point as a comma) has occurred	100%
	118. For destination type W the greenweight must be no more than 150kg otherwise Procedure C must be followed – Section 191(2) a of the Fisheries Act 1996 says that wharf sales should be no more than 10kg for any species (with an even lower limit for shellfish). Fishers may make a number of sales at the same time and report them in total, but even so very large catches are likely to be errors.	100%
	119. Greenweight must have no more than 2 decimal places otherwise Procedure C must be followed – it does not matter how many decimal places a fisher reports. However, a large number of decimal places frequently indicates that a comma has been misread as a decimal point, which leads to a greenweight which is in error by a factor of 1000. This is probably worth a quick check. Ideally, we would like to solve this problem by pre-printing the decimal point on the form.	100%
	120. The greenweight should approximately equal the number of units times the weight of each unit times the conversion factor otherwise Procedure A must be followed. The exceptions to this are that: Ø if the greenweight is small (specified in Table 15a) and the calculated weight is small the check should not be done – this is so that validator resource is not wasted following up very minor discrepancies. However, it is important that	100%

	discrepancies that lead to the reduction of the greenweight (for example 26000 being misread as 26.000) be detected. Therefore, both the greenweight and the calculated weight must be small for the check to be avoided. Ø When the ratio of the greenweight to the content weight is about one (between 0.5 and 1.5) the check should not be done – it is common (particularly for tuna fisheries) for fishers to enter what appears to be an estimate of the total greenweight in the "content weight" field. This misunderstanding does not warrant a form being a returned to the fisher Ø species/state code combinations listed in Table 15b do not use the conversion factor– this is because scallops are reported in meatweight rather than greenweight. Ø The check need not be done for Foveaux strait dredge oysters – Foveaux Strait dredge oysters are supposed to have a greenweight as if each oyster weighed 1kg. It may be best not to do the check for this species The tolerance limits are that it falls either: a) Within the appropriate tolerance % for the given greenweight (Table 15c) or b) within the absolute tolerance limit (Table 15d) or c) within the expected weight of one unit (ie unit weight times conversion factor) – this is in case the last unit is nearly empty This is an important check for consistency within the form and may detect major errors in the greenweight on the database. However it may also be triggered in cases which do not warrant returning the form to the fisher. It should only be sent back if an examination of all the information on the form (including estimated catches) suggests that the greenweight is seriously in error.	
	121. The total greenweight of this species in the landing part of the form must approximately equal the total of the estimated catches of this species over all the effort part of the form otherwise Procedure C must be followed – this would be an ideal specification, because it would detect inconsistencies within the form. In some (perhaps many) of the cases, the problem could be resolved easily by a validator checking for data entry errors on the single form. However, beyond this it would be extremely labour intensive to determine the source of the error, because it may involve many different forms. We suggest that initially the Procedure require that the validator check for data entry errors on the form itself, but not attempt to follow up more complex causes of the problem.	100%
	122. Two greenweight figures of the same quantity should not be duplicated for one fishstock within one landing unless the greenweight figure is small (less than 250kg)	100%

	otherwise Procedure A must be followed –this is because it is common for a fisher to report fish from one fishstock on more than one line (for example when two different carton sizes have been used) but to receive only one greenweight figure from the LFR. The fisher will frequently enter the single greenweight figure on multiple lines of the form, so that the greenweight is duplicated. We would like to see this interpreted on the system by collapsing the multiple lines of data into one line, since the information lost is not great compared with the danger of incorrect total greenweights. There is a small chance that the duplicate greenweights may be genuine, and the Procedures will allow the validator to refrain from sending the form back if this appears to be the case. Small genuine duplicate greenweights do occur more frequently, and so are exempted from this rule. .	
Purchase tax invoice number from LFR	123. The purchase tax invoice number must be present if destination type is L otherwise Procedure C must be followed –this information in the database does not appear to be used very frequently (although it may be used directly from the form, or the scanned version of the form), and so it does not seem to warrant validator resource. The fisher may not receive an invoice number in the case of seized fish. 124. The purchase tax invoice number must be absent if destination type is other than L or S otherwise Procedure C must be followed we do not mind if they give us this unnecessary information. This may be present because a fisher has filled a column down with the same number even though some of the rows contained fish that had been eaten or discarded. 125. The purchase tax invoice number (if present) must not contain a decimal point otherwise Procedure A must be followed – there are cases where the greenweight and the invoice number appear to have been swapped (either by the fisher or the data entry person). The presence of a decimal point on the purchase tax invoice number may be an indication that this has occurred. However analysis shows that decimal points are also frequently used as separators in purchase tax invoice numbers.	0% 0% 0%
Permit holder's name	126. The permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed - important check on the permit holder's number	100%
Permit holder's FIN number	127. The permit holder's FIN number must be present and a valid number otherwise Procedure A must be followed important field 128. The permit holder's FIN number must be a valid permit holder otherwise Procedure A must be followed – important field	100% 100%

	129. The vessel id/client combination must be same vessel id/client combination who was issued the form otherwise Procedure C must be followed –the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator.	100%
Signature of master	130. A signature must be present otherwise Procedure A must be followed- important verification of the form	100%
Date signed	131. A date must be present and a valid date otherwise Procedure A must be followed- important for evidential purposes	100%
	132. The date must not be after earliest Electronic timestamp otherwise Procedure C must be followed – useful check on the dates on the form.	100%
	133. The date must not be before date of landing by more than 2 days otherwise Procedure A must be followed – useful check on the dates on the form. This error would not be sent back to the fisher unless it suggested that one of the other dates on the form was incorrect.	100%

6.2 Specifications for information collected on a Catch Landing Return

Field name on form	Specification	Standard
	134. Form structure must be correct for the form type (see Table 1 for details) otherwise Procedure A must be followed – this is only likely to occur if there are problems sending the form in via EDT	100%
	135. Must have some landing records (so that it is not a nil return) otherwise Procedure A must be followed – For a nil return, the fisher must explicitly write "NIL" on the return. If there are no landing records and fisher has not explicitly indicated that it is a nil return then it must go back to the fisher for confirmation. If it has been incorrectly recorded as a non-nil return then this can be corrected without going back to the fisher	100%
Form number	136. Form must not previously have been cancelled otherwise Procedure A must be followed - this is not validated using this mechanism but somehow all errors of this kind must be detected because it implies that a form number has been incorrectly used.	100%
First day of trip	137. First day of trip must be present and a valid date otherwise Procedure A must be followed - important field	100%
	138. Trip dates must not overlap trip dates for other CLR returns (or nil returns) by this client-vessel combination otherwise Procedure A must be followed –this specification seems to have problems where there are more than one landing for one trip, for example if transhipment has occurred. Therefore we propose to remove this specification. However we are concerned that this may allow serious errors to remain undetected. Perhaps there is some more limited check that could be done – for example "first day of trip must not overlap trip dates for other CLR returns unless one of them is a transhipment".	0%
	139. First day of trip must not be later than the last day of trip otherwise Procedure A must be followed –important check on the validity of the dates	100%
	140. First day of trip must not be before book was issued otherwise Procedure C must be followed	100%
	141. First day of trip must not be after earliest Electronic timestamp otherwise Procedure A must be followed- a check for consistency of dates on the form	100%
	142. Date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100%
Last day of trip	143. Last day of trip must be present and a valid date	100%

	otherwise Procedure A must be followed – important field for linking to the effort forms that are associated with this landing	
Landing date	144. Landing date must be present and a valid date otherwise Procedure A must be followed –important field	100%
	145. Landing date must be between 0 and 120 days after start of trip otherwise Procedure A must be followed –this is a useful range check to check for errors on the dates.	100%
	146. Vessel must be registered on date of landing otherwise Procedure C must be followed – just a check for an error on vessel or landing date	100%
	147. Landing should not occur before end of trip otherwise Procedure C must be followed – even though this is not impossible, it may be worth a check	100%
	148. Landing where destination code is L or W must not occur before end of trip otherwise Procedure A must be followed - a landing with code L or W must terminate a trip	100%
	149. Landing date must not be more than 60 days after end date otherwise Procedure A must be followed – this is a range check to pick up errors in the end date or the landing date.	100%
	150. Landing date must not be more than 10 days after end date otherwise Procedure C must be followed – this is a range check to pick up data entry errors in the end date or the landing date	100%
Vehicle registration number	151. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed – important field	100%
	152. Vessel must be registered for fishing on start date of form otherwise Procedure C must be followed –just to try to catch data entry errors, since it is the matching TCEPR that would detect fishing while unregistered.	100%
Vessel name	153. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed – important check on the vessel id.	100%
Vessel registration number of other vessel (if pair fishing)	154. Vessel id must be valid otherwise Procedure A must be followed –we cannot conceive of a use for this information on a CLR	0%
	155. Vessel registration of pair vessel must not be same as the vessel submitting the form otherwise Procedure A must be followed–we cannot conceive of a use for this information on a CLR	0%
	156. Vessel reported as being involved in pair fishing must be registered at the time of fishing otherwise Procedure A must be followed –we cannot conceive of a use for this information on a CLR	0%
Point of landing	157. Point of landing must be present otherwise Procedure A must be followed –important field, even though the data can be hard to interpret	100%

	158. Point of landing must have at least two characters otherwise Procedure A must be followed –if it important that the landing be present, it must be important that it have some value other than a blank. A two character string is the smallest string that could conceivable convey information about the point of landing eg WN. An exception to this is that the character "T" has sometimes been used to indicate that a transhipment has occurred.	100%
Page (sequence)	159. Page (sequence) number must be valid otherwise Procedure A must be followed (these do not seem like very useful checks and perhaps should be removed altogether, except that we want to be able to detect gaps) 160. Page (sequence) number must be between 1 and 99 otherwise Procedure A must be followed 161. Page (sequence) number must not be greater than total page count otherwise Procedure A must be followed 162. Page (sequence) number must be present if page count is present otherwise Procedure A must be followed 163. Page sequence number must start at 1 and go to page count with no gaps otherwise procedure A must be followed – A gap in page sequence number may indicate that a page is missing which would be of vital importance to follow up. However it must be clear in the procedures manual that where this does not seem to be the case, then a follow up is not required.	95% 95% 95% 95% 100%
Of (count of how many pages)	164. Page count must be valid otherwise Procedure A must be followed 165. Page count must be between 1 and 99 otherwise Procedure A must be followed 166. Page count must be present if page sequence is present otherwise Procedure A must be followed (Page count is not quite as important as page sequence number for identifying missing pages, except as used with page sequence number to identify missing pages at the end of the sequence)	95% 95% 95%
Fishstock (Species/Area)	167. Fishstock must be present and valid otherwise Procedure A must be followed- important field 168. Fishstock code must have been valid at time of fishing otherwise Procedure A must be followed –important field 169. Fishstock code must be for a species with a valid or a passable code for use on the landing part of the form (usage code L or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed – Species codes with usage code L are valid codes for commercial species that would be expected on the landing part of the form. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	100% 100% 100%

	170. Fishstock code must be for a species with a valid code for use on the landing part of the form (usage code L and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check	100%
Landed state	171. Landed state must be present and a valid code otherwise Procedure A must be followed –important field	100%
	172. Landed state code must have been a landed state code at the time of landing (as listed in Table 11) otherwise Procedure A must be followed – important field	100%
	173. Landed state must be consistent with species (ie this species/state code combination must exist) otherwise Procedure A must be followed- the conversion factors table has been revised so that all valid state codes for any species (QMS or non-QMS) should be in this table	100%
	174. Landed state must not be logically inconsistent with the species otherwise Procedure A must be followed – this should not be necessary if the conversion factors table is complete.	0%
	175. If the landed state code is an additional state code (as listed in Table 13), then there must also be a record for the same species in the same landing with a primary state code (unless the species code is OFF and the state code is MEB) otherwise Procedure A must be followed –the primary state fish does not need to be landed within the same landing, but it should at least be recorded as having been retained on board. Offal is a place-holder species codes that may be used with the additional state code MEB for Fish Meal By-product.	100%
	176. If the destination type is A or D then the state code should probably be GRE otherwise Procedure C must be followed – it is likely that fish that are accidentally lost will be green, but it is possible that they have been processed before being lost. If this is the case, then we want to know. However it is useful to check whether an error has occurred. Under the Fisheries (Reporting) Regulations 2001 destination type H was changed to include fish that was lost from any holding receptacle including (for example) a freezer. Therefore fish with destination type H can now be of any state.	100%
Containers-Number	177. If present, the number of containers must be a valid number otherwise Procedure C must be followed –if this data is given to us, we want to check that it has not been entered incorrectly	100%
	178. If present, the number of containers must be in range 0-50 000 otherwise Procedure C must be followed – again, just a data entry check	100%
	179. The number of containers must be present unless the	100%

	state code is an additional state code or the greenweight is present otherwise Procedure A must be followed – We are not that interested in the number of containers except where that is the only information available to determine the greenweight, and then it becomes very important 180. For destination types other than A and D the container details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification.	0%
Containers-Type	181. The type of container must be a valid type of unit (as listed in Table 12) otherwise Procedure A must be followed –This information will still be available on the form for use in the field by Fisheries Officers, but we do not feel that it warrants validator resource 182. For destination types other than A and D the container details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification 179	0% 0%
Containers-Content weight	183. If present, the container content weight must be a valid number otherwise Procedure C must be followed – if this data is submitted, we want to ensure that it has been entered correctly 184. If present, the container content weight must be of correct format (no more than 1 decimal places) otherwise Procedure C must be followed – if this data is submitted, we want to ensure that it has been entered correctly 185. If present, the container content weight must be between 0.1 and 50 000kg otherwise Procedure C must be followed – just for a data entry check 186. The container content weight must be within correct range for the type of unit (as listed in Table 12) otherwise Procedure C must be followed – because the type of container is not to be followed up, neither will this one 187. The container content weight must be present unless the state code is an additional state code or the greenweight is present or the destination type is F otherwise Procedure A must be followed– We are not that interested in the weight of containers except where that is the only information available to determine the greenweight, and then it becomes very important 188. For destination types other than A and D the container details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification.	100% 100% 100% 0% 100% 0%
Quota registration number fish caught against	189. For ITQ species where the fishstock is not Extra-territorial, then a valid QRN id must be entered otherwise Procedure A must be followed —The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE.	0%

	190. The QRN must be one that this permit holder has fished against the quota of previously (within the past 12 months) otherwise Procedure C should be followed–The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE	0%
	191. The QRN must be the permit holder or a QRN with whom this permit holder has a valid fishing against quota agreement otherwise Procedure A should be followed– –The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE	0%
	192. If not ITQ then this may be blank, but if present it must be valid–The QRN field on this form was removed in the Fisheries (Reporting) Regulations 2001, since the permit holder is the same as the holder of ACE	0%
Destination type	193. Must be present and valid otherwise Procedure A must be followed- important field for determining how a particular parcel of fish should be counted or tracked	100%
	194. For destination type D, species should not be ITQ otherwise Procedure C must be followed –it is not permitted to discard ITQ species. However, this is not a major problem for data quality and will be left for Compliance to follow up as they see fit.	100%
	195. For destination type A, species should not be non-ITQ otherwise Procedure A must be followed – again, this is not seen to be a major problem for data quality.	0%
	196. For destination types other than A and D the container details (number, type and weight) should all be present otherwise Procedure A must be followed – this has been superseded by the new specification.	0%
	197. For destination types A and D the container details (number, type and weight) should be null otherwise Procedure A must be followed –we would rather have this information than not, especially if there is no greenweight information available.	0%
	198. For destination type C the QRN must be for an appropriate Crown account otherwise Procedure C should be followed – Destination type C was removed under the Fisheries (Reporting) Regulations 2001	0%
Destination LFR number or vessel reg number	199. For destination types A,B,D,E,H,R,O, P, Q, F and U the destination number should be empty (although the vessel's own vessel id is acceptable) otherwise Procedure C must be followed – we are not usually concerned if the fisher gives extra information that is not required. This check may be useful however to discover that a code has been misused or misentered. On the other hand, it may just cause a large number of false errors where the LFR number has been filled in down the page, and some of the rows actually have one of these non-landed codes.	100%

	Whether or not it is worthwhile depends on the proportion of false errors generated and the time taken to deal with each one.	
	200. For destination type L the destination should be a valid client number that is an LFR otherwise Procedure A must be followed- important to be able to track fish and compare data between systems. If fish has been seized, the fisher may not know the LFR to which the fish has been sent.	100%
	201. For destination type L the LFR must be an LFR that this permit holder has landed to within the past year otherwise Procedure C must be followed – this may be a useful check to identify mistakes in the LFR code. There will inevitably be a small number of false errors the first time that each permit holder lands to a new LFR.	100%
	202. For destination type T the destination should be a valid registered vessel that is not the same as the vessel on the form otherwise Procedure C must be followed –in some cases the vessel does not need to be a registered one, but this is a quick check for a data entry error on the vessel id	100%
	203. The transhipment vessel must be registered in the same region as the vessel landing the fish (this is to ensure that an incorrect vessel id has not been entered) otherwise Procedure A must be followed –this was potentially a useful check if the vessels are small local vessels, but these days, it is probably not a useful check	0%
	204. For destination type W then if a valid client number has been entered, then this client must have a role of "wharf seller" otherwise Procedure A must be followed – this is inconsistent with the explanatory notes.	0%
	205. For destination type S the LFR number should be for a regional office otherwise Procedure C must be followed – a fisheries officer may send seized fish to any LFR	0%
Greenweight(kilograms) when advised by LFR	206. For all destination types greenweight must be present unless the state code is one of the state codes listed in Table 13 otherwise Procedure A must be followed – vital information for determining total landings	100%
	207. For additional state (Table 13) codes greenweight should be null otherwise Procedure A must be followed-	100%
	208. Greenweight must be a valid weight otherwise Procedure A must be followed –important field	100%
	209. Greenweight must be greater than or equal to zero and less than the maximum for this species as specified in Table 14 otherwise Procedure A must be followed – if this greenweight is not possible for this species then it should be sent back to the fisher for correction	100%
	210. Greenweight must be greater than or equal to zero and less than the likely maximum for this species as specified in Table 14 otherwise Procedure C must be followed – if this greenweight is unlikely for this species, then it should	100%

	at least be checked to see whether a data entry error or misinterpretation (for example the interpretation of a decimal point as a comma) has occurred	
	211. For destination type W the greenweight must be no more than 150kg otherwise Procedure C must be followed – Section 191(2) a of the Fisheries Act 1996 says that wharf sales should be no more than 10kg for any species (with an even lower limit for shellfish). A fisher may make a number of sales at the same time and report the total, but even so a very large catch is likely to be an error.	100%
	212. Greenweight must have no more than 2 decimal places otherwise Procedure C must be followed – it does not matter how many decimal places a fisher reports. However, a large number of decimal places frequently indicates that a comma has been misread as a decimal point, which leads to a greenweight which is in error by a factor of 1000. This is probably worth a quick check. Ideally, we would like to solve this problem by pre-printing the decimal point on the form.	100%
	213. The greenweight should approximately equal the number of units times the weight of each unit times the conversion factor otherwise Procedure A must be followed. The exceptions to this are that: Ø if the greenweight is small (specified in Table 15a) and the calculated weight is small the check should not be done – this is so that validator resource is not wasted following up very minor discrepancies. However, it is important that discrepancies that lead to the reduction of the greenweight (for example 26000 being misread as 26.000) be detected. Therefore, both the greenweight and the calculated weight must be small for the check to be avoided. Ø When the ratio of the greenweight to the content weight is about one (between 0.5 and 1.5) the check should not be done – it is common (particularly for tuna fisheries) for fishers to enter what appears to be an estimate of the total greenweight in the "content weight" field. This misunderstanding does not warrant a form being a returned to the fisher Ø species/state code combinations listed in Table 15b do not use the conversion factor– this is because scallops are reported in meatweight rather than greenweight. Ø The check need not be done for Foveaux Strait dredge oysters – Foveaux Strait dredge oysters are supposed to have a greenweight as if each oyster weighed 1kg. It may be best not to do the check for this species The tolerance limits are that it falls either: d) Within the appropriate tolerance % for the given greenweight (Table 15c) or e) within the absolute tolerance limit (Table 15d) or f) within the expected weight of one unit (ie unit weight	100%

	times conversion factor) – this is in case the last unit is nearly empty This is an important check for consistency within the form and may detect major errors in the greenweight on the database. However it may also be triggered in cases which do not warrant returning the form to the fisher. It should only be sent back if an examination of all the information on the form (including estimated catches) suggests that the greenweight is seriously in error. 214. The total greenweight of this species in this landing must approximately equal the total of the estimated catches of this species over all the effort forms in this trip otherwise Procedure C must be followed – this would be an ideal specification, because it would detect inconsistencies across different catch effort forms. However, it would be extremely labour intensive to determine the source of the error, because it would involve many different forms. Also, there would be a large number of errors relating to very minor discrepancies, for example, minor species that were not landed or false errors where the other data had simply not been entered yet. We think that the best way to do this check may be to have a dedicated Mfish validator run a report on a monthly basis and investigate only the very worst of the discrepancies they discover. 215. Two greenweight figures of the same quantity should not be duplicated for one fishstock within one landing unless the greenweight is small (less than 250 kg) otherwise Procedure A must be followed –this is because it is common for a fisher to report fish from one fishstock on more than one line (for example when two different carton sizes have been used) but to receive only one greenweight figure from the LFR. The fisher will frequently enter the single greenweight figure on multiple lines of the form, so that the greenweight is duplicated. We would like to see this interpreted on the system by collapsing the multiple lines of data into one line, since the information lost is not great compared with the danger of incorrect total greenweights. There is a small chance that the duplicate greenweights may be genuine, and the Procedures will allow the validator to refrain from sending the form back if this appears to be the case. Small genuine duplicate greenweights do occur more frequently, and so are exempted from this rule.	0% 100%
Purchase tax invoice number from LFR	216. The purchase tax invoice number must be present if destination type is L otherwise Procedure C must be followed –this information in the database does not appear to be used very frequently (although it may be used directly from the form, or the scanned version of the	0%

	form), and so it does not seem to warrant validator resource. If fish has been seized, the fisher may not receive an invoice. 217. The purchase tax invoice number must be absent if destination type is other than L or S otherwise Procedure C must be followed we do not mind if they give us this unnecessary information. This may be present because a fisher has filled a column down with the same number even though some of the rows contained fish that had been eaten or discarded. 218. The purchase tax invoice number (if present) must not contain a decimal point otherwise Procedure A must be followed – there are cases where the greenweight and the invoice number appear to have been swapped (either by the fisher or the data entry person). The presence of a decimal point on the purchase tax invoice number may be an indication that this has occurred. However analysis shows that decimal points are also frequently used as separators in purchase tax invoice numbers.	0% 0%
Permit holder's FIN number	219. The permit holder's FIN number must be present and a valid number otherwise Procedure A must be followed important field 220. The permit holder's FIN number must be a valid permit holder otherwise Procedure A must be followed – important field 221. The client/vessel combination must be same client/vessel combination who was issued the form otherwise Procedure C must be followed –the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator.	100% 100% 100%
Permit holder's name	222. The permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed important check on the permit holder's number	100%
Signature of master	223. A signature must be present otherwise Procedure A must be followed- important verification of the form	100%
Date signed	224. A date must be present and a valid date otherwise Procedure A must be followed- important for evidential purposes 225. The date must not be after earliest Electronic timestamp otherwise Procedure C must be followed – useful check on the dates on the form 226. The date must not be before date of landing by more than 2 days otherwise Procedure A must be followed – useful check on the dates on the form. This would only be sent back to the fisher if it suggested that one of the other	100% 100% 100%

	dates on the form was incorrect.	

6.3. Specifications for information collected on a Trawl Catch Effort and Processing Return

Field name on form	Specification	Standard
	227. Form structure must be correct for the form type (see Table 1 for details) otherwise Procedure A must be followed –this is only likely to occur if there are problems sending the form in via EDT	100%
	228. If the page is from a single page return, then it must have some effort records (so that it is not a nil return) otherwise Procedure C must be followed. –If a fisher has not declared a return to be a nil return then it should have effort on it. If there is no effort then the validator may be able to make an interpretation that it is a nil return without going back to the fisher because the explanatory notes do not say that a fisher must declare a non-fishing TCEPR to be a nil return. Some fishers may report processing of fish from a previous day on a form with no effort. This is not technically correct (since the processing should be reported on the day the fish was caught), but does not require that the form be sent back.	100%
	229. If the page is from a multi page return, then it must have either some effort or some processing records (so that it is not a nil return) otherwise Procedure C must be followed –If a fisher has not declared a return to be a nil return then it should have effort or processing information on it. If there is no effort, catch nor processing information then the validator may be able to make an interpretation that it is a nil return without going back to the fisher because the explanatory notes do not say that a fisher must declare a non-fishing TCEPR to be a nil return	100%
	230. Must have no more than 10 tows within 24 hours otherwise Procedure C must be followed -this is like a range check on an effort field, and may detect timing or date errors. However, if there really are 10 genuine tows within one 24 hour period, then there is no need to send this back to the fisher	100%
Form number	231. Form must not previously have been cancelled otherwise Procedure A must be followed -this is currently not validated by this mechanism but somehow, all cases of this error must be detected because it suggests that an incorrect form number may have been entered	100%
Date	232. Date must be present and a valid date otherwise Procedure A must be followed-vital check on an important field	100%
	233. Date must not be before book was issued otherwise Procedure A must be followed -just to check for data entry	100%

	errors on the date. The problem may be that the book was re-issued by data entry staff. However if there is clearly an error on the form (for example a year 1066), then it must be rectified.	
	234. Date must not duplicate other TCEPR form dates by this client-vessel combination unless they are all pages of the same return otherwise Procedure A must be followed - the procedures must state that the validator should investigate the source of the problem first, for example, is there an incorrect date or vessel on one of the duplicate pages	100%
	235. Date must not be after the earliest Electronic timestamp otherwise procedure A must be followed– if a form is submitted for a date after the date it was received by us, there must be an error	100%
	236. Date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100%
	237. Form date must not be after date signed otherwise Procedure A must be followed -here we are concerned that if the form is signed before the effort occurred then there may be an error on the effort date. If there does seem to be an error on the form date, then it may have to be sent back	100%
Vessel registration number	238. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed –important field	100%
	239. Vessel must be registered for fishing on date of form otherwise Procedure A must be followed –important field	100%
	240. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed –this is mainly to check for data entry errors, and does not require following up if there is in fact no error	100%
Vessel registration number of other vessel (if pair fishing)	241. Vessel id of pair vessel must be valid otherwise Procedure A must be followed -pair vessel is reasonably important for correct measurement of catch and effort if pair fishing has occurred.	100%
	242. Vessel id of pair vessel must not be same as that of the vessel submitting the form otherwise Procedure A must be followed -the procedure should ask the validator to try to resolve the error without sending back, for example by determining whether there was in fact no pair fishing at all. There is an automatic derivation that removes the pair vessel id if it is the same as the vessel completing the form and if there was no pair fishing method used on the form.	100%
	243. Pair vessel must be registered at the time of fishing otherwise Procedure A must be followed -this is not really	95%

	a problem for this form, and will be picked up when the other vessel submits its form 244. If pair fishing, then the other vessel in the pair must report corresponding effort on the same form type otherwise Procedure A must be followed -this is likely to have many false errors – for example because the first of the two forms must always trigger it – and we think that provided the basic data is provided, a detailed analysis will be required to resolve pair fishing issues	0%
Vessel's name	245. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed- important check on vessel id.	100%
Position at Midday	246. Position at Midday must be present and a valid format otherwise Procedure C must be followed -not of any importance now that VMS is available 247. Position at Midday must be within range (latitude between 25 and 56 degrees and longitude between 160 and 260 degrees, where 260 degrees E is 100 degrees W) and not inland otherwise Procedure C must be followed -not of any importance now that VMS is available	0% 0%
Water temperature at shot 1 – surface	248. Surface temperature at shot 1 must be present and valid with correct format otherwise Procedure C must be followed – Data is considered to be unreliable (for example, because of unknown calibration of the temperature gauges used) and therefore validation resource will not be expended on this field 249. Surface temperature at shot 1 must be between 4 and 24 degrees otherwise Procedure C must be followed –Data unreliable	0% 0%
Water temperature at shot 1 - bottom	250. Bottom temperature must be present and valid with correct format otherwise Procedure C must be followed – Data is considered to be unreliable (for example, because of unknown calibration) and therefore validation resource will not be expended 251. Bottom temperature must be between 4 and 24 degrees otherwise Procedure C must be followed – Unreliable 252. Bottom temperature must be equal to or cooler than surface temperature (difference between 0 and 99 degrees) otherwise Procedure C must be followed- Data unreliable	0% 0% 0%
Page (sequence)	253. Page (sequence) number must be valid otherwise Procedure A must be followed –these do not seem like very useful checks and perhaps should be removed altogether, except that we want to be able to detect gaps 254. Page (sequence) number must be between 1 and 99 otherwise Procedure A must be followed 255. Page (sequence) number must not be greater than total page count otherwise Procedure A must be followed 256. Page (sequence) number must be present if page count is present otherwise Procedure A must be followed 257. Page sequence number must start at 1 and go to page	95% 95% 95% 95% 100%

	count with no gaps otherwise Procedure A must be followed – A gap in page sequence number may indicate that a page is missing which would be of vital importance to follow up. However it must be clear in the procedures manual that where this does not seem to be the case, then a follow up is not required. It may not be possible to make this check 100% correct because there is no explicit link between different pages of the same return. However it should be possible to make a fairly reliable check using information from the page sequence number, the page count and the form number of the relevant forms.	
Of (count of how many pages)	258. Page count must be valid otherwise Procedure A must be followed 259. Page count must be between 1 and 99 otherwise Procedure A must be followed 260. Page count must be present if page sequence is present otherwise Procedure A must be followed (Page count is not quite as important as page sequence number for identifying missing pages)	95% 95% 95%
Start time	261. Start time must be present otherwise Procedure A must be followed –vital field 262. Start time must be a valid time otherwise Procedure A must be followed- vital field. 263. Start time must be after previous shot end time otherwise Procedure A must be followed – this checks that the times make sense on the form.	100% 100% 100%
End time	264. End time must be present otherwise Procedure A must be followed –vital field 265. End time must be a valid time otherwise Procedure A must be followed-vital field. 266. Tow duration must be within range as specified in Table 16 otherwise Procedure A must be followed- the time from start time to end time of tow must not be unreasonable, otherwise it suggests that either the start or the end time were incorrect 267. Tow end time must be after tow start time unless the tow is the last tow on the form otherwise Procedure A must be followed – if a tow begins at 11:00 and finishes at 10:00 this could be because there is an error or because the tow began at 11:00 on one day and finished at 10:00 on the next day. If this is the case, there should be no tows on the form recorded as beginning at any time in the afternoon.	100% 100% 100% 100%
Start latitude	268. Start latitude must be present, of valid format otherwise Procedure A must be followed-important field 269. Start position (latitude and longitude) must not be inland and must be a reasonable fishing location otherwise Procedure A must be followed unless the return is for high seas fishing in which case Procedure C must be followed- this is an important field, and this checks for unreasonable	100% 100%

	results (the current definition of reasonable locations is not robust for all high seas fishing, so for these forms the rule is only used as a check). The precise definition of what are reasonable fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The "defined grids" are obtained as follows: • They are between longitudes of 110 and 215 and latitudes of 0 to –90 (this excludes the northern hemisphere, west of Western Australia, and east of 145 degrees West); • They are not totally land bound grids; AND • They ⇒ Contain at least 5 shots in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions; OR ⇒ They are within the defined boundary for the South Tasman Rise; OR ⇒ They are within the New Zealand continental shelf (as defined by the 1,000m contour); OR ⇒ They are within the Louisville Ridge area as defined by a set of 0.50*0.50 degree grids that represent all fishing conducted in that general area in the 3 year period Jan 1997 to Feb 2000 or as updated with confirmed positions. 270. Start position (latitude and longitude) must be within likely fishing locations otherwise Procedure C must be followed– this is a range beyond which it is unlikely that fishers will fish, however it is not impossible, so this will just be used for a quick check to confirm what is actually written on the form. The precise definition of what are likely fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The "defined grids" are obtained as follows: • Between longitudes of 110 and 215 and latitudes of 0 to –90. This excludes the northern hemisphere, west of Western Australia, and east of 145 degrees West; AND • Are not totally land bound grids; AND • The grid contains at least 5 shots in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions.	100%

	271. Displacement from last tow end position (within the same day) to this tow's start position must be in range as specified in Table 16 otherwise Procedure A must be followed –this check for unreasonably long movements is mainly to check for data entry errors on the start or the end position, but may require following up	100%
End latitude	272. End latitude must be present, of valid format otherwise Procedure A must be followed –useful field	100%
	273. End position (latitude and longitude) must not be inland and must be a reasonable fishing location otherwise Procedure A must be followed – this check for reasonableness uses the same grid as described in the start position field (Specification 269)	100%
	274. End position (latitude and longitude) must be within likely fishing location otherwise Procedure C must be followed– this is a range beyond which it is unlikely that fishers will fish, however it is not impossible, so this will just be used for a quick check to confirm what is actually written on the form. This check uses the same grid as described in the start position field (Specification 270)	100%
Start longitude	275. Start longitude must be present, of valid format otherwise Procedure A must be followed- an important check on an important field	100%
End longitude	276. End longitude must be present, of valid format otherwise Procedure A must be followed – a useful field	100%
	277. Displacement from start to end position must be in range as specified in Table 16 otherwise Procedure A must be followed –this check for unreasonably long tows is mainly to check for data entry errors in the positions	100%
Gear code	278. Method code must be present and a valid method at time of fishing otherwise Procedure B must be followed – This is not of great interest to compliance, particularly as use of the TCEPR implies a trawling method, so Procedure B rather than Procedure A should be used.	100%
	279. Where present, method code must be a valid method for a TCEPR otherwise Procedure B must be followed – if a TCEPR is used then either bottom or mid-water trawling, with either a single or a pair of vessels must be used.	100%
	280. Where present, method code must be consistent with presence/absence of pair vessel id otherwise Procedure B must be followed -we are not sure whether this is of great importance. The main information about the occurrence of pair trawling is from the identity of the pair trawl vessel. However this is a useful check on that field, and identifies which fishing events within the form are associated with pair trawling, and which were carried out by the vessel alone	100%
Gear code	281. Gear width must be present otherwise Procedure B must be followed -not of great interest to compliance so	90%

	Procedure B seems warranted. We don't have enough resource to follow this up every time, but we want to maintain quality in this area at no worse than current levels	
	282. Where present, gear width must be a valid number of correct format (no more than one decimal place) otherwise Procedure C must be followed. –the current data entry screens mean that there is no room to enter a gear width with a decimal place anyway.	100%
	283. Where present, gear width must be within likely range specified in Table 4 otherwise Procedure C must be followed -since this is just a check for a data entry error it seems sensible for it to be done every time a major error is discovered. If there is no data entry error, no further action seems warranted	100%
Headline height	284. Headline height must be present otherwise Procedure B must be followed -this is a field which is vital for measuring effort applied in trawl fishing, and therefore deserves validation resource. It does not seem to be of primary interest to Compliance	100%
	285. Where present, headline height must be a valid number otherwise Procedure B must be followed -because this is a primary effort field, it deserves some validation resource	100%
	286. Where present, headline height must be in possible range specified in Table 4 otherwise Procedure B must be followed - it is considered implausible to have a net outside this range so contact with the fisher is reasonable	100%
	287. Where present, headline height must have correct format and be within likely range specified in Table 4 otherwise Procedure C must be followed -this is just a check for data entry errors since a larger net is not impossible	100%
Depth groundrope	288. Groundrope depth must be present otherwise Procedure B must be followed -not a primary effort field, so we do not have the resources to follow up every error. However we do want to maintain quality at about current levels	95%
	289. Where present, groundrope depth must be a valid number of correct format otherwise Procedure C must be followed –where we have received a number from a fisher, we do not want a data entry error to remove its usefulness, and since it is a data entry check, it is sensible to have it done on every error	100%
	290. Where present, Groundrope depth must be between 5 and 1100m otherwise Procedure C must be followed -this is mainly useful as a check for data entry errors, and should be done on every sufficiently suspicious value	100%
Depth bottom	291. Bottom depth must be present otherwise Procedure B must be followed –of interest for stock assessment, but not a primary effort field	95%

	292. Where present, bottom depth must be a valid number of correct format otherwise Procedure C must be followed –where this information has been supplied, we do not want a data entry error to remove its usefulness	100%
	293. Where present, Bottom depth must be between 0 and 1100m otherwise Procedure C must be followed -this is a check for data entry errors	100%
	294. Where present, Bottom depth must not be more than 300m deeper than groundrope depth for bottom trawl methods otherwise Procedure C must be followed -this is a check for data entry errors	100%
	295. Where present, groundrope depth must not be more than 100m deeper than bottom depth for bottom trawl methods otherwise Procedure C must be followed –these limits are very loose, but they were selected so that the number of errors generated is commensurate with the importance of the fields.	100%
Trawling speed	296. Trawling speed must be present otherwise Procedure B must be followed –this is an important field for stock assessment since (combined with the tow duration) it leads to an estimate of the total distance towed	100%
	297. Where present, trawling speed must be a valid number otherwise procedure B must be followed-important field	100%
	298. Where present, trawling speed must be of correct format, otherwise procedure C must be followed -data entry check because a trawling speed with more than 2 decimal places is likely to be an error	100%
	299. Where present, trawling speed must be in possible range specified in Table 4 otherwise Procedure B must be followed -outside this range is considered implausible and contact with the fisher is justified	100%
	300. Trawling speed must be within likely range specified in Table 4 otherwise Procedure C must be followed - outside this range is not impossible, but is a useful check for data entry errors	100%
	301. Trawling speed must be less than or equal to vessel's maximum speed otherwise Procedure B must be followed -not thought to be a useful check in practice, since the vessel's maximum speed will be much greater than the maximum reasonable towing speed	0%
	302. Distance towed (as measured by duration of tow times speed of tow) must be within range specified in Table 16 otherwise Procedure A must be followed – this is a Procedure A check rather than a Procedure B check because it involves start and end times which are fields of interest to compliance	100%
Target species	303. Target species must be present otherwise Procedure A must be followed –target species is a very important field	100%
	304. Target species must be an ITQ species or a non-ITQ species that the permit holder has a permit to target in that	100%

	area otherwise Procedure A must be followed -the procedure in this case would include checking for data entry or interpretation errors and if requested contacting compliance instead of the fisher. Ideally the target species would be compared with the list of non-ITQ species that the permit holder actually has a permit to target. However, if this information is not available, the target species could be compared with the generic list of non-ITQ species that permit to target can be issued for in each area. This generic list is in Table 5.	
	305. Target species code must be a passable or valid code for use as a target species (usage code T or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed– this check is less specific than the previous check, and is put in for consistency with a check on the species caught. There should be no way for this check to be triggered without the previous check being triggered. In many cases the procedure would allow interpretations rather than necessarily returning the form to the fisher. Species codes with usage code T are valid codes for commercial species that would be expected in this field. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	100%
	306. Target species code must be a valid code for use as a target species (usage code T and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check	100%
	307. Target species must have an associated estimated catch after approved derivations (this is to ensure that data entry or misuse of the "total catch" field has not missed the target species from the list of estimated catches) except when: • The total catch is zero or • There were 4 or fewer species reported caught and the sum of the estimated catches is within 20% of the total catch or • There were 5 species reported caught and the sum of the estimated catches is less than the total catch or • There is an associated estimated catch for another species of the same group (see Table 8) Otherwise Procedure A must be followed –Generally this would not require sending back unless it seemed that the "total catch" column was being used to store the catch of the target species. This would generally be indicated by	100%

	the sum of the estimated catches not equalling the total catch. 308. The target species must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure A must be followed-if the method/species combination is impossible or unreasonable, for example, the midwater trawl method for paua, then it should be sent back to the fisher for correction or clarification.	100%
Total (kg)	309. Total catch weight must be a valid weight otherwise Procedure B must be followed –total catch is of some importance for environmental monitoring, since it is the only indication of catches beyond the 5 species reported	100%
	310. Total catch weight must have correct format (no more than 2 decimal places) otherwise Procedure C must be followed –just a check for a data entry or handwriting interpretation error	100%
	311. Total catch weight must be greater than or equal to zero and less than or equal to the maximum for this method and form type as shown in Table 9 otherwise Procedure C must be followed- a data entry check for unlikely values	100%
	312. Total catch weight must not be greater than the sum of estimated catches (by more than 40% and 100kg) or less than the sum of estimated catches (by more than 20% and 100kg) unless the target species is one where the estimated catches are given in units other than greenweight (such as tuna species) otherwise Procedure C must be followed – if the total catch is not near to the sum of the estimated catches, it may be that the total catch column is being mis-interpreted or that some estimated catches are missing. For tuna species, OYS and SCA the estimated catches are not in units of greenweight and fishers may not realise that the total greenweight column should be a simple sum of the estimated catches anyway.	100%
	313. If processing information is on the form then either a total catch or some species weights must be present otherwise Procedure C must be followed -this check is no longer of great importance	0%
Species code	314. Species caught must be a valid or a passable code for use on the effort part of the form (usage code E or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed – Species codes with usage code E are valid codes for commercial species that would be expected on the effort part of the form. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	100%
	315. Species caught must be a valid code for use on the	100%

	effort part of the form (usage code E and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check	
	316. Species caught must not be duplicated within species list otherwise Procedure A must be followed -This is to detect data entry errors or cases where the fisher has reported more than required, for example both a weight and a number of fish. The problem should be resolved from the form if possible.	100%
	317. Species caught must be present if estimated catch is present otherwise Procedure A must be followed -again, this is an important error to follow up, but in many cases the problem should be resolved from the form	100%
	318. The species caught must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed- if the method/species combination is impossible or unreasonable, for example, the midwater trawling method for paua, then it is worth a check.	100%
Quantity (kg)	319. Estimated quantity must be valid otherwise Procedure A must be followed -this is an important field for stock assessment and requires validation	100%
	320. Estimated quantity must be of correct format (no more than 2 decimal places) otherwise Procedure C must be followed –just a check for data entry or interpretation errors, since a fisher is unlikely to make an estimate that is accurate to 3 decimal places. A comma may have been misread as a decimal place, changing the figure by 3 orders of magnitude	100%
	321. Estimated quantity must be greater than or equal to zero and less than the maximum for that species/method combination as specified in Table 10 otherwise Procedure A must be followed -if the estimated catch is really impossible, then the form should be sent back to the fisher	100%
	322. Estimated quantity must be must be greater than or equal to zero and less than the likely maximum for that species/method combination as specified in Table 10 otherwise Procedure C must be followed -if the estimated catch is an unlikely but not impossible figure, then the form should be checked	100%
	323. Estimated quantity must be present if species code is present otherwise Procedure A must be followed -this is of some importance, but should be resolved from the form if at all possible	100%
	324. If total catch is present, then at least one estimated catch must be present (after allowed derivations) otherwise Procedure A must be followed -if the fisher has	100%

	filled in a total catch but no estimated catches, it really must be investigated	
Processed Species	325. Species processed must be present otherwise Procedure A must be followed –The processing part of the form is currently less used than other parts of the form, but if we have sufficient resources, we will maintain validation resource on this field. 326. Species processed must have a valid or a passable species code for use on the landing part of the form (usage code L or P) as defined in Table 6 otherwise Procedure A must be followed – Species codes with usage code L are valid codes for commercial species that would be expected on the landing part of the form. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher 327. Species processed must have a valid species code for use on the landing part of the form (usage code L) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check	100% 100% 100%
Processed state	328. Processed state must be present, a valid code otherwise Procedure A must be followed, - the processing part of the form is currently less used than other parts of the form, but if we have sufficient resources we will maintain validation resource on this field 329. Processed state must be a processed state code at the time of processing and must be a gazetted state code otherwise Procedure A must be followed – we will maintain validation resource on this field if possible 330. Processed state must be consistent with species (ie this species/state code combination must exist) otherwise Procedure A must be followed-does not warrant full validation	100% 100% 90%
Number of processed units	331. Number of processed units must be present if required by the state code (ie not ACC, DIS) otherwise Procedure A must be followed number of units is one of the least used fields on the database and does not warrant much validation effort. However we think that its presence should not be discouraged 332. Number of processed units must be absent if not required by the state code (ie ACC, DIS) otherwise Procedure A must be followed -we want to remove this check, because if fishers want to tell us about the amount of fish they discarded, we do not want to discourage this 333. Number of processed units must be a valid number otherwise Procedure A must be followed-not worth following up 334. Number of processed units must be in range 0-100 000 otherwise Procedure A must be followed-not worth	90% 0% 0% 0%

	following up	
Unit weight	335. Unit weight must be present if required by the state code (ie not ACC, DIS) otherwise Procedure A must be followed –unit weight is one of the least used fields on the database and does not warrant much validation effort. However we think that its presence should not be discouraged	90%
	336. Unit weight must be absent if not required by the state code (ie ACC, DIS) otherwise Procedure A must be followed- we want to remove this check, because if fishers want to tell us about the amount of fish they discarded, we do not want to discourage this	0%
	337. Unit weight must be a valid number of correct format (no more than 2 decimal places) otherwise Procedure A must be followed -not of great interest	0%
	338. Unit weight must be between 0 and 1 000kg otherwise Procedure A must be followed –not of great interest	0%
Processed catch weight	339. Processed catch weight must be present unless the species is one of BEM, BKM, DSM, MAR, or STM or the state code is one of ACC, DIS or EAT (which do not require a processed weight) otherwise Procedure A must be followed -processed catch weight is one of the least used fields on the database and does not warrant much validation effort. However we think that its presence should not be discouraged	90%
	340. Processed catch weight must be between 0 and 100 000kg otherwise Procedure A must be followed – not worth validation resource	0%
	341. Processed catch weight must be of correct format (no more than 1 decimal place) otherwise Procedure A must be followed- not worth validation resource	0%
	342. Processed catch weight must within tolerance limits as specified in Table 17 equal the number of units times the unit weight, or (lest the last unit was nearly empty) the number of units minus one times the unit weight, otherwise Procedure A must be followed -if anybody wants to use this data, they will have to resolve these issues for themselves	0%
Conversion factor	343. Conversion factor must be a valid conversion factor otherwise Procedure A must be followed -again, this is not an important field, but we do not want to discourage high data quality	90%
	344. Conversion factor must be between 0 and 100 otherwise Procedure A must be followed -pointless check	0%
	345. Conversion factor must be of correct format (no more than 2 decimal places) otherwise Procedure A must be followed –pointless	0%
	346. Conversion factor must be present unless the state code is one of ACC, DIS, OIL, ROE, EAT or GRE otherwise Procedure A must be followed. Conversion	0%

	factor must be absent for state codes ACC, DIS, OIL and ROE otherwise Procedure A must be followed.-not worth validation resource 347. Conversion factor for ITQ species must match gazetted value (or vessel specific value) otherwise Procedure A must be followed -this seems an easy check to do. However, since the greenweight calculated from the processed weight does not get used on the landing form, it doesn't really matter whether it is correct or not	90%
Calculated weight before processing	348. Calculated greenweight must be a valid weight otherwise Procedure A must be followed – The processing part of the form is currently less used than other parts of the form, but if we have sufficient resources, we will maintain validation resource on this field. 349. Calculated greenweight must be between 0 and 500 000kg otherwise Procedure A must be followed-The processing part of the form is currently less used than other parts of the form, but if we have sufficient resources, we will maintain validation resource on this field. 350. The greenweight should approximately equal the number of units times the weight of each unit times the conversion factor otherwise Procedure C must be followed. The exceptions to this are that: Ø If the greenweight is small (specified in Table 15a) and the calculated weight is small the check should not be done –this is so that validator resource is not wasted following up very minor discrepancies. However, it is important that discrepancies that lead to the reduction of the greenweight (for example 26000 being misread as 26.000) be detected. Therefore, both the greenweight and the calculated weight must be small for the check to be avoided. Ø When the ratio of the greenweight to the content weight is about one (between 0.5 and 1.5) the check should not be done – it is common (particularly for tuna fisheries) for fishers to enter what appears to be an estimate of the total greenweight in the "content weight" field. This misunderstanding does not warrant a form being a returned to the fisher Ø Species/state code combinations listed in Table 15b do not use the conversion factor– this is because scallops are reported in meatweight Ø The check need not be done for oysters, scallops or tuna-these species have different reporting requirements and the extra complexity of dealing with them properly may not be worthwhile. The tolerance limits are that it falls either: g) Within the appropriate tolerance % for the given greenweight Table 15c) or h) Within the absolute tolerance limit (Table 15d) or	100% 100% 90%

	i) Within the expected weight of one unit (ie unit weight times conversion factor) – this is in case the last unit is nearly empty This is a useful check for consistency within the form and may detect major errors in the greenweight on the database. Perhaps for consistency this should be Procedure C, but we do not want to do it 100% of the time, because of its relatively low importance. 351. Calculated greenweight must be of correct format (no more than 2 decimal places) otherwise Procedure A must be followed- perhaps this should be Procedure C, but we do not want to do it 100% of the time, because of its relatively low importance 352. Within tolerance limits specified in Table 18 the Calculated greenweight must equal the processed weight times the conversion factor otherwise Procedure A must be followed –not worth a great deal of validation resource	90% 90%
Meal(kg)	353. Weight of meal produced must be a valid weight of correct format otherwise Procedure A must be followed – this may be a useful field on the form, but it is not of great use on the database and so does not warrant much validation resource 354. Weight of meal produced must be between 0 and 19000kg otherwise Procedure A must be followed –not useful	0% 0%
Oil(l)	355. Volume of oil produced must be a valid number otherwise Procedure A must be followed- this may be a useful field on the form, but it is not of great use on the database and so does not warrant much validation resource 356. Volume of oil produced must be in range 0 to 15000 otherwise Procedure A must be followed –not useful	0% 0%
Activity comment	357. Activity name if present must be interpretable as an activity code otherwise Procedure A must be followed – this is useful information, but we do not have the resources to follow it up 358. If there is effort on the form then activity name must be blank or “Fishing” otherwise Procedure A must be followed –if they want to report some other activity on that day, then this is not a problem	80% 0%
Permit holder’s FIN number	359. Permit number must be present and a valid number otherwise Procedure A must be followed –important field 360. Permit number must be a valid permit holder otherwise Procedure A must be followed –important field 361. The vessel id /client combination must be the same vessel id/client combination who was issued the form otherwise Procedure C must be followed - the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another	100% 100% 100%

	vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator	
Permit holder's name	362. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed- important check on permit holder id	100%
Signature of master	363. Signature must be present otherwise Procedure A must be followed –important for evidential purposes	100%
Date signed	364. Date signed must be present and a valid date otherwise Procedure A must be followed –important for evidential purpose 365. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed- consistency check on date	100% 100%

6.4 Specifications for information collected on a Tuna Longlining Catch, Effort Return

Field name on form	Specification	Standard
	366. Form structure must be correct for the form type (see Table 1 for details) otherwise Procedure A must be followed -this is only likely to occur if there are problems sending the form in via EDT	100%
	367. Must have some effort records (so that it is not a nil return) otherwise Procedure A must be followed – if a TLCER has no effort recorded it must be returned to the fisher for clarification unless it is clearly marked NIL in which case it should be recorded as a nil return.	100%
Form number	368. Form must not previously have been cancelled otherwise Procedure A must be followed -this is currently not validated using this mechanism but somehow, all cases of this error must be detected because it suggests that an incorrect form number may have been entered	100%
Vessel registration number	369. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed –important field	100%
	370. Vessel must be registered for fishing on date of form otherwise Procedure A must be followed –important field	100%
	371. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed -this is mainly to check for data entry errors, and does not require following up if there is in fact no error	100%
Vessel name	372. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed-important check on vessel id	100%
Position at Start of set	373. Position at start of set must be present and a valid format otherwise Procedure A must be followed-important field	100%
	374. Position at start of set must be in a reasonable fishing location and not inland otherwise Procedure A must be followed unless the return is for high seas fishing in which case Procedure C must be followed - this is an important field, and this checks for unreasonable results (the current definition of reasonable locations is not robust for all high seas fishing, so for these forms the rule is only used as a check). The precise definition of what are reasonable fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The “defined grids” are obtained as follows:	100%

	• They are not totally land bound grids; AND • The Grid is: ⇒ Within the EEZ, but excluding FMA's 4 and 6; OR ⇒ Is an area that had been commonly fished or near areas that had been commonly fished (according to TLCER returns) in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions. 375. Position must be within a likely fishing location otherwise Procedure C must be followed– this is a range beyond which it is unlikely that fishers will fish, however it is not impossible, so this will just be used for a quick check to confirm what is actually written on the form. The precise definition of what are likely fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The "defined grids" are obtained as follows: • They are not totally land bound grids; AND • They are areas that had been commonly fished or near areas that had been commonly fished (according to TLCER returns) in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions.	100%
Target species code	376. Target species must be present otherwise Procedure A must be followed –target species is a very important field 377. Target species code must be a valid or passable code for use as a target species (usage code T or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed–Species codes with usage code T are valid codes for commercial species that would be expected in this field. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only. 378. Target species code must be a valid code for use as a target species (usage code T and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check 379. The target species must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure A must be followed-if the	100% 100% 100% 100%

	method/species combination is impossible or unreasonable, for example, the SLL method for paua, then it should be sent back to the fisher for correction or clarification.	
Start of set – date	380. Date at start of set must be present and a valid date otherwise Procedure A must be followed-important field 381. Date at start of set must not be before book was issued otherwise Procedure A must be followed- important field 382. If the vessel is a foreign vessel then the date at start of set must not overlap other TLCER effort by this vessel-client combination otherwise Procedure A must be followed – it is reasonable for a vessel to set two lines before hauling the first line. Therefore we think that this specification should be removed. 383. Date must not be after date signed otherwise Procedure A must be followed– this is an important check for consistency between the two dates. It should be returned to fisher if there seems to be an error in the effort date. 384. Start date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100% 100% 0% 100% 100%
Start of set – time	385. Time of start of set must be present otherwise Procedure A must be followed –important field 386. Time at start of set must be a valid time otherwise Procedure A must be followed- important field. This is not presently followed up	100% 100%
Start of set –sea surface temp	387. Sea surface temperature at start of set must be present otherwise Procedure B must be followed– Data is considered to be unreliable (for example, because of unknown calibration of the temperature gauges used) and therefore validation resource will not be expended on this. 388. Sea surface temperature at start of set must be a valid Sea surface temperature otherwise Procedure B must be followed- data unreliable 389. Temperature must have no more than one decimal place otherwise Procedure B must be followed- data unreliable 390. Temperature must be in range 4-24 degrees otherwise Procedure B must be followed-data unreliable	0% 0% 0% 0%
Finish of set – date	391. Date at finish of set must be present and a valid date otherwise Procedure A must be followed- dates are generally important fields, however if this date is missing it should be interpreted from the other dates on the form if possible	100%
Finish of set – time	392. Time of finish of set must be present otherwise Procedure A must be followed – times are important	100%

	393. Time of finish of set must be a valid time otherwise Procedure A must be followed-important field	100%
	394. Set end date and time must be after set start date and time otherwise Procedure A must be followed-consistency checks on two important fields	100%
	395. Time from start of set to end of set must be in range specified in Table 19 otherwise Procedure A must be followed. -This may be a useful check, but we think that any major problems detected here could be just as well detected by a check on the total time from start of set to end of haul.	0%
Finish of set – cloud cover amount	396. Cloud cover amount at finish of set must be present otherwise Procedure B must be followed.- This is not a primary effort field and we think that this information is probably rather unreliable and not worth a lot of validator effort to follow up.	55%
	397. Cloud cover amount must be a number otherwise Procedure B must be followed-data unreliable	95%
	398. Cloud cover amount must have no more than 1 decimal place otherwise Procedure B must be followed-data unreliable	0%
	399. Cloud cover amount must be between 0 and 8 otherwise Procedure B must be followed- data unreliable	95%
Finish of set – cloud cover code	400. Cloud cover code at finish of set must be present otherwise Procedure B must be followed- again we think that this data is probably unreliable and not worth validating	0%
	401. Cloud cover code must be a valid cloud type (Nil, Ci,Cc,Cs, Ac, As, Ns, Sc, St, Cu, Cb) otherwise Procedure B must be followed- data unreliable	0%
Start of Hauling – date	402. Date at start of hauling must be present and a valid date otherwise Procedure A must be followed - dates are generally important fields, however if this date is missing it should be interpreted from the other dates on the form if possible.	100%
Start of Hauling – time	403. Time of start of hauling must be present otherwise Procedure A must be followed – times are important	100%
	404. Time of start of hauling must be a valid time otherwise Procedure A must be followed-important field	100%
	405. Date time of start of hauling must be after set end date time otherwise Procedure A must be followed-consistency checks on two important fields	100%
Start of hauling – wind speed	406. Wind speed at start of hauling must be present otherwise Procedure B must be followed- this is not a primary effort field and does not warrant a great deal of validator effort	90%
	407. If present, wind speed at start of hauling must be a valid number otherwise Procedure C must be followed- if this data has been provided, we do not want it destroyed by incorrect data entry	100%

	408. If present, wind speed at start of hauling must have no more than one decimal place otherwise Procedure C must be followed- because of data converted from knots to metres per second, many decimal places is common.	0%
	409. If present, wind speed at start of hauling must be in range 0 to 45 m/s otherwise Procedure C must be followed- if this data has been provided, we do not want it destroyed by incorrect data entry	100%
Finish of hauling – date	410. Date of finish of hauling must be present and a valid date otherwise Procedure A must be followed – dates are generally important fields, however if this date is missing it should be interpreted from the other dates on the form if possible.	100%
Finish of hauling – time	411. Time of finish of hauling must be present otherwise Procedure A must be followed – times are important	100%
	412. Time of finish of hauling must be a valid time otherwise Procedure A must be followed-important field	100%
	413. Time from start of haul to end of haul must be in range specified in Table 19 otherwise Procedure A must be followed-This may be a useful check, but we think that any problems detected here could be just as well detected by a check on the total time from start of set to end of haul	0%
	414. Haul end date and time must be after set start date and time otherwise Procedure A must be followed – this does not appear to be necessary if the intermediate consistency checks are present	0%
	415. Haul end date and time must be after haul start date and time otherwise Procedure A must be followed consistency checks on two important fields	100%
	416. Time from start of setting to end of hauling must be in range specified in Table 19 otherwise Procedure A must be followed consistency checks on two important fields	100%
Finish of hauling – wind speed	417. Wind speed at finish of hauling must be present and a valid number otherwise Procedure B must be followed- this is not a primary effort field and does not warrant a great deal of validator effort, particularly as the wind speed at start of hauling is validated.	90%
	418. Wind speed at finish of hauling must be a valid number otherwise Procedure B must be followed – not a primary effort field	80%
	419. Wind speed must have no more than one decimal place otherwise Procedure B must be followed- not a primary effort field	75%
	420. Wind speed must be in range 0 to 45 m/s otherwise Procedure B must be followed-not a primary effort field	95%
Gear – total length of line	421. Total length of line must be present otherwise Procedure B must be followed- not a primary effort field so does not warrant a great deal of validator effort, particularly as it is not clear how it could be used.	95%
	422. Total length of line must be a valid length otherwise	90%

	Procedure B must be followed- It is not clear how this could be used. If it is important information, the specification could be upgraded to Procedure C at 100%.	
	423. Total length of line must have no more than 1 decimal place otherwise Procedure B must be followed- It is not clear how this could be used. If it is important information, the specification could be upgraded to Procedure C at 100%	90%
	424. Total length of line must be in possible range as specified in Table 4 otherwise Procedure B must be followed – It is not clear how this could be used. If it is important information, the specification could be upgraded to Procedure C at 100%.	95%
Gear – total number of hooks	425. Total hook number must be present otherwise Procedure B must be followed-this is the primary effort field for this method and so validator effort is warranted. Because it is primarily of interest for stock assessment, Procedure B is called for.	100%
	426. Total hook number must be a valid number otherwise Procedure B must be followed- primary effort field	100%
	427. Total hook number should be within possible range as specified in Table 4 otherwise Procedure B must be followed- outside this range is considered implausible and contact with the fisher is justified	100%
	428. Total hook number should be within likely range as specified in Table 4 otherwise Procedure C must be followed – outside this range is unlikely but not impossible and warrants a quick data entry error check	100%
Gear – total number of baskets	429. Total basket number must be present otherwise Procedure B must be followed- not the primary effort field for this method, so does not warrant a great deal of validator effort	95%
	430. Total basket number must be valid otherwise Procedure B must be followed- not the primary effort field for this method, so does not warrant a great deal of validator effort	95%
	431. Number of baskets must be within possible range specified in Table 4 otherwise Procedure B must be followed- not the primary effort field	95%
Species code	432. Species caught must be a valid or a passable code for use on the effort part of the form (usage code E or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed – Species codes with usage code E are valid codes for commercial species that would be expected on the effort part of the form. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	100%
	433. Species caught must be a valid code for use on the	100%

	effort part of the form (usage code E and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check	
	434. Species caught must not be duplicated within the species reported on the bottom section of the TLCER form otherwise Procedure A must be followed –This is to detect data entry errors or cases where the fisher has reported more than required. The problem should be resolved from the form if possible.	100%
	435. Species caught must be present if catch is present otherwise Procedure A must be followed -again, this is an important error to follow up, but in many cases the problem should be resolved from the form	100%
	436. The species caught must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed- if the method/species combination is impossible or unreasonable, for example, the SLL method for paua, then it is worth a check.	100%
Processed catch weight	437. Processed catch weight must be present if the number of fish is non-zero (unless the species is one of BEM, BKM, DSM, SSF, STM, MAR, SAI[7]) otherwise Procedure A must be followed- this is an important field on a TLCER since it is the only reported catch weight.	100%
	438. Processed catch weight must be a valid number otherwise Procedure A must be followed-important field	100%
	439. Processed catch weight must have no more than 2 decimal place otherwise Procedure C must be followed- this may be a useful check to see if a comma has been mis-read as a decimal point which would put the figure in error by a factor of 1000	100%
	440. Processed catch weight must be greater than or equal to zero and less than the maximum for that species (220 kg if is an individual Southern Bluefin Tuna or as given in Table 20 if it is the total for a whole species) otherwise Procedure A must be followed – this is an important field and this check tries to detect unreasonable values	100%
	441. Processed catch weight must be greater than or equal to zero and less than the likely maximum for that species (130 if it is an individual Southern Bluefin Tuna or as given in Table 20 if it is the total for a whole species) otherwise Procedure C must be followed- this range check detects unlikely (but not impossible) values and triggers a data-entry level check	100%

[7] Section 20A of the Fisheries (Commercial Fishing) regulations 1986 and section 20B of the Fisheries (Auckland and Kermadec areas commercial fishing) regulations 1986 prohibit commercial fishers from possessing these species. Therefore we consider that it would be unreasonable for validators to require fishers to provide a processed weight.

	442. Processed catch weight must be present if species caught is present otherwise Procedure A must be followed.- this detects that no catch weight has been given where a species has been written in and is an important error	100%
Number of fish	443. The number of fish must be present and valid if the processed weight is non-zero otherwise Procedure A must be followed- an important consistency checks between two important fields 444. The number of fish must be within range as given in Table 20 otherwise Procedure A must be followed – this detects numbers outside the reasonable range 445. The number of fish must be within the likely range as given in Table 20 otherwise Procedure C must be followed.- this detects numbers outside the likely range of values and triggers a data entry level check	100% 100% 100%
Permit holder's name	446. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed- important check on permit holder id	100%
Permit holder's FIN number	447. Permit number must be present and a valid number otherwise Procedure A must be followed –important field 448. Permit number must be a valid permit holder otherwise Procedure A must be followed –important field 449. The vessel id /client combination must be the same vessel id/client combination who was issued the form otherwise Procedure C must be followed - the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator.	100% 100% 100%
Signature of master or permit holder	450. Signature must be present otherwise Procedure A must be followed –important for evidential purposes	100%
Date signed	451. Date signed must be present and a valid date otherwise Procedure A must be followed –important for evidential purpose 452. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed- consistency check on date.	100% 100%

6.5. Specifications for information collected on a Squid Jigging Catch, Effort Return

Field name on form	Specification	Standard
	453. Form structure must be correct for the form type (see Table 1 for details) otherwise Procedure A must be followed -this is only likely to occur if there are problems sending the form in via EDT	100%
	454. Must have some catch records or some effort records (so that it is not a nil return) otherwise Procedure C must be followed. – If a fisher has not declared a return to be a nil return then it should have effort or processing information on it. If there is no effort, catch nor processing information then the validator may be able to make an interpretation that it is a nil return without going back to the fisher because the explanatory notes do not say that a fisher must declare a non-fishing SJCER to be a nil return	100%
Form number	455. Form must not previously have been cancelled otherwise Procedure A must be followed -this is currently not validated using this mechanism but somehow, all cases of this error must be detected because it suggests that an incorrect form number may have been entered	100%
Vessel registration number	456. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed –important field	100%
	457. Vessel must be registered for fishing on date of form otherwise Procedure A must be followed –important field	100%
	458. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed -this is mainly to check for data entry errors, and does not require following up if there is in fact no error	100%
Vessel name	459. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed-important check on vessel id	100%
Date	460. Date must be present and a valid date otherwise Procedure A must be followed-vital check on an important field	100%
	461. Date must not be before book was issued otherwise Procedure A must be followed -just to check for data entry errors on the date. The problem may be that the book was re-issued by data entry staff. However if there is clearly an error on the form (for example a year 1066), then it must be rectified.	100%
	462. Date must not duplicate other SJCER form dates by this client-vessel combination otherwise Procedure A must be followed -the procedures must state that the validator should investigate the source of the problem first, for example, is there an incorrect date or vessel on one of the	100%

	duplicate pages 463. Date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors 464. Date must not be after the earliest Electronic timestamp otherwise procedure A must be followed-if the date is after the date the form was received by us, then there must be an error 465. Date signed must not be before date of effort otherwise Procedure A must be followed -here we are concerned that if the form is signed before the effort occurred then there may be an error on the effort date. If there does seem to be an error on the form date, then it may have to be sent back	100% 100% 100%
Latitude	466. Latitude must be present, of valid format otherwise Procedure A must be followed-important field 467. Position (latitude and longitude) must not be inland and must be a reasonable fishing location otherwise Procedure A must be followed unless the return is for high seas fishing in which case Procedure C must be followed-this is an important field, and this checks for unreasonable results (the current definition of reasonable locations is not robust for all high seas fishing, so for these forms the rule is only used as a check). The precise definition of what are reasonable fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The "defined grids" are obtained as follows: • They are not totally land bound grids; AND • The Grid is: ⇒ within the New Zealand continental shelf (as defined by the 1,000m contour); OR ⇒ an area that had been commonly fished or near areas that had been commonly fished (according to SJCER returns) in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions. 468. Position (latitude and longitude) must be within likely fishing locations otherwise Procedure C must be followed– this is a range beyond which it is unlikely that fishers will fish, however it is not impossible, so this will just be used for a quick check to confirm what is actually written on the form. The precise definition of what are likely fishing locations is confidential (because it contains information on fishing locations to smaller than 1 degree	100% 100% 100%

	grids and with fewer than three vessels or companies per grid) but were derived in this way: The start position must be within a defined set of 0.50*0.50 degree grids. The "defined grids" are obtained as follows: • Are not totally land bound grids; AND • Are areas that had been commonly fished or near areas that had been commonly fished (according to SJCER returns) in the 3 year period Jan 1997 to Feb 2000 -it is envisaged that this be updated with confirmed positions.	
Longitude	469. Longitude must be present, of valid format otherwise Procedure A must be followed- an important check on an important field	100%
Depth Deepest Lure	470. Lure depth must be present otherwise Procedure B must be followed -this is not a primary effort field, so we do not have the resources to follow up every error. However we do want to maintain quality at no worse than current levels 471. Where present, lure depth must be a valid number of correct format otherwise Procedure C must be followed – where we have received a number from a fisher, we do not want a data entry error to remove its usefulness, and since it is a data entry check, it is sensible to have it done on every error 472. Where present, lure depth must be between 30 and 150m otherwise Procedure C must be followed -this is mainly useful as a check for data entry errors, and should be done on every sufficiently suspicious value	75% 100% 100%
Depth Sea bottom	473. Bottom depth must be present otherwise Procedure B must be followed –of interest for stock assessment, but not a primary effort field 474. Where present, bottom depth must be a valid number of correct format otherwise Procedure C must be followed –where this information has been supplied, we do not want a data entry error to remove its usefulness 475. Where present, Bottom depth must be between 1 and 500m otherwise Procedure C must be followed -this is a check for data entry errors 476. Where present, Bottom depth must be greater than or equal to lure depth otherwise Procedure C must be followed –we are not sure whether this is a useful check, but it may be useful as a check for data entry errors that create impossible values	85% 100% 100% 100%
Sea surface temperature	477. Surface temperature must be present and valid with correct format otherwise Procedure B must be followed – Data is considered to be unreliable (for example, because of unknown calibration of the temperature gauges used) and therefore validation resource will not be expended 478. Surface temperature at shot 1 must be between 4 and	0% 0%

	24 degrees otherwise Procedure C must be followed –Data unreliable	
Wind speed	479. Wind speed must be valid with correct format otherwise Procedure B must be followed-This is not a primary effort field and does not warrant validator effort 480. Wind speed must be within range 0 to 20 m/s otherwise Procedure B must be followed- not a primary effort field 481. If there is a non null wind direction, then there must be a wind speed otherwise Procedure B must be followed – replaced by new specification 482. If there is no wind direction, then there should not be a wind speed otherwise Procedure B must be followed- not an important specification 483. Wind speed must be present otherwise Procedure B must be followed – wind speed should be present (even if it is zero), but it does not warrant much validator effort	0% 0% 0% 0% 90%
Wind direction	484. The wind direction must be valid and of correct format (no more than one decimal place) otherwise Procedure B must be followed- this is not a primary effort field and does not warrant validator effort 485. The wind direction must be within range 0-360 otherwise Procedure B must be followed – does not warrant validator effort 486. The wind direction must be present if the speed is non-zero otherwise Procedure B must be followed – wind direction should be present (unless the wind speed is zero) but it does not warrant much validator effort	0% 0% 95%
Time at start of fishing	487. Start time must be present otherwise Procedure A must be followed –important field 488. Start time must be a valid time otherwise Procedure A must be followed- important field.	100% 100%
End time	489. End time must be present otherwise Procedure A must be followed –important field 490. End time must be a valid time otherwise Procedure A must be followed-important field. 491. Effort duration must be within range 2 to 15 hours otherwise Procedure C must be followed- the time from start time to end time of effort must not be unreasonable, otherwise it suggests that either the start or the end time were incorrect	100% 100% 100%
Number of jigging machines in use – single reel	492. Either single reel number or a double reel number must be present otherwise Procedure B must be followed- this may be the primary effort field for squid jigging, and therefore may require validation. However, there does not appear to be much likelihood of the data being used in the medium term, and therefore it does not seem to warrant validator effort. 493. If the number of single reel jigging machines in use is present, then it must be a valid number less than or equal	95% 100%

	to 32000 otherwise Procedure C must be followed- however if the data is provided, it is worth checking that it has been entered correctly	
	494. If the number of single reel jigging machines is present, then it must be in likely range specified in Table 4 otherwise Procedure C must be followed- a data entry check on the validity of the number	100%
Double reel	495. Either single reel number or double reel number must be present otherwise Procedure B must be followed- this may be the primary effort field for squid jigging, and therefore may require validation. However, there does not appear to be much likelihood of the data being used in the medium term, and therefore it does not seem to warrant validator effort.	95%
	496. If the number of double reel jigging machines in use is present, then it must be a valid number otherwise Procedure C must be followed- however if the data is provided, it is worth checking that it has been entered correctly	100%
	497. If the number of double reel jigging machines is present, then it must be in likely range specified in Table 4 otherwise Procedure C must be followed- a data entry check on the validity of the number	100%
Species code	498. Species caught must be a valid or a passable code for use on the effort part of the form (usage code E or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed – this is an important field for stock assessment and requires validation. The instructions on the SJCER actually specify that common names for the species may be used, but these will be converted into species codes by the computer. Species codes with usage code E are valid codes for commercial species that would be expected on the effort part of the form. Species codes with usage code P are codes for unusual species which are acceptable and do not require confirmation with the fisher. Species codes with usage code X are for use on high seas forms only.	100%
	499. Species caught must be a valid code for use on the effort part of the form (usage code E and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed – Species codes with usage code P are codes for unusual species which do not require confirmation with the fisher, but do require a data entry check.	100%
	500. Species caught must be present if estimated catch is present otherwise Procedure A must be followed -again, this is an important error to follow up, but in many cases the problem should be resolved from the form	100%
	501. The species caught must not be unreasonable in combination with the method used as specified in Table 7	100%

	otherwise Procedure C must be followed- if the method/species combination is impossible or unreasonable, for example, the jigging method for paua, then it is worth a check.	
Total catch (by species)	502. Catch weight must be valid otherwise Procedure A must be followed -this is an important field for stock assessment and requires validation	100%
	503. Catch weight must be of correct format (no more than 2 decimal place) otherwise Procedure C must be followed -just a check for data entry or interpretation errors, since a fisher is unlikely to make an estimate that is accurate to 3 decimal places. A comma may have been misread as a decimal place, changing the figure by 3 orders of magnitude	100%
	504. Catch weight must be greater than or equal to zero and less than the maximum for that species/method combination as specified in Table 21 otherwise Procedure A must be followed -if the catch weight is really impossible, then the form should be sent back to the fisher	100%
	505. Catch weight must be must be greater than or equal to zero and less than the likely maximum for that species/method combination as specified in Table 21 otherwise Procedure C must be followed -if the catch weight is an unlikely but not impossible figure, then the form should be checked	100%
	506. Catch weight must be present if species code is present otherwise Procedure A must be followed -this is of some importance, but should be resolved from the form if at all possible	100%
Number of squid per tray	507. The number of trays must be a valid number otherwise Procedure A must be followed- this is thought to be unreliable because we do not know the size of the trays used on a particular vessel. Also, it is not clear how it could be used for stock assessment of squid. Size frequency information can be in stock assessment models for other species, but we cannot see how it could be used for squid which lives only for one year.	0%
	508. The number of trays must be within range 0 –5000 otherwise Procedure A must be followed- unreliable and not thought to be of use	0%
Total (number of trays)	509. The total number of trays must be a valid number otherwise Procedure A must be followed- unreliable and not thought to be of use	0%
	510. The total number of trays must be within range 0-5000 otherwise Procedure A must be followed-unreliable and not thought to be of use	0%
	511. The total number of trays must equal the sum of the individual tray tallies otherwise Procedure A must be followed-unreliable and not thought to be of use	0%
Not fishing	512. Activity name if present must be interpretable as an	90%

	activity code otherwise Procedure A must be followed. –this is useful information but we do not have the resources to follow it up 513. If there is effort on the form then activity name must be blank or "Fishing" otherwise Procedure A must be followed. –if they want to report some other activity on that day, then this is not a problem	0%
Permit holder FIN number	514. Permit number must be present and a valid number otherwise Procedure A must be followed –important field 515. Permit number must be a valid permit holder otherwise Procedure A must be followed –important field 516. The vessel id /client combination must be the same vessel id/client combination who was issued the form otherwise Procedure C must be followed - the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator.	100% 100% 100%
Permit holder's name	517. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed-important check on permit holder id	100%
Signature of master	518. Signature must be present otherwise Procedure A must be followed –important for evidential purposes	100%
Date signed	519. Date signed must be present and a valid date otherwise Procedure A must be followed –important for evidential purposes 520. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed. –the form could not have been received before it was apparently signed unless there is an error	100% 100%

6.6. Specifications for information collected on a nil Catch Effort Landing Return

Field name on form	Specification	Standard
	521. Form structure must be correct for the form type (see Table 1 for details) otherwise Procedure A must be followed – this error is only likely to occur if there are problems sending the form in via EDT	100%
	522. Must be marked as a nil return and have no effort or landing records (so that it is a genuine nil return) otherwise Procedure A must be followed – The fisher must explicitly write "NIL" on the return. If the fisher has explicitly indicated that it is a nil return but there are effort or landing records on it then it must go back to the fisher for confirmation. If it has been incorrectly recorded as a nil return then this can be corrected without going back to the fisher. Please note that the instructions on the form state that the fisher must write Nil in the greenweight column. We suggest that it would be reasonable to accept the word NIL written anywhere on the form as an explicit declaration that this is a nil return, even if the letters do not appear in the greenweight column. Any effort, catch or landing data recorded must be stored until a validator can decide whether this is an incorrectly filled in NIL return, or not a NIL return at all.	100%
Form number	523. Form must not previously have been cancelled otherwise Procedure A must be followed - this is currently not validated using this mechanism but somehow all errors of this kind must be detected because otherwise it suggests that there is an error in the form number	100%
First day of trip	524. Must supply either a start and end date for the nil period or a nil period month otherwise Procedure A must be followed –this does not match the reporting framework	0%
	525. Must not supply both a period and a start or end date otherwise Procedure A must be followed–this does not match the reporting framework	0%
	526. If not being used for a nil return start date, the form date should be null for a nil return otherwise Procedure A must be followed–this does not match the reporting framework	0%
	527. If being used for a nil return start date the date must be a valid date otherwise Procedure A must be followed–this does not match the reporting framework	0%
Last day of trip	528. Must supply either a start and end date for the nil period or a nil period month otherwise Procedure A must be followed–this does not match the reporting framework	0%
	529. Must not supply both a period and a start or end date otherwise Procedure A must be followed–this does not match the reporting framework	0%

	530. If not being used for a nil return end date, the trip last date should be null for a nil return otherwise Procedure A must be followed–this does not match the reporting framework	0%
	531. If being used for a nil return end date the last day of trip must be a valid date otherwise Procedure A must be followed–this does not match the reporting framework	0%
	532. End date must be after start date otherwise Procedure A must be followed–this does not match the reporting framework	0%
Landing date	533. Must supply the month and year of this nil return otherwise Procedure A must be followed – however this month and year may be interpretable from a start and end date supplied for the nil period	100%
	534. Must not supply both a period and a start or end date otherwise Procedure A must be followed–this does not match the reporting framework	0%
	535. If not being used for a nil return period, the landing date should be null for a nil return otherwise Procedure A must be followed–this does not match the reporting framework	0%
	536. The date must be a valid month and year otherwise Procedure A must be followed	100%
	537. Must not overlap other returns by this vessel-client combination otherwise Procedure A must be followed – this should only be sent back if there seems to be a serious problem with the forms.	100%
	538. Date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100%
Vessel registration number	539. The vessel registration number (or call sign for foreign licensed vessels) must be present (or "NONE" if the form was issued to a client with no vessel associated) and valid otherwise Procedure A must be followed -important field	100%
	540. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed- just to check for data entry errors and does not require following up	100%
Vessel name	541. Vessel name must be present (unless the form was issued to a client with no vessel) and must agree with vessel id otherwise Procedure A must be followed–important check on vessel id	100%
Vessel registration number of other vessel (if pair fishing)	542. Must be absent for a nil return otherwise Procedure A must be followed–(we don't mind if they report a pair vessel that they were not fishing with)	0%

Point of landing		
Page (sequence)	543. The page sequence number must not be other than 1 for a nil return otherwise Procedure A must be followed– this specification is not important	0%
Of (count of how many pages)	544. The page count must not be other than 1 for a nil return otherwise Procedure A must be followed–this specification is not important	0%
Day and Month	545. Effort data must be absent for a nil return otherwise Procedure A must be followed– this specification is to be removed to save unnecessary duplication, and replaced with a simple statement about the form structure at the top of the specifications	0%
Method Code	546. Effort data must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Position	547. Effort data must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Effort data Time	548. Effort data must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Effort data A	549. Effort data must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Effort data B	550. Effort data must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Effort data C	551. Effort data must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Effort data D	552. Effort data must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Target species	553. Target species must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Total (kg)	554. Total weight must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Species Code	555. Species code must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Weight (kg)	556. Weight must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Fishstock (Species/Area)	557. Fishstock must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Landed state	558. Landed state must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Containers-Number	559. Container number must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Containers-Type	560. Container type must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Containers-Content Weight	561. Content weight must be absent for a nil return otherwise Procedure A must be followed-unnecessary	0%

	duplication	
Quota registration no. fish caught against	562. QRN must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Destination type	563. Destination type must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Destination LFR no. or vessel reg no.	564. Destination must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Greenweight(kilograms) when advised by LFR	565. Greenweight must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication 566. Must be "nil" for a nil return otherwise Procedure A must be followed – although this is what is stated in the explanatory notes for a CELR we think that it is unnecessary to require that the word "Nil" be written in the greenweight column specifically, and would suggest that if this text was in that column then it should be automatically derived to a null on the catch effort database.	0% 0%
Purchase tax invoice number from LFR	567. Purchase tax invoice number must be absent for a nil return otherwise Procedure A must be followed-unnecessary duplication	0%
Permit holder's name	568. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed-important check on the permit holder's FIN number	100%
Permit holder's FIN number	569. Permit holder's FIN number must be present and a valid number otherwise Procedure A must be followed-important field 570. Permit holder's FIN number must be a valid permit holder otherwise Procedure A must be followed-important field 571. The vessel id /client combination must be the same vessel id/client combination who was issued the form otherwise Procedure C must be followed - the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator	100% 100% 100%
Signature of master	572. Signature must be present otherwise Procedure A must be followed-important for evidential purposes	100%
Date signed	573. Date must be present and a valid date otherwise Procedure A must be followed –important for evidential purposes 574. Date must not be after earliest Electronic timestamp otherwise Procedure C must be followed-important check	100% 100%

	for consistency of dates. 575. Date must not be before date of landing by more than 2 days otherwise Procedure A must be followed-this does not make any sense on a nil return since it could be signed at any time.	0%

6.7. Specifications for information collected on a nil Catch Landing Return

Field name on form	Specification	Standard
	576. Form structure must be correct for the form type (see Table 1 for details) otherwise Procedure A must be followed – this is only likely to occur if there are problems sending the form in via EDT	100%
	577. Must be marked as a Nil return and have no landing records (so that it is a genuine nil return) otherwise Procedure A must be followed – The fisher must explicitly write "NIL" on the return. If the fisher has explicitly indicated that it is a nil return but there are landing records on it then it must go back to the fisher for confirmation. If it has been incorrectly recorded as a nil return then this can be corrected without going back to the fisher. Please note that the instructions on the form state that the fisher must write Nil in the greenweight column. We suggest that it would be reasonable to accept the word NIL written anywhere on the form as an explicit declaration that this is a nil return, even if the letters do not appear in the greenweight column. Any landing data recorded must be stored until a validator can decide whether this is an incorrectly filled in NIL return, or not a NIL return at all.	100%
Form number	578. Form must not previously have been cancelled otherwise Procedure A must be followed - this is currently not validated using this mechanism but somehow all errors of this kind must be detected because otherwise it suggests that there is an error in the form number	100%
First day of trip	579. Must supply either a start and end date for the nil period or a nil period month otherwise Procedure A must be followed –this does not match the reporting framework	0%
	580. Must not supply both a period and a start or end date otherwise Procedure A must be followed–this does not match the reporting framework	0%
	581. If not being used for a nil return start date, the form date should be null for a nil return otherwise Procedure A must be followed–this does not match the reporting framework	0%
	582. If being used for a nil return start date the date must be a valid date otherwise Procedure A must be followed–this does not match the reporting framework	0%
Last day of trip	583. Must supply either a start and end date for the nil period or a nil period month otherwise Procedure A must be followed–this does not match the reporting framework	0%
	584. Must not supply both a period and a start or end date otherwise Procedure A must be followed–this does not match the reporting framework	0%
	585. If not being used for a nil return end date, the trip last	0%

	date should be null for a nil return otherwise Procedure A must be followed–this does not match the reporting framework	
	586. If being used for a nil return end date the last day of trip must be a valid date otherwise Procedure A must be followed–this does not match the reporting framework	0%
	587. End date must be after start date otherwise Procedure A must be followed–this does not match the reporting framework	0%
Landing date	588. Must supply the month and year of this nil return otherwise Procedure A must be followed – however this month and year may be interpretable from a start and end date supplied for the nil period	100%
	589. Must not supply both a period and a start or end date otherwise Procedure A must be followed–this does not match the reporting framework	0%
	590. If not being used for a nil return period, the landing date should be null for a nil return otherwise Procedure A must be followed–this does not match the reporting framework	0%
	591. The date must be a valid month and year combination otherwise Procedure A must be followed	100%
	592. Must not overlap other effort by this vessel otherwise Procedure A must be followed – this is not a valid check because there may be more than one landing per trip.	0%
	593. Date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100%
Vehicle registration number	594. The vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed -important field. If a nil CLR has no vessel id because the permit holder had no vessel registered at that time, then it need not be sent back.	100%
Vessel name	595. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed – important check on vessel id	100%
Vessel registration number of other vessel (if pair fishing)	596. Must be absent for a nil return otherwise Procedure A must be followed –(we don't mind if they report a pair vessel that they were not fishing with)	0%
Point of landing	597. Optional for a nil return	
Page (sequence)	598. The page sequence number must not be other than 1 for a nil return otherwise Procedure A must be followed – this specification is not important	0%
Of (count of	599. The page count must not be other than 1 for a nil	0%

how many pages)	return otherwise Procedure A must be followed-not important	
Fishstock (Species/Area)	600. Must be absent for a nil return otherwise Procedure A must be followed – this specification is to be removed to save unnecessary duplication, and replaced with a simple statement about the form structure at the top of the specifications	0%
Landed state	601. Must be absent for a nil return otherwise Procedure A must be followed –unnecessary duplication	0%
Containers-Number	602. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication	0%
Containers-Type	603. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication	0%
Containers-Content weight	604. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication	0%
Quota registration number fish caught against	605. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication	0%
Destination type	606. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication	0%
Destination LFR number or vessel reg number	607. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication	0%
Greenweight(kilograms) when advised by LFR	608. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication 609. Must be "nil" for a nil return otherwise Procedure A must be followed – although this is what the explanatory notes require we think that it is unnecessary to require that the word "Nil" be written in the greenweight column specifically, and would suggest that if this text was in that column then it should be automatically derived to a null on the catch effort database.	0% 0%
Purchase tax invoice number from LFR	610. Must be absent for a nil return otherwise Procedure A must be followed–unnecessary duplication	0%
Permit holder's FIN number	611. Permit holder's FIN number must be present and a valid number otherwise Procedure A must be followed-important field 612. Permit holder's FIN number must be a valid permit holder otherwise Procedure A must be followed-important field 613. The vessel id /client combination must be the same vessel id/client combination who was issued the form otherwise Procedure C must be followed - the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another	100% 100% 100%

	vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator.	
Permit holder's name	614. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed-important check on the permit holder's FIN number	100%
Signature of master	615. Signature must be present otherwise Procedure A must be followed-important for evidential purposes	100%
Date signed	616. Date must be present and a valid date otherwise Procedure A must be followed –important for evidential purposes 617. Date must not be after earliest Electronic timestamp otherwise Procedure C must be followed-important check for consistency of dates. 618. Date must not be before date of landing by more than 2 days otherwise Procedure A must be followed-this does not make sense on a nil return since it may be signed at any time.	100% 100% 0%

6.8 Specifications for information collected on a TCEPR when no fishing occurred

Field name on form	Specification	Standard
	619. Form structure must be correct for the form type (see Table 1 for details) ie there must be no effort or catch otherwise Procedure A must be followed – The fisher can explicitly declare a form to be a nil return with either an Activity Comment or by writing NIL on the form. If the fisher has explicitly indicated that it is a nil return but there are effort or catch or processing records on it then it must go back to the fisher for confirmation. If it has been incorrectly recorded as a nil return then this can be corrected without going back to the fisher. Any effort, catch or processing data recorded must be stored until a validator can determine whether it is an incorrectly filled in Nil return or not a nil return at all.	100%
Form number	620. Form must not previously have been cancelled otherwise Procedure A must be followed –this is currently not validated using this mechanism but somehow all cases of this error must be detected because it suggests that an incorrect form number may have been entered.	100%
Date	621. Must supply a start and end date for the nil period otherwise Procedure A must be followed - this specification matches the current data entry screens but does not match the reporting framework and therefore has been removed as a specification. A nil TCEPR should be for one day only.	0%
	622. If the date is not being used for a nil return start date, the form date should be null for a nil return otherwise Procedure A must be followed -again, this does not match the reporting framework	0%
	623. Nil return date must be present –need to know date for which the nil return applies. A TCEPR nil return should be for one day only	100%
	624. Date must be a valid date otherwise Procedure A must be followed- important check on date field.	100%
	625. End date must be after start date otherwise Procedure A must be followed -does not match reporting framework	0%
	626. Date must not be before book was issued otherwise Procedure C must be followed – this is just to check for data entry errors on the date. The problem may be that the book was re-issued by data entry staff	100%
	627. Date must not duplicate other TCEPR form dates by this client-vessel combination unless they are all pages of the same return otherwise Procedure A must be followed - the procedures must state that the validator should investigate the source of the problem first, for example, is there an incorrect date or vessel on one of the duplicate	100%

	pages 628. Date must not be after earliest Electronic timestamp otherwise procedure A must be followed – the form should not apply to a date after the form was received by us 629. Date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100% 100%
Vessel registration number	630. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed –important field 631. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed –just to check for data entry errors and does not require following up	100% 100%
Vessel registration number of other vessel (if pair fishing)	632. Vessel registration number of the other vessel (if pair fishing) must be absent for a nil return otherwise Procedure A must be followed -we don't mind if they report a pair vessel that they were not fishing with	0%
Vessel's name	633. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed – this is a vital check on the vessel id	100%
Position at Midday	634. The position at midday is optional but must be in a valid format otherwise Procedure C must be followed- not of any importance now that VMS is available 635. The position at midday is optional, but if present it must be within range (latitude between 25 and 56 degrees and longitude between 160 and 260 degrees, where 260 degrees E is 100 degrees W) and not inland otherwise Procedure C must be followed -not of any importance now that VMS is available	0% 0%
Water temperature at shot 1 – surface	636. The surface water temperature at shot 1 is optional, but if present it must be valid with correct format otherwise Procedure C must be followed – Data is considered to be unreliable and therefore validation resource will not be expended on this field 637. The surface water temperature at shot 1 must be between 4 and 24 degrees otherwise Procedure C must be followed– Data is considered to be unreliable and therefore validation resource will not be expended	0% 0%
Water temperature at shot 1 - bottom	638. The bottom water temperature is optional, but if present it must be valid with correct format otherwise Procedure C must be followed– Data is considered to be unreliable and therefore validation resource will not be expended 639. The bottom water temperature must be between 4 and	0% 0%

	24 degrees otherwise Procedure C must be followed– Data is considered to be unreliable and therefore validation resource will not be expended on this field 640. The bottom water temperature must be equal to or cooler than surface temperature (difference between 0 and 99 degrees) otherwise Procedure C must be followed– Data is considered to be unreliable and therefore validation resource will not be expended on this field	0%
Page (sequence)	641. The page sequence number must not be other than 1 for a nil return otherwise Procedure A must be followed – not considered to be a useful check	0%
Of (count of how many pages)	642. The page count must not be other than 1 for a nil return otherwise Procedure A must be followed –not considered to be a useful check	0%
Start time	643. Must have no effort otherwise Procedure A must be followed – this specification has been removed to save unnecessary duplication, and replaced with a simple statement about the form structure at the top of the specifications	0%
End time	644. Must have no effort otherwise Procedure A must be followed –unnecessary duplication	0%
Start latitude	645. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
End latitude	646. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Start longitude	647. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
End longitude	648. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Gear code	649. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Gear code	650. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Headline height	651. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Depth groundrope	652. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Depth bottom	653. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Trawling speed	654. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Target species	655. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Total (kg)	656. Must have no effort otherwise Procedure A must be followed–unnecessary duplication	0%
Species code	657. Must have no estimated subcatch otherwise Procedure A must be followed–unnecessary duplication	0%
Quantity (kg)	658. Must have no estimated subcatch otherwise Procedure A must be followed–unnecessary duplication	0%

Processed Species	659. Must have no processing otherwise Procedure A must be followed–unnecessary duplication	0%
Processed state	660. Must have no processing otherwise Procedure A must be followed–unnecessary duplication	0%
Number of processed units	661. Must have no processing otherwise Procedure A must be followed–unnecessary duplication	0%
Unit weight	662. Must have no processing otherwise Procedure A must be followed–unnecessary duplication	0%
Processed catch weight	663. Must have no processing otherwise Procedure A must be followed–unnecessary duplication	0%
Conversion factor	664. Must have no processing otherwise Procedure A must be followed–unnecessary duplication	0%
Calculated weight before processing	665. Must have no processing otherwise Procedure A must be followed–unnecessary duplication	0%
Meal(kg)	666. Must have no meal production otherwise Procedure A must be followed–unnecessary duplication	0%
Oil(kg)	667. Must have no oil production otherwise Procedure A must be followed–unnecessary duplication	0%
Activity comment	668. Activity name must be present and interpretable as an activity code – we do not have the resources to follow this up 669. Activity code must not be blank or "Fishing" otherwise Procedure A must be followed – this should be completed for a nil TCEPR but we don't have the resources to follow this up	60% 85%
Permit holder's FIN number	670. The permit holder's FIN number must be present and a valid number otherwise Procedure A must be followed- important field 671. The permit holder's FIN number must be for a valid permit holder otherwise Procedure A must be followed – important field 672. The vessel id /client combination must be the same vessel id/client combination who was issued the form otherwise Procedure C must be followed - the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another vessel or client had returned the form, or there has been a data entry error in the vessel id or client number. Either way this should be corrected by the validator.	100% 100% 100%
Permit holder's name	673. The permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed –vital check on permit holder id	100%
Signature of master	674. A signature must be present otherwise Procedure A must be followed -necessary that the form be signed	100%
Date signed	675. A date must be present and a valid date otherwise Procedure A must be followed –important field 676. Date signed must not be after earliest Electronic	100% 100%

	timestamp otherwise Procedure C must be followed – consistency check on dates	

6.9 Specifications for information collected on a "nil" TLCER

Field name on form	Specification	Standard
Form number	677. Form must not previously have been cancelled otherwise Procedure A must be followed 678. Form structure must be correct for the form type (see Table 1 for details) ie it must not have any effort or catch otherwise Procedure C must be followed: - Since a TLCER is an effort based form (rather than a daily form) there is no meaning for a nil-TLCER return and no legal way for a "Nil" TLCER to be returned to the fisher for correction. Therefore these specifications merely show what specifications will be removed in the revised specifications. If a return is clearly marked "Nil" and it has effort or catch then it should be returned to the fisher as an incorrectly completed Non-nil return unless the effort consists of a latitude and longitude or environmental information that the fisher could have provided without actually setting a line.	0% 100%
Vessel registration number	679. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed 680. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure A must be followed	0% 0%
Vessel name	681. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed	0%
Position at Start of set	682. Must have no effort on form otherwise Procedure A must be followed	0%
Target species code	683. Must have no effort on form otherwise Procedure A must be followed	0%
Start of set – date	684. Must supply a start and end date for the nil period otherwise Procedure A must be followed 685. If not being used for a nil return start date, the form date should be null for a nil return otherwise Procedure A must be followed 686. If being used for a nil return start date then it must be a valid date otherwise Procedure A must be followed 687. End date must be after start date otherwise Procedure A must be followed	0% 0% 0% 0%
Start of set – time	688. Must have no effort on form otherwise Procedure A must be followed	0%
Start of set –sea surface temp	Optional but sea surface temperature at start of set must be a 689. Valid Sea surface temperature otherwise Procedure A must be followed 690. Temperature must have no more than one decimal place otherwise Procedure A must be followed	0% 0%

	691. Temperature must be in range 4-24 degrees otherwise Procedure A must be followed	0%
Finish of set – date	692. Must have no effort otherwise Procedure A must be followed	0%
Finish of set – time	693. Must have no effort otherwise Procedure A must be followed	0%
Finish of set – cloud cover amount	Optional but cloud cover amount at finish of set: 694. Must be a number otherwise Procedure A must be followed 695. Must have no more than 1 d. p otherwise Procedure A must be followed 696. Must be between 0 and 8 otherwise Procedure A must be followed	 0% 0% 0%
Finish of set – cloud cover code	Optional but cloud cover code at finish of set: 697. Must be a valid cloud type (Nil, Ci,Cc,Cs, Ac, As, Ns, Sc, St, Cu, Cb)	 0%
Start of Hauling – date	698. Must have no effort otherwise Procedure A must be followed	0%
Start of Hauling – time	699. Must have no effort otherwise Procedure A must be followed	0%
Start of hauling – wind speed	700. Must have no effort otherwise Procedure A must be followed	0%
Finish of hauling – date	701. Must have no effort otherwise Procedure A must be followed	0%
Finish of hauling – time	702. Must have no effort otherwise Procedure A must be followed	0%
Finish of hauling – wind speed	703. Must have no effort otherwise Procedure A must be followed	0%
Gear – total length of line	704. Must have no effort otherwise Procedure A must be followed	0%
Gear – total number of hooks	705. Must have no effort otherwise Procedure A must be followed	0%
Gear – total number of baskets	706. Must have no effort otherwise Procedure A must be followed	0%
Species code	707. Must have no processing otherwise Procedure A must be followed	0%
Processed catch weight	708. Must have no processing otherwise Procedure A must be followed	0%
Number of fish	709. Must have no processing otherwise Procedure A must be followed	0%
Permit holder's name	710. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed	0%
Permit holder's FIN number	711. Permit holder's FIN number must be present and a valid number otherwise Procedure A must be followed 712. Permit holder's FIN number must be for a valid permit holder otherwise Procedure A must be followed	0% 0%

	713. Permit holder's FIN number must be for the same permit holder who was issued the book otherwise Procedure A must be followed	0%
Signature of master or permit holder	714. Signature must be present otherwise Procedure A must be followed	0%
Date signed	715. Signed date must be present and a valid date otherwise Procedure A must be followed	0%

6.10 Specifications for information collected on a SJCER on which no fishing is reported

Field name on form	Specification	Standard
	716. Form structure must be correct for the form type (see Table 1 for details) ie there must be no effort or catch otherwise Procedure A must be followed –The fisher can explicitly declare a form to be a nil return with either an Activity Comment or by writing NIL on the form. If the fisher has explicitly indicated that it is a nil return but there are effort or catch or processing records on it then it must go back to the fisher for confirmation (unless the effort consists of a latitude and longitude or environmental data which they might have completed without actually doing any fishing). If it has been incorrectly recorded as a nil return then this can be corrected without going back to the fisher. Any effort, catch or processing data recorded must be stored until a validator can determine whether it is an incorrectly filled in Nil return or not a nil return at all.	100%
Form number	717. Form must not previously have been cancelled otherwise Procedure A must be followed –this is currently not validated using this mechanism but somehow all cases of this error must be detected because it suggests that an incorrect form number may have been entered.	100%
Vessel registration number	718. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed –important field	100%
	719. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed –just to check for data entry errors and does not require following up	100%
Vessel name	720. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed – this is a vital check on the vessel id	100%
Date	721. Must supply a start and end date for the nil period otherwise Procedure A must be followed -this specification matches the current data entry screens but does not match the reporting framework and therefore has been removed	0%
	722. If the date is not being used for a nil return start date, the form date should be null for a nil return otherwise Procedure A must be followed -again, this does not match the reporting framework	0%
	723. Form date must be present –a nil SJCER should be for one day only	100%
	724. Date must be a valid date otherwise Procedure A must be followed- important field	100%
	725. End date must be after start date otherwise Procedure A must be followed -does not match reporting framework	0%

	726. Date must not be before book was issued otherwise Procedure C must be followed -just to check for data entry errors on the date. The problem may be that the book was re-issued by data entry staff	100%
	727. Date must not duplicate other SJCER form dates by this client-vessel combination otherwise Procedure A must be followed -the procedures must state that the validator should investigate the source of the problem first, for example, is there an incorrect date or vessel on one of the duplicate pages	100%
	728. Date must not be after earliest Electronic timestamp otherwise procedure A must be followed –consistency check on date	100%
	729. Date must match date in lodgement data otherwise Procedure C must be followed –the data from data entry should match the data that has been entered into the lodgement screen (which may or may not have been scanned in). This is both to ensure consistency between the two systems and also to detect data entry errors	100%
Latitude	730. Latitude must be present and a valid format otherwise Procedure A must be followed- not useful information on a nil return	0%
	731. Latitude must be within range (latitude between 25 and 56 degrees) and not inland otherwise Procedure A must be followed – not particularly useful on a nil return	0%
Longitude	732. Longitude must be present and a valid format otherwise Procedure A must be followed- not useful information on a nil return	0%
	733. Longitude must be within range (between 147 and 260 degrees, where 260 degrees E is 100 degrees W) otherwise Procedure A must be followed- not particularly useful on a nil return	0%
Depth Deepest Lure	734. Must have no depth otherwise Procedure A must be followed– this specification is to be removed to save unnecessary duplication, and replaced with a simple statement about the form structure at the top of the specifications	0%
Depth Sea bottom	735. Must have no depth otherwise Procedure A must be followed–unnecessary duplication	0%
Sea surface temperature	736. Sea surface temperature is optional but if present it must be valid and of the correct format- this information is not reliable and is not useful information on a nil return	0%
Wind speed	Wind speed is optional but if present it:	
	737. Must be valid with correct format otherwise Procedure A must be followed- not useful information on a nil return	0%
	738. Must be within range 0 to 20 m/s otherwise Procedure A must be followed- not useful on a nil return	0%
	739. If there is a non null wind direction, then there must be a wind speed otherwise Procedure A must be followed-not useful on a nil return	0%

	740. If there is no wind direction, then there should be no wind speed otherwise Procedure A must be followed- not useful on a nil return	0%
Wind direction	Wind direction is optional but if present it: 741. Must be valid and of correct format (no more than one decimal place) otherwise Procedure A must be followed- not useful on a nil return 742. Must be within range 0-360 otherwise Procedure A must be followed- not useful on a nil return	 0% 0%
Time at start of fishing	743. Must have no start time otherwise Procedure A must be followed–unnecessary duplication	0%
End time	744. Must have no end time otherwise Procedure A must be followed–unnecessary duplication	0%
Number of jigging machines in use – single reel	745. Must have no number of single reel machines otherwise Procedure A must be followed–unnecessary duplication	0%
Double reel	746. Must have no number of double reel machines otherwise Procedure A must be followed–unnecessary duplication	0%
Species code	747. Must have no species code otherwise Procedure A must be followed–unnecessary duplication	0%
Total catch	748. Must have no total catch otherwise Procedure A must be followed–unnecessary duplication	0%
Number of squid per tray	749. Must have no trays otherwise Procedure A must be followed–unnecessary duplication	0%
Total (trays)	750. Must have no total otherwise Procedure A must be followed–unnecessary duplication	0%
Not fishing	751. Activity name must be present and interpretable as an activity code otherwise Procedure A must be followed – this is useful information but we do not have the resources to follow it up 752. Activity code must not be blank or “Fishing” otherwise Procedure A must be followed – this should be completed for a nil SJCER but we don’t have the resources to follow this up	30% 95%
Permit holder FIN number	753. The permit holder’s FIN number must be present and a valid number otherwise Procedure A must be followed- important field 754. The permit holder’s FIN number must be for a valid permit holder otherwise Procedure A must be followed – important field 755. The vessel id /client combination must be the same vessel id/client combination who was issued the form otherwise Procedure C must be followed - the vessel id/client combination from data entry should match the vessel id/client combination that the form was issued to. Otherwise either the form has not been re-issued at lodgement time when it became apparent that another vessel or client had returned the form, or there has been a	100% 100% 100%

	data entry error in the vessel id or client number. Either way this should be corrected by the validator.	
Permit holder's name	756. The permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed –vital check on permit holder id	100%
Signature of master	757. A signature must be present otherwise Procedure A must be followed -it is necessary that the form be signed for evidential purposes	100%
Date signed	758. A date must be present and a valid date otherwise Procedure A must be followed –important field 759. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed – consistency check on date	100% 100%

6.11 Specifications for information collected on a Paua Catch Effort Landing Return

Field name on form	Specification	Standard
	760. Form structure must be correct for the form type otherwise Procedure A must be followed	100%
	761. If the page is from a single page return, then it must have some landing records (so that it is not a nil return) otherwise Procedure C must be followed.	100%
	762. If the page is from a multiple page return, then it must have some effort or some landing records (so that it is not a nil return) otherwise Procedure C must be followed	100%
Form number	763. Form must not previously have been cancelled otherwise Procedure A must be followed –	100%
	764. Form number must be a valid form number with the correct number of digits for this form type otherwise Procedure C must be followed	100%
Date	765. Date must be present and a valid date otherwise Procedure A must be followed	100%
	766. Date must not be before book was issued otherwise Procedure C must be followed	100%
	767. Date must not duplicate other PCELR form dates by this client/vessel combination unless they are all pages of the same return otherwise Procedure A must be followed	100%
	768. Date must not be after the earliest Electronic timestamp otherwise Procedure A must be followed	100%
	769. Date must match date in lodgement data otherwise Procedure C must be followed	100%
	770. Form date must not be after date signed otherwise Procedure A must be followed -here we are concerned that if the form is signed before the effort occurred then there may be an error on the effort date. If there does seem to be an error on the form date, then it may have to be sent back	100%
Fishstock (Species/Area)	771. Fishstock code must be present and valid otherwise Procedure A must be followed	100%
	772. Fishstock code must have been valid at date of fishing otherwise Procedure A must be followed-	100%
	773. Fishstock code must be for paua otherwise Procedure A must be followed.	100%
	774. The fishstock must be consistent with the statistical area that this species was reported caught in otherwise Procedure A must be followed	100%
Name of diver	775. Must be present otherwise Procedure A must be followed	100%
	776. Must be valid (at least 3 letters not counting the full stop) otherwise Procedure A must be followed.	100%
Position	777. The location of fishing must be present otherwise	100%

	Procedure A must be followed 778. The statistical area given must be a valid statistical area for paua otherwise Procedure A must be followed 779. The numerical difference between this statistical area and the previous reported statistical area on this form must not be more than 10 otherwise Procedure C must be followed – because the paua statistical areas are allocated rationally, two statistical areas that are close physically will have numbers that are similar. Therefore, the difference in their numbers is a proxy for physical distance, and large differences may detect data entry errors in one of the entries. There may be false errors where the numbers are disjoint because of islands.	100% 100%
Time spent in water	780. The fishing duration must be present in the fishing duration column otherwise Procedure B must be followed 781. Fishing duration must be a valid number otherwise Procedure B must be followed 782. Fishing duration must be within range 0-10 hours as specified in Table 4 otherwise Procedure B must be followed 783. Fishing duration must be within likely range 0-8 hours as specified in Table 4 otherwise Procedure C must be followed	100% 100% 100% 100%
Estimate (by fisher) of catch of blackfoot paua	784. Estimated quantity must be valid otherwise Procedure A must be followed 785. Estimated quantity must be of correct format (a whole number) otherwise Procedure C must be followed 786. Estimated quantity must be greater than or equal to zero and less than the maximum of 3000kg for that species/method combination as specified in Table 10 otherwise Procedure A must be followed 787. Estimated quantity must be greater than or equal to zero and less than the likely maximum of 2000kg for that species/method combination as specified in Table 10 otherwise Procedure C must be followed	100% 100% 100% 100%
Estimate (by fisher) of catch of yellowfoot paua	788. Estimated quantity must be valid otherwise Procedure A must be followed 789. Estimated quantity must be of correct format (a whole number) otherwise Procedure C must be followed 790. Estimated quantity must be greater than or equal to zero and less than the maximum of 500kg for that species/method combination as specified in Table 10 otherwise Procedure A must be followed 791. Estimated quantity must be greater than or equal to zero and less than the likely maximum of 100kg for that species/method combination as specified in Table 10 otherwise Procedure C must be followed 792. There should be a catch of either blackfoot or yellowfoot paua otherwise Procedure C must be followed – of course it is possible for neither species to be caught,	100% 100% 100% 100% 100%

	but it may be worth checking 793. If there is a catch of yellowfoot paua but no catch of blackfoot paua then Procedure C must be followed – yellowfoot paua is comparatively rare, and may be worth a check to ensure that a data entry error has not shifted the catch of blackfoot paua into the yellowfoot paua column	100%
Diving conditions	794. Diving condition must be present otherwise Procedure B must be followed- it was decided when the form was designed that this would not be followed up with the fisher 795. Diving condition must be one of "E", "G", "A", "P" or "V" otherwise Procedure C must be followed-if data is present, it is worth checking that it has been correctly entered	0% 100%
Estimate (by permit holder) of greenweight	796. Estimated quantity must be present otherwise Procedure A must be followed 797. Estimated quantity must be valid otherwise Procedure A must be followed 798. Estimated quantity must be of correct format (a whole number) otherwise Procedure C must be followed 799. Estimated quantity must be greater than or equal to zero and less than the maximum for PAU as specified in Table 14 otherwise Procedure A must be followed 800. Estimated quantity must be greater than or equal to zero and less than the likely maximum for PAU as specified in Table 14 otherwise Procedure C must be followed	100% 100% 100% 100% 100%
Destination type	801. Must be present and valid otherwise Procedure A must be followed 802. For destination type D, species should not be ITQ otherwise Procedure C must be followed	100% 100%
Containers-Number	803. The number of containers must be a valid number otherwise Procedure C must be followed 804. The number of containers must be in range 0-999 otherwise Procedure C must be followed 805. The number of containers must be present otherwise Procedure A must be followed – on other formtypes we would not put validation resource into this unless there was going to be no greenweight data	100% 100% 0%
Containers-Type	806. The type of container must be a valid type of unit (as listed in Table 12) otherwise Procedure A must be followed –this would be consistent with the other formtypes 807. The container type must be present otherwise Procedure A must be followed – this would be consistent with the other formtypes	0% 0%
Destination LFR no. or vessel reg no.	808. For destination types A,B,D,E,H,R,O,P,F, Q and U the destination number should be empty (although the vessel's own vessel id is acceptable) otherwise Procedure C must be followed –need to add in the new destination types 809. For destination type L the destination should be a valid	100% 100%

	client number that is an LFR otherwise Procedure A must be followed	
	810. For destination type L the LFR must be an LFR that this permit holder has landed to within the past year otherwise Procedure C must be followed.	100%
	811. For destination type T the destination should be a valid registered vessel that is not the same as the vessel on the form otherwise Procedure C must be followed	100%
Greenweight (kilograms) when advised by LFR	812. For destination type L the greenweight must be present otherwise Procedure A must be followed	100%
	813. Greenweight must be a valid weight otherwise Procedure A must be followed	100%
	814. Greenweight must be greater than or equal to zero and less than the maximum for PAU as specified in Table 14 otherwise Procedure A must be followed	100%
	815. Greenweight must be greater than or equal to zero and less than the likely maximum specified in Table 14 for PAU otherwise Procedure C must be followed	100%
	816. The total greenweight of this species in the landing part of the form must approximately equal the total of the estimated catches of this species over all the effort part of the form otherwise Procedure C must be followed –this will not be checked because of the likelihood of fishers putting part of their catch into holding receptacles and landing it later	0%
	817. Two greenweight figures of the same quantity should not be duplicated for one fishstock within one landing otherwise Procedure A must be followed	100%
	818. The greenweight advised to the LFR must be similar to the estimate made by the permit holder (within 15% and 20kg) in this line otherwise Procedure A must be followed – they need not of course be identical, but if they differed greatly, then it should be clarified.	100%
Purchase tax invoice number from LFR	819. The purchase tax invoice number must be present if destination type is L otherwise Procedure C must be followed –we would not follow this up for other formtypes	0%
	820. The purchase tax invoice number must be absent if destination type is other than L or S otherwise Procedure C must be followed	0%
Name of permit holder	821. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed-	100%
Client number of permit holder	822. Permit holder number must be present and a valid number otherwise Procedure A must be followed	100%
	823. Permit holder number must be a valid permit holder otherwise Procedure A must be followed	100%
	824. The client/vessel combination must be the same client/vessel combination who was issued the form otherwise Procedure C must be followed	100%
Name of vessel	825. Vessel name must be present (unless the vessel id is	100%

	"NONE") and must agree with vessel id (if present) otherwise Procedure A must be followed	
Registration number of vessel	826. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid or "NONE" otherwise Procedure A must be followed - fishers have been told to write "NONE" if they did not use a vessel 827. Vessel must be registered for fishing on date of form otherwise Procedure A must be followed 828. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed	100% 100% 100%
Pages submitted for the date	829. There must be the same number of pages submitted for the date entered as is declared in this field otherwise Procedure A must be followed.	100%
Signature of permit holder	830. Signature must be present otherwise Procedure A must be followed	100%
Date signed	831. Date signed must be present and a valid date otherwise Procedure A must be followed 832. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed	100% 100%

6.12 Specifications for information collected on a PCELR when no fishing occurred

Field name on form	Specification	Standard
	833. Form structure must be correct for the form type otherwise Procedure A must be followed	100%
	834. Must be marked as a nil return and have no effort or landing details (so that it is a genuine nil return) otherwise Procedure A must be followed	100%
Form Number	835. Form must not previously have been cancelled otherwise Procedure A must be followed	100%
	836. Form number must be a valid form number with the correct number of digits for this form type otherwise Procedure C must be followed	100%
Nil return date	837. Must supply the month and year of this nil return otherwise Procedure A must be followed	100%
	838. The date must be a valid month and year combination otherwise Procedure A must be followed	100%
	839. Must not overlap other PCELR returns by this vessel-client combination otherwise Procedure A must be followed	100%
	840. Date must match date in lodgement data otherwise Procedure C must be followed	100%
Name of permit holder	841. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed	100%
Client number of permit holder	842. Permit holder number must be present and a valid number otherwise Procedure A must be followed	100%
	843. Permit holder number must be a valid permit holder otherwise Procedure A must be followed	100%
	844. The client/vessel combination must be the same client/vessel combination who was issued the form otherwise Procedure C must be followed	100%
Name of vessel	845. Vessel name must be present (unless vessel id is "NONE") and must agree with vessel id (if present) otherwise Procedure A must be followed	100%
Registration number of vessel	846. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid or "NONE" otherwise Procedure A must be followed – fishers have been told to write "NONE" if they did not use a vessel	100%
	847. Vessel must be an active fishing vessel (ie have fished before and within past 365 days) otherwise Procedure C must be followed	100%
Pages submitted for the date	848. There must be the same number of pages submitted for the date entered as is declared in this field otherwise Procedure A must be followed.	100%
Signature of permit holder	849. Signature must be present otherwise Procedure A must be followed	100%

Date signed	850. Date signed must be present and a valid date otherwise Procedure A must be followed	100%
	851. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed	100%

6.13 Specifications for information collected on a Freshwater Eel Catch Landing Return

Field name on form	Specification	Standard
	852. Form structure must be correct for the form type otherwise Procedure A must be followed	100%
	853. Must have some landing records (so that it is not a nil return) otherwise Procedure A must be followed	100%
	854. There should be a landing of either longfinned or shortfinned eels on this form otherwise Procedure A must be followed – to ensure that the fisher is using this form appropriately. If they fail to catch eels once, that is not a problem, but if they were not actually targeting eels, then that is a problem	100%
Form number	855. Form must not previously have been cancelled otherwise Procedure A must be followed	100%
	856. Form number must be a valid form number with the correct number of digits for this form type otherwise Procedure C must be followed- forms of this formtype will all have the same number of digits	100%
Date (month and year)	857. Must supply the month and year of this return otherwise Procedure A must be followed	100%
	858. The date must be a valid month and year otherwise Procedure A must be followed	100%
	859. Must not overlap other returns by this client otherwise Procedure A must be followed – more than one form from a client is possible	0%
	860. Date must match date in lodgement data otherwise Procedure C must be followed	100%
	861. Date must not be before book was issued otherwise Procedure C must be followed	100%
	862. Date must not be after the earliest Electronic timestamp otherwise Procedure A must be followed	100%
Date of Landing	863. Landing date must be present and a valid date otherwise Procedure A must be followed	100%
Fishstock (Species/Area)	864. Fishstock code must be present and valid otherwise Procedure A must be followed	100%
	865. Fishstock code must have been valid at time of fishing otherwise Procedure A must be followed	100%
	866. Fishstock code must be for a species with a valid or a passable code for use on the landing part of the form (usage code L or P and not usage code X) as defined in Table 6 otherwise Procedure A must be followed	100%
	867. Fishstock code must be for a species with a valid code for use on the landing part of the form (usage code L and not usage code X) as defined in Table 6 otherwise	100%

	Procedure C must be followed 868. Fishstock code must be for eels or for another species which is appropriate for use on an eel landing form (CAT, BTR, FLU, KOU, CAU, GLX, KOI, GGO, BUL, RDD or FLA) otherwise Procedure C must be followed	100%
Estimate (by permit holder or fisher) of catch of greenweight	869. Greenweight estimate must be a valid number otherwise Procedure A must be followed 870. Greenweight estimate must be of correct format (a whole number) otherwise Procedure C must be followed 871. Greenweight estimate must be greater than or equal to zero and less than the maximum for that species as specified Table 14 otherwise Procedure A must be followed –note that this is the landed greenweight check not the estimated catch check because the fishing method is not given on this form type 872. Greenweight estimate must be greater than or equal to zero and less than the likely maximum for that species as specified in Table 14 otherwise Procedure C must be followed –note that this is the landed greenweight check not the estimated catch check because the fishing method is not given on this form type 873. For destination type W the greenweight must be no more than 150kg otherwise Procedure C must be followed	100% 100% 100% 100% 100%
Destination type	874. Must be present and valid otherwise Procedure A must be followed 875. For destination type D, species should not be ITQ (including South Island Eels) otherwise Procedure C must be followed	100% 100%
Destination LFR no. or vessel reg no.	876. For destination types A,B,D,E,F,H,R,O,P,Q and U the destination number should be empty otherwise Procedure C must be followed – P and Q are new 877. For destination type L the destination should be a valid client number that is an LFR otherwise Procedure A must be followed – C has been removed 878. For destination type L the LFR must be an LFR that this permit holder has landed to within the past year otherwise Procedure C must be followed 879. For destination type T the destination should be a valid registered vessel that is not the same as the vessel on the form otherwise Procedure C must be followed –this will not be followed up for this formtype	100% 100% 100% 0%
Greenweight when advised by the LFR	880. For destination type L greenweight must be present otherwise Procedure A must be followed 881. Greenweight must be a valid weight otherwise Procedure A must be followed 882. Greenweight must be of correct format (a whole number) otherwise Procedure C must be followed 883. Greenweight must be greater than or equal to zero and less than the maximum for this species as specified in Table 14 otherwise Procedure A must be followed	100% 100% 100% 100%

	884. Greenweight must be greater than or equal to zero and less than the likely maximum specified in Table 14 for this species otherwise Procedure C must be followed 885. Two greenweight figures of the same quantity should not be duplicated for one fishstock within one landing otherwise Procedure A must be followed 886. The greenweight advised to the LFR must be similar to (within 15% and 20kg of) the estimate made by the permit holder in this line otherwise Procedure A must be followed – they need not of course be identical, but if they differed greatly, then it should be clarified.	100% 100% 100%
Purchase tax invoice number from LFR	887. The purchase tax invoice number must be present if destination type is L otherwise Procedure C must be followed -this is consistent with the other forms 888. The purchase tax invoice number must be absent if destination type is other than L or S otherwise Procedure C must be followed –this is consistent with the other forms	0% 0%
Name of permit holder	889. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed	100%
Client number of permit holder	890. Client number must be present and a valid number otherwise Procedure A must be followed 891. Client number must be a valid permit holder otherwise Procedure A must be followed 892. The client must be the same client who was issued the form otherwise Procedure C must be followed – this differs from the other forms, because there is no vessel	100% 100% 100%
Signature of permit holder or fisher	893. Signature must be present otherwise Procedure A must be followed	100%
Date signed	894. Date signed must be present and a valid date otherwise Procedure A must be followed 895. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed	100% 100%

6.14 Specifications for information collected on a Freshwater Eel Catch Landing Return when no fishing occurred

Field name on form	Specification	Standard
	896. Form structure must be correct for the form type otherwise Procedure A must be followed	100%
	897. Must be marked as a nil return and have no landing details (so that it is a genuine nil return) otherwise Procedure A must be followed	100%
Form Number	898. Form must not previously have been cancelled otherwise Procedure A must be followed	100%
	899. Form number must be a valid form number with the correct number of digits for this formtype otherwise Procedure C must be followed	100%
Nil return date	900. Must supply the month and year of this nil return otherwise Procedure A must be followed	100%
	901. The date must be a valid month and year otherwise Procedure A must be followed	100%
	902. This nil return must not overlap other eel landing returns by this client otherwise Procedure A must be followed	100%
	903. Date must match date in lodgement data otherwise Procedure C must be followed	100%
Name of permit holder	904. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed	100%
Client number of permit holder	905. Client number must be present and a valid number otherwise Procedure A must be followed	100%
	906. Client number must be a valid permit holder otherwise Procedure A must be followed	100%
	907. The client must be the same client who was issued the form otherwise Procedure C must be followed	100%
Signature of permit holder or fisher	908. Signature must be present otherwise Procedure A must be followed	100%
Date signed	909. Date signed must be present and a valid date otherwise Procedure A must be followed	100%
	910. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed	100%

6.15 Specifications for information collected on a Freshwater Eel Catch Effort Return

Field name on form	Specification	Standard
	911. Form structure must be correct for the form type otherwise Procedure A must be followed	100%
	912. Must have some effort records (so that it is not a nil return) otherwise Procedure C must be followed.	100%
	913. There should be a catch of either longfinned or shortfinned eels otherwise Procedure A must be followed – to ensure that the fisher is using this form appropriately. If they fail to catch eels once, that is not a problem, but if they were not actually targeting eels, then that is a problem	100%
Form number	914. Form must not previously have been cancelled otherwise Procedure A must be followed	100%
	915. Form number must be a valid form number with the correct number of digits for this type of form otherwise Procedure C must be followed	100%
Date (month and year)	916. Must supply the month and year of this return otherwise Procedure A must be followed	100%
	917. The date must be a valid month and year otherwise Procedure A must be followed	100%
	918. Date must match date in lodgement data otherwise Procedure C must be followed	100%
	919. Date must not be before book was issued otherwise Procedure C must be followed	100%
	920. Date must not be after the earliest Electronic timestamp otherwise Procedure A must be followed	100%
Method	921. The method code must be present and a valid method at time of fishing as specified in Table 2 of the DQSS otherwise Procedure A must be followed	100%
	922. The method should be fyke net, eel pot, fish trap, set net, ring net, cod pot or driftnet otherwise Procedure A should be followed – although there is opportunity to enter other methods, they should be confirmed with the fisher, particularly if the method was unreasonable on this type of form	100%
	923. No more than one method must be indicated otherwise Procedure A must be followed-it would be possible for a fisher to tick more than one method box, but this is not valid	100%
Date gear was lifted	924. The day must be present and valid in combination with the month otherwise Procedure A must be followed	100%
	925. The day and month of fishing must be before the earliest Electronic timestamp otherwise Procedure A must	100%

	be followed 926. The date/method/fisher/statistical area/permit holder number combination should be unique otherwise Procedure A must be followed	100%
Eel statistical area	927. The statistical area must be present otherwise Procedure A must be followed 928. The statistical area given must be a valid statistical area for freshwater eels otherwise Procedure A must be followed.	100% 100%
Number of Fyke nets, eel pots or Fish traps lifted	929. The total number of pot lifts must be present otherwise Procedure B must be followed 930. The total number of pot lifts must be a valid integer otherwise Procedure B must be followed 931. The number of pot lifts (or other effort measure) must be in possible range specified in Table 4 for the method otherwise Procedure B must be followed 932. The number of pot lifts (or other effort measure) must be in likely range specified in Table 4 for the method otherwise Procedure C must be followed	100% 100% 100% 100%
Estimate (by fisher) of catch of eels SFE	933. Estimated quantity must be valid otherwise Procedure A must be followed 934. Estimated quantity must be of correct format (a whole number) otherwise Procedure C must be followed 935. Estimated quantity must be greater than or equal to zero and less than the maximum for that species/method combination as specified in Table 10 otherwise Procedure A must be followed 936. Estimated quantity must be greater than or equal to zero and less than the likely maximum for that species/method combination as specified in Table 10 otherwise Procedure C must be followed 937. The species caught (SFE) must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed	100% 100% 100% 100% 100%
Estimate (by fisher) of catch of eels LFE	938. Estimated quantity must be valid otherwise Procedure A must be followed 939. Estimated quantity must be of correct format (a whole number) otherwise Procedure C must be followed 940. Estimated quantity must be greater than or equal to zero and less than the maximum for that species/method combination as specified in Table 10 otherwise Procedure A must be followed 941. Estimated quantity must be greater than or equal to zero and less than the likely maximum for that species/method combination as specified in Table 10 otherwise Procedure C must be followed 942. The species caught (LFE) must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed	100% 100% 100% 100% 100%
Species Code	943. Species caught must be a valid or a passable code for	100%

	use on the effort part of the form (usage code E or P and not usage code X) as defined in Table 6 otherwise Procedure A must be followed	
	944. Species caught must be a valid code for use on the effort part of the form (usage code E and not usage code X) as defined in Table 6 otherwise Procedure C must be followed	100%
	945. Species caught must be a suitable code for use on an eel form (CAT, BTR, FLU, KOU, CAU, GLX, KOI, GGO, BUL, RDD, BFL, BRI, GFL, LSO, ESO, SFL, TUR, YBF) otherwise Procedure C must be followed	100%
	946. Species caught must not be duplicated within species list otherwise Procedure A must be followed	100%
	947. Species caught must be present if estimated catch is present otherwise Procedure A must be followed	100%
	948. The species caught must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed-	100%
Estimate (by fisher) of catch of other species.	949. Estimated quantity must be valid otherwise Procedure A must be followed	100%
	950. Estimated quantity must be of correct format (a whole number) otherwise Procedure C must be followed	100%
	951. Estimated quantity must be greater than or equal to zero and less than the maximum for that species/method combination as specified in Table 10 otherwise Procedure A must be followed	100%
	952. Estimated quantity must be greater than or equal to zero and less than the likely maximum for that species/method combination as specified in Table 10 otherwise Procedure C must be followed	100%
	953. Estimated quantity must be present if species code is present otherwise Procedure A must be followed – because of the structure of the form, this is not true on the form, but should be the case in the database	100%
Name of permit holder	954. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed	100%
Client number of permit holder	955. Client number must be present and a valid number otherwise Procedure A must be followed	100%
	956. Client number must be a valid permit holder otherwise Procedure A must be followed	100%
	957. The client must be the same client who was issued the form otherwise Procedure C must be followed –note that there is no vessel on this formtype	100%
Name of fisher	958. The name of the fisher must be present otherwise Procedure A must be followed.	100%
	959. The name of the fisher must be valid (at least 3 letters not counting the full stop) otherwise Procedure A must be followed.	100%
	960. The name of the fisher must be one that has appeared on this client's Freshwater Eel Catch Effort Return within	100%

	the past 12 months otherwise Procedure C must be followed	
Signature of permit holder or fisher	961. Signature must be present otherwise Procedure A must be followed	100%
Date signed	962. Date signed must be present and a valid date otherwise Procedure A must be followed 963. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed	100% 100%

6.19 Specifications for information collected on a Tuna Longlining Catch Effort Return (2002 version)

Field name on form	Specification	Standard
	964. Form structure must be correct for the form type otherwise Procedure A must be followed	100%
	965. Must have some effort records (so that it is not a nil return) otherwise Procedure C must be followed	100%
Form number	966. Form must not previously have been cancelled otherwise Procedure A must be followed	100%
	967. Form number must be a valid form number with the correct number of digits for this form type otherwise Procedure C must be followed	100%
Target species	968. Target species must be present otherwise Procedure A must be followed	100%
	969. Target species code must be a valid or passable code for use as a target species (usage code T or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed	100%
	970. Target species code must be a valid code for use as a target species (usage code T and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed	100%
	971. The target species must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure A must be followed	100%
	972. The target species must be for a tuna species otherwise Procedure A must be followed	100%
Start of set Date	973. Date must be present and a valid date otherwise Procedure A must be followed	100%
	974. Date must not be before book was issued otherwise Procedure C must be followed	100%
	975. Date must not duplicate other TLCER form dates and times by this client/vessel combination otherwise Procedure C must be followed – this is a check for an exact duplicate of dates and times for two TLCER forms. This indicates that a second page is being used, and the validator will have to make an appropriate interpretation	100%
	976. Date must not be after the earliest Electronic timestamp otherwise Procedure A must be followed	100%
	977. Date must match date in lodgement data otherwise Procedure C must be followed	100%
	978. Form date must not be after date signed otherwise Procedure A must be followed	100%
Start of set Time	979. Time of start of set must be present otherwise Procedure A must be followed	100%
	980. Time at start of set must be a valid time otherwise Procedure A must be followed	100%

Start of set Latitude	981. Start latitude must be present, of valid format otherwise Procedure A must be followed	100%
	982. Start position (latitude and longitude) must not be inland and must be a reasonable fishing location otherwise Procedure A must be followed unless the return is for high seas fishing in which case Procedure C must be followed	100%
	983. Start position (latitude and longitude) must be within likely fishing locations otherwise Procedure C must be followed	100%
	984. Displacement from last set end position (within the same day) to this set's start position must be in range as specified in Table 19 otherwise Procedure A must be followed	100%
Start of set Longitude	985. Start longitude must be present, of valid format otherwise Procedure A must be followed	100%
Start of set Wind speed	986. Wind speed at start of set must be present otherwise Procedure B must be followed	100%
	987. If present, wind speed at start of set must be a valid number otherwise Procedure C must be followed- if present, a data entry error should not be allowed to destroy this data	100%
	988. If present, wind speed at start of set must have correct format (no decimal places) otherwise Procedure C must be followed-for consistency with other methods, would not expect to validate this	0%
	989. If present, wind speed at start of set must be in range 0 to 60 knots otherwise Procedure C must be followed	100%
Start of set direction of wind	990. The wind direction must be valid (E, ENE, ESE, N, NE, NNE, NNW, NW, S, SE, SSE, SSW, SW, W, WNW, WSW) otherwise Procedure C must be followed- a data entry error should not be allowed to destroy this information if it has been provided	100%
	991. The wind direction must be within range 0-360 (after having been derived from letters N, NW etc) otherwise Procedure C must be followed – a data entry error should not be allowed to destroy this information if it has been provided	100%
	992. The wind direction must be present if the speed is non-zero otherwise Procedure B must be followed	100%
Start of set sea surface temperature	993. Sea surface temperature at start of set must be present otherwise Procedure B must be followed –this is not a primary effort field for this method, and for consistency with other methods would not normally get validator resource	90%
	994. Sea surface temperature at start of set must be a valid Sea surface temperature otherwise Procedure C must be followed – if the data is given we do not want it destroyed by incorrect data entry	100%
	995. Temperature must have no more than one decimal place otherwise Procedure C must be followed – for	90%

	consistency with similar data, we would not allocate validator resource to this 996. Temperature must be in range 4-26 degrees otherwise Procedure C must be followed- if the data is given we do not want it destroyed by incorrect data entry	100%
End of set time	997. Time of finish of set must be present otherwise Procedure A must be followed 998. Time of finish of set must be a valid time otherwise Procedure A must be followed 999. Set end date and time must be after set start date and time otherwise Procedure A must be followed- the software will in the first instance derive the set end date so that this rule must be true. However, the validator will be able to change the set end date, and this rule is needed to validate that change 1000. Time from start of set to end of set must be in range specified in Table 19 otherwise Procedure A must be followed.	100% 100% 100% 100%
End of set Latitude	1001. Set end latitude must be present, of valid format otherwise Procedure A must be followed 1002. Set end position (latitude and longitude) must not be inland and must be a reasonable fishing location otherwise Procedure A must be followed unless the return is for high seas fishing in which case Procedure C must be followed 1003. Set end position (latitude and longitude) must be within likely fishing locations otherwise Procedure C must be followed 1004. Displacement from start to end position must be in range as specified in Table 19 otherwise Procedure A must be followed	100% 100% 100% 100%
End of set Longitude	1005. Set end longitude must be present, of valid format otherwise Procedure A must be followed	100%
Start of haul time	1006. Time of start of haul must be present otherwise Procedure A must be followed 1007. Time of start of haul must be a valid time otherwise Procedure A must be followed 1008. Start haul date and time must be after set end date and time otherwise Procedure A must be followed- the software will in the first instance derive the start haul date so that this rule must be true. However, the validator will be able to change the haul start date, and this rule is needed to validate that change 1009. Time from end of set to start of haul must be in range specified in Table 19 otherwise Procedure A must be followed.	100% 100% 100% 100%
End of haul date	1010. Date must be present and a valid date otherwise Procedure A must be followed	100%
End of haul time	1011. Time of finish of haul must be present otherwise Procedure A must be followed 1012. Time of finish of haul must be a valid time otherwise	100% 100%

	Procedure A must be followed 1013. Haul end date and time must be after set start date and time otherwise Procedure A must be followed 1014. Time from start of haul to end of haul must be in range specified in Table 19 otherwise Procedure A must be followed. 1015. Time from start of set to end of haul must be in range specified in Table 19 otherwise Procedure A must be followed	100% 100% 100%
End of haul wind speed	1016. Wind speed at end of haul must be present otherwise Procedure B must be followed-not a primary effort field for this method and would not normally expect full validator resource 1017. If present, wind speed at end of haul must be a valid number otherwise Procedure C must be followed- if present, a data entry error should not destroy it 1018. If present, wind speed at end of haul must have no more than one decimal place otherwise Procedure C must be followed- if present, a data entry error should not destroy it 1019. If present, wind speed at end of haul must be in range 0 to 80 knots otherwise Procedure C must be followed – if present, a data entry error should not destroy it	90% 100% 0% 100%
End of haul direction of wind	1020. The wind direction must be valid (E, ENE, ESE, N, NE, NNE, NNW, NW, S, SE, SSE, SSW, SW, W, WNW, WSW) otherwise Procedure C must be followed- if present, a data entry error should not destroy it 1021. The wind direction must be within range 0-360 (after derivation from N, NW etc) otherwise Procedure C must be followed – if present, a data entry error should not destroy it 1022. The wind direction must be present if the speed is non-zero otherwise Procedure B must be followed- this is not a primary effort field for this method and would not expect to get full validator resource	100% 100% 90%
End of haul sea surface temperature	1023. Sea surface temperature at end of haul must be present otherwise Procedure B must be followed- this is not a primary effort field for this method and would not expect to get full validator resource 1024. Sea surface temperature at end of haul must be a valid Sea surface temperature otherwise Procedure C must be followed- if present, a data entry error should not destroy this information 1025. Temperature must have no more than one decimal place otherwise Procedure C must be followed- for consistency with other methods, this would not normally be checked 1026. Temperature must be in range 4-26 degrees otherwise Procedure C must be followed – a data entry check should not be allowed to destroy this information	90% 100% 0% 100%

Length of line	1027. Total length of line must be present otherwise Procedure B must be followed-not a primary effort field for this method 1028. Total length of line must be a valid length otherwise Procedure B must be followed 1029. Total length of line must have no more than 0 decimal place otherwise Procedure C must be followed- not worth checking 1030. Total length of line must be in possible range as specified in Table 4 otherwise Procedure C must be followed- data entry check	100% 100% 0% 100%
Number of hooks	1031. Total hook number must be present otherwise Procedure B must be followed-primary effort field 1032. Total hook number must be a valid number otherwise Procedure B must be followed 1033. Total hook number should be within possible range as specified in Table 4 otherwise Procedure B must be followed 1034. Total hook number should be within likely range as specified in Table 4 otherwise Procedure C must be followed	100% 100% 100% 100%
Number of floats	1035. Total floats number must be present otherwise Procedure B must be followed-not a primary effort field, but worth validation effort 1036. Total floats number must be valid otherwise Procedure C must be followed 1037. Number of floats must be within possible range specified in Table 4 otherwise Procedure C must be followed	100% 100% 100%
Number of light sticks	1038. Light sticks number must be present otherwise Procedure B must be followed-not a primary effort field 1039. Light sticks number must be valid otherwise Procedure C must be followed-data entry error check 1040. Light sticks number must be within possible range specified in Table 4 otherwise Procedure C must be followed-data entry error check 1041. Number of light sticks must be less than or equal to the number of hooks otherwise Procedure C must be followed-data entry error check	90% 100% 100% 100%
Line shooter	1042. Must be Y or N otherwise Procedure C must be followed-not a primary effort field 1043. Must be present otherwise Procedure B must be followed-not a primary effort field	100% 90%
Percentage of bait that was fish	1044. At least one of the four bait types must be present otherwise Procedure B must be followed- not a primary effort field 1045. If present, the bait type must be a valid percentage (between 0 and 100) otherwise Procedure C must be followed-data entry error check	90% 100%
Percentage of	1046. If present, the bait type must be a valid percentage	100%

bait that was squid	(between 0 and 100) otherwise Procedure C must be followed-data entry error check	
Percentage of bait that was artificial	1047. If present, the bait type must be a valid percentage (between 0 and 100) otherwise Procedure C must be followed-data entry error check	100%
Percentage of bait that was other	1048. If present, the bait type must be a valid percentage (between 0 and 100) otherwise Procedure C must be followed-data entry error check 1049. The four percentages of bait must add up to 100% -this error would require a large amount of validator resource to follow up, and it has been decided that this is not warranted at this time	100% 0%
Catch kept species code	1050. Species caught must be a valid or a passable code for use on the effort part of the form (usage code E or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed 1051. Species caught must be a valid code for use on the effort part of the form (usage code E and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed 1052. Species caught must be present if catch is present otherwise Procedure A must be followed 1053. The species caught must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed	100% 100% 100% 100%
Catch kept processed state	1054. Processed state must be present and a valid code otherwise Procedure A must be followed, 1055. Processed state must be a processed state code at the time of processing and must be a gazetted state code otherwise Procedure A must be followed – 1056. Processed state must be consistent with species (ie this species/state code combination must exist) otherwise Procedure A must be followed- 1057. Processed state must not be for a discard (ie ACC or DIS) otherwise Procedure A must be followed- on this form, there is a separate section for these fish to be recorded on, so there should be no reason for them to be in this section	100% 100% 100% 100%
Catch kept processed weight	1058. Processed catch weight must be present if the number of fish is non-zero otherwise Procedure A must be followed- this used to say "(unless the species is one of BEM, BKM, DSM, SSF, STM, MAR, SAI[8])" but this exclusion is no longer required, since these species should not be put on this part of the form anyway (since they may not be processed) 1059. Processed catch weight must be a valid number	100% 100%

[8] Section 20A of the Fisheries (Commercial Fishing) regulations 1986 and section 20B of the Fisheries (Auckland and Kermadec areas commercial fishing) regulations 1986 prohibit commercial fishers from possessing these species. Therefore we consider that it would be unreasonable for validators to require fishers to provide a processed weight.

	otherwise Procedure A must be followed 1060. Processed catch weight must have no more than 0 decimal places otherwise Procedure C must be followed 1061. Processed catch weight must be greater than or equal to zero and less than the maximum for that species (as given in Table 20) otherwise Procedure A must be followed 1062. Processed catch weight must be greater than or equal to zero and less than the likely maximum for that species (as given in Table 20) otherwise Procedure C must be followed 1063. Processed catch weight must be present if species caught is present otherwise Procedure A must be followed.	100% 100% 100% 100%
Catch kept number of fish	1064. The number of fish must be present and valid if the species code is present (unless the processed weight is zero or it is in an additional landed state) otherwise Procedure A must be followed- if the species code is present, there ought to be a number of fish present, unless there was no processed weight in which case a blank number of fish would be acceptable or if there was an additional landed state, in which case the fisher is instructed to write N/A 1065. The number of fish must be within range as given in Table 20 otherwise Procedure A must be followed 1066. The number of fish must be within the likely range as given in Table 20 otherwise Procedure C must be followed	100% 100% 100%
Catch discarded species code	1067. Species caught must be a valid or a passable code for use on the effort part of the form (usage code E or P and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure A must be followed 1068. Species caught must be a valid code for use on the effort part of the form (usage code E and not usage code X unless this is a high seas form) as defined in Table 6 otherwise Procedure C must be followed 1069. Species caught must be present if catch is present otherwise Procedure A must be followed 1070. The species caught must not be unreasonable in combination with the method used as specified in Table 7 otherwise Procedure C must be followed 1071. The species discarded must be non-ITQ otherwise Procedure C must be followed – there are ways that non-ITQ species could legally appear in this column (for example fish being accidentally lost), but we think it is worth a data entry check	100% 100% 100% 100% 100%
Catch discarded greenweight	1072. Greenweight must be present if the number of fish is non-zero otherwise Procedure A must be followed –this is true even for DSM, STM etc 1073. Greenweight must be a valid number otherwise Procedure A must be followed	100% 100%

	1074. Greenweight must have no more than 0 decimal places otherwise Procedure C must be followed	100%
	1075. Greenweight must be greater than or equal to zero and less than the maximum for that species (as given in Table 22) otherwise Procedure A must be followed	100%
	1076. Greenweight must be greater than or equal to zero and less than the likely maximum for that species (as given in Table 22) otherwise Procedure C must be followed	100%
	1077. Greenweight must be present if species caught is present otherwise Procedure A must be followed.	100%
Catch discarded number of fish	1078. The number of fish must be present and valid if the species is present unless the greenweight is zero otherwise Procedure A must be followed	100%
	1079. The number of fish must be within range as given in Table 22 otherwise Procedure A must be followed	100%
	1080. The number of fish must be within the likely range as given in Table 22 otherwise Procedure C must be followed	100%
Name of fisher	1081. The name of the fisher must be present otherwise Procedure A must be followed.	100%
	1082. The name of the fisher must be valid (at least 3 letters not counting the full stop) otherwise Procedure A must be followed.	100%
	1083. The name of the fisher must be one that has appeared on this client's TLCER within the past 12 months otherwise Procedure C must be followed	100%
Name of permit holder	1084. Permit holder's name must be present and must match permit holder id otherwise Procedure A must be followed	100%
Client number of permit holder	1085. Permit holder number must be present and a valid number otherwise Procedure A must be followed	100%
	1086. Permit holder number must be a valid permit holder otherwise Procedure A must be followed	100%
	1087. The client/vessel combination must be the same client/vessel combination who was issued the form otherwise Procedure C must be followed	100%
Name of vessel	1088. Vessel name must be present and must agree with vessel id otherwise Procedure A must be followed	100%
Registration number of vessel	1089. Vessel registration number (or call sign for foreign licensed vessels) must be present and valid otherwise Procedure A must be followed	100%
	1090. Vessel must be registered for fishing on date of form otherwise Procedure A must be followed	100%
	1091. Vessel must be an active fishing vessel for this method (ie have fished before and within past 365 days) otherwise Procedure C must be followed	100%
Signature of permit holder or authorised person	1092. Signature must be present otherwise Procedure A must be followed	100%
Date signed	1093. Date signed must be present and a valid date otherwise Procedure A must be followed	100%

	1094. Date signed must not be after earliest Electronic timestamp otherwise Procedure C must be followed	100%

7. Appendix: Tables of associated identifiers and values

Table 1: Form structure specifications

Form type	Group Description	Min Num	Max Num
CELR	Form Header	1	1
CELR	Landing Section	0	1
CELR	Effort rows	0	99
CELR	Estimated Catch rows	0	99
CELR	Catch Landing rows	0	99
CELR- nil return	Form Header	1	1
CELR- nil return	Landing Section	0	0
CELR- nil return	Effort rows	0	0
CELR- nil return	Estimated Catch rows	0	0
CELR- nil return	Catch Landing rows	0	0
CLR	Form Header	1	1
CLR	Landing Sections	1	1
CLR	Catch Landing Rows	1	99
CLR – nil return	Form Header	1	1
CLR – nil return	Landing Sections	0	0
CLR – nil return	Catch Landing Rows	0	0
TCEPR	Form Header sections	1	1
TCEPR	Environment Data sections	1	1
TCEPR	Effort rows	0	99
TCEPR	Estimated Catch items	0	99
TCEPR	Daily Processing sections	0	1
TCEPR	Daily Processing rows	0	99
TCEPR – nil return	Form Header sections	1	1
TCEPR – nil return	Environment Data sections	1	1
TCEPR – nil return	Effort rows	0	0
TCEPR – nil return	Estimated Catch items	0	0
TCEPR – nil return	Daily Processing sections	0	0
TCEPR – nil return	Daily Processing rows	0	0
TLCER	Form Header	1	1
TLCER	Environment	1	1
TLCER	Setting/ Landing	1	1
TLCER	Individual Fish	0	200
TLCER	Catch	0	99
TLCER – nil return	Form Header	1	1
TLCER – nil return	Environment	1	1
TLCER – nil return	Setting/ Landing	0	0
TLCER – nil return	Individual Fish	0	0
TLCER – nil return	Catch	0	0
TLCER – 2002 version	Form Header	1	1
TLCER – 2002 version	Setting and hauling line	0	1
TLCER – 2002 version	Catch	0	99

Form type	Group Description	Min Num	Max Num
TLCER – 2002 version	Bait used	0	99
SJCER	Form Header	1	1
SJCER	Environment	1	1
SJCER	Effort	0	1
SJCER	Tray Tally	0	2
SJCER	Catch	0	6
SJCER - nil return	Form Header	1	1
SJCER - nil return	Environment	0	1
SJCER - nil return	Effort	0	0
SJCER - nil return	Tray Tally	0	0
SJCER - nil return	Catch	0	0
PCELR	Form Header	1	1
PCELR	Effort rows	0	99
PCELR	Estimated Catch	0	99
PCELR	Landing Section	0	1
PCELR	Catch Landing rows	0	99
PCELR – nil return	Form Header	1	1
PCELR – nil return	Effort rows	0	0
PCELR – nil return	Estimated Catch rows	0	0
PCELR – nil return	Landing Section	0	0
PCELR – nil return	Catch Landing rows	0	0
ECER	Form Header	1	1
ECER	Effort Rows	0	99
ECER	Estimated Catch rows	0	99
ECLR	Form Header	1	1
ECLR	Landing Data	0	99
ECLR	Catch Landing Rows	0	99
ECLR – nil return	Form Header	1	1
ECLR – nil return	Landing Data	0	0
ECLR – nil return	Catch Landing Rows	0	0

Table 2: Table of valid fishing methods

Method	Name	Method type	Start date	End date
BLL	Bottom Long Line	Lining	1 Oct. 1990	1 Oct. 2055
BPT	Bottom Pair Trawl	Trawl	1 Oct. 1990	1 Oct 2055
BS	Beach Seine/Drag Net	Seine	1 Oct. 1990	1 Oct. 2055
BT	Bottom Trawl	Trawl	1 Oct. 1990	1 Oct. 2055
CRP	Crab Pots	Potting	1 Oct 2001	1 Oct 2055
CP	Cod Pots	Potting	1 Oct. 1990	1 Oct. 2055
D	Dredge	Dredge	1 Oct. 1990	1 Oct. 2055
DI	Diving	Gathering	1 Oct. 1990	1 Oct. 2055
DL	Dahn Line	Lining	1 Oct. 1990	1 Oct. 2055
DN	Inshore Drift Net	Passive Netting	1 Oct. 1990	1 Oct. 2055
DPN	Dip Net	Seine	1 Oct. 2001	1 Oct. 2055
DPS	Pair Danish Seine	Seine	1 Oct. 1990	1 Oct. 2055
DS	Danish Seine	Seine	1 Oct. 1990	1 Oct. 2055
EP	Eel Pot	Potting	1 Oct. 1990	1 Oct. 2055

Method	Name	Method type	Start date	End date
FN	Fyke Net	Potting	1 Oct. 1990	1 Oct. 2055
FP	Fish Traps	Potting	1 Oct. 1990	1 Oct. 2055
H	Hand Gathering	Gathering	1 Oct. 1990	1 Oct. 2055
HL	Hand Line	Other Lining Methods	1 Oct. 1990	1 Oct. 2055
L	Lampara Nets	Seine	1 Oct. 1990	1 Oct. 2055
MH	Mechanical Harvesting	Trawl	1 Oct. 2001	1 Oct. 2055
MPT	Midwater Pair Trawl	Trawl	1 Oct. 1990	1 Oct. 2055
MW	Midwater Trawl	Trawl	1 Oct. 1990	1 Oct. 2055
OCP	Octopus Pots	Potting	1 Oct 2001	1 Oct 2055
PL	Pole and Line	Other Lining Methods	1 Oct. 1990	1 Oct. 2055
PS	Purse Seine	Seine	1 Oct. 1990	1 Oct. 2055
PSN	Pair Set Net	Passive Netting	15 Jul. 1999	1 Oct. 2055
RLP	Rock Lobster Pot	Potting	1 Oct. 1990	1 Oct. 2055
RN	Ring Net	Seine	1 Oct. 1990	1 Oct. 2055
SJ (not valid for use on a CELR)	Squid Jig	Squid Jigging	1 Oct. 1990	1 Oct. 2055
SCN	Scoop Nets	Seine	1 Oct 2001	1 Oct 2055
SCP	Scampi Pots	Potting	1 Oct 2001	1 Oct 2055
SLL	Surface/Midwater Long Line	Lining	1 Oct. 1990	1 Oct. 2055
SN	Set Net (incl. Gill Net)	Passive Netting	1 Oct. 1990	1 Oct. 2055
T	Troll	Other Lining Methods	1 Oct. 1990	1 Oct. 2055
TL	Trot Line	Lining	1 Oct. 1990	1 Oct. 2055

Table 3: Table specifying types of Catch Effort return that are required for different types of fishing

Type of fishing	Type of catch & effort return required	Type of catch landing return required
Fishing using the method of trawling (BT, MW, BPT, MPT) from a vessel that is more than 28m in overall length	**TCEPR**	**CLR**
Fishing using the method of squid jigging	**SJCER**	**CLR**
Fishing which targets tuna using the method of surface longlining	**TLCER**	**CLR**
Fishing which targets freshwater eels	**ECER**	**ECLR**
Fishing which targets paua using the method of diving	**PCELR**	
Fishing in a manner that does not fall within any of the 5 categories listed above	**CELR**	
Fishing by or on behalf of permit holders who have been given written instructions by the Chief Executive of the Ministry of Fisheries to provide a type of return other than that indicated in the 4 categories listed above. This category takes precedence over other categories.	**TCEPR, SJCER, TLCER, CLR or CELR returns as specified in the written instructions.**	

Table 4: Valid ranges for effort columns by form type and method

			Check if effort value is >=		Check if effort value is <=	
			Proc B	Procedure C		Proc B
Method	**Form**	**Field**	**Max**	**Max**	**Min**	**Min**
BLL	CELR	Total number hooks hauled in the day	35000.0	30000.0	100.0	30.0
BLL	CELR	Number of sets hauled in the day	nc	19.0	0.9	nc
BPT	CELR	Fishing duration (hrs)	17.0	14.0	0.9	0.3
BPT	CELR	Headline height (m)	nc	8.0	0.5	nc
BPT	CELR	Number of tows completed in the day	11.0	9.0	nc	0.9

			Check if effort value is >=		Check if effort value is <=	
			Proc B	Procedure C		Proc B
Method	Form	Field	Max	Max	Min	Min
BPT	CELR	Wing Spread (m)	nc	28.0	5.5	nc
BPT	TCEPR	Headline height (m)	13.0	11.0	1.5	0.9
BPT	TCEPR	Trawling Speed (knots)	7.6	6.6	1.4	1.0
BPT	TCEPR	Wing Spread (m)	nc	55.0	5.5	nc
BS	CELR	Number sets/shots in the day	24.0	20.0	nc	0.9
BS	CELR	Total length net used in a shot (m)	nc	2500.0	50.0	nc
BT	CELR	Fishing duration (hrs)	24.1	22.0	0.9	0.3
BT	CELR	Headline height (m)	nc	9.0	0.5	nc
BT	CELR	Number of tows completed in the day	11.0	9.0	nc	0.9
BT	CELR	Wing Spread (m)	nc	125.0	5.5	nc
BT	TCEPR	Headline height (m)	90.0	75.0	1.5	0.9
BT	TCEPR	Trawling Speed (knots)	7.6	6.6	1.4	1.0
BT	TCEPR	Wing spread (m)	nc	145.0	5.5	nc
CRP	CELR	Total number of pot/trap lifts in the day	500.0	450.0	0.9	0.9
CRP	CELR	Number of pots/traps in water at midnight	500.0	nc	nc	nc
CP	CELR	Total number of pot/trap lifts in the day	160.0	130.0	nc	0.9
CP	CELR	Number of pots/traps in water at midnight	160.0	nc	nc	nc
D	CELR	Fishing duration (hrs)	24.1	22.0	0.9	0.3
D	CELR	Number of tows completed in the day	110.0	90.0	5.0	1.0
D	CELR	Wingspread (m)	nc	27.0	1.5	nc
DI	CELR	Number of people diving	nc	5.0	0.9	nc
DI	CELR	Total diving time during the day (hrs)	15.0	9.0	0.9	0.3
DL	CELR	Total number hooks hauled in the day	3000.0	2500.0	20.0	4.0
DL	CELR	Number of sets hauled in the day	nc	180.0	0.9	nc
DN	CELR	Mesh size (mm)	nc	115.0	80.0	nc
DN	CELR	Fishing duration (hrs)	12.0	9.0	0.9	0.3
DN	CELR	Total length of nets hauled in day (m)	1750.0	1500.0	150.0	80.0
DPN	CELR	Number sets/shots in the day	9.0	6.0	0.9	0.9
DPS	CELR	Number sets/shots in the day	10.0	7.0	nc	0.9
DPS	CELR	Total length net used in a shot (m)	nc	4400.0	10.0	nc
DS	CELR	Number sets/shots in the day	10.0	7.0	nc	0.9
DS	CELR	Total length net used in a shot (m)	nc	4400.0	10.0	nc
EP	CELR	Total number of pot/trap lifts in the day	100.0	80.0	3.0	0.9
EP	CELR	Number of pots/traps in water at midnight	100.0	nc	nc	nc
FN	CELR	Total number of pot/trap lifts in the day	135.0	110.0	3.0	0.9
FN	CELR	Number of pots/traps in water at midnight	135.0	nc	nc	nc
FP	CELR	Total number of pot/trap lifts in the day	330.0	270.0	5.0	0.9
FP	CELR	Number of pots/traps in water at midnight	330.0	nc	nc	nc
H	CELR	Number of people gathering	nc	7.0	0.9	Nc

			Check if effort value is >=		Check if effort value is <=	
			Proc B	Procedure C		Proc B
Method	Form	Field	Max	Max	Min	Min
H	CELR	Total gathering time during the day (hrs)	21.0	17.0	0.9	0.3
HL	CELR	Total catching time (hrs)	nc	22.0	0.9	Nc
HL	CELR	Max number of hooks used at any time	110.0	90.0	5.0	0.9
HL	CELR	Max number of lines used at any time	nc	8.0	0.9	Nc
L	CELR	Number sets/shots in the day	13.0	11.0	nc	0.9
L	CELR	Total length net used in a shot (m)	nc	1700.0	20.0	Nc
MH	CELR	Fishing duration (hrs)	15	10	0.3	0.1
MH	CELR	Wing Spread (m)	2.0	1.0	0.5	0.3
MPT	CELR	Fishing duration (hrs)	24.1	22.0	0.9	0.3
MPT	CELR	Headline height (m)	nc	70.0	2.1	Nc
MPT	CELR	Number of tows completed in the day	11.0	9.0	nc	0.9
MPT	CELR	Wing Spread (m)	nc	180.0	11.0	Nc
MPT	TCEPR	Headline height (m)	110.0	90.0	2.1	0.9
MPT	TCEPR	Trawl speed (knots)	7.6	6.6	1.4	1.0
MPT	TCEPR	Wing spread (m)	nc	90.0	16.0	Nc
MW	CELR	Headline height (m)	nc	70.0	2.1	Nc
MW	CELR	Number of tows completed in the day	11.0	9.0	nc	0.9
MW	CELR	Fishing duration (hrs)	24.1	22.0	0.9	0.3
MW	CELR	Wing spread (m)	nc	180.0	11.0	Nc
MW	TCEPR	Headline height (m)	140.0	115.0	2.1	0.9
MW	TCEPR	Trawl speed (knots)	7.6	6.6	1.4	1.0
MW	TCEPR	Wing spread (m)	nc	180.0	16.0	Nc
OCP	CELR	Total number of pot/trap lifts in the day	250.0	200.0	0.9	0.9
OCP	CELR	Number of pots/traps in water at midnight	250.0	nc	nc	Nc
PL	CELR	Total catching time (hrs)	nc	15.0	0.9	Nc
PL	CELR	Max number of hooks used at any time	15.0	12.0	nc	0.9
PL	CELR	Max number of lines used at any time	nc	12.0	0.9	Nc
PS	CELR	Number sets/shots in the day	23.0	19.0	nc	0.9
PS	CELR	Total length net used in a shot (m)	nc	3200.0	320.0	Nc
PSN	CELR	Fishing duration (hrs)	28.1	24.0	0.9	0.3
PSN	CELR	Mesh size (mm)	nc	500.0	20.0	nc
PSN	CELR	Total length of nets hauled in day (m)	11000.0	9000.0	100.0	40.0
RLP	CELR	Total number of pot/trap lifts in the day	440.0	360.0	5.0	0.9
RLP	CELR	Number of pots/traps in water at midnight	440.0	nc	nc	Nc
RN	CELR	Number sets/shots in the day	20.0	16.0	nc	0.9
RN	CELR	Total length net used in a shot (m)	nc	1150.0	65.0	Nc
SCN	CELR	Number sets/shots in the day	75.0	50.0	0.9	0.9
SCP	CELR	Total number of pot/trap lifts in the day	1000.0	800.0	0.9	0.9
SCP	CELR	Number of pots/traps in water at midnight	1000.0	nc	nc	Nc
SJ	SJCER	Max number double reels in use	nc	50.0	nc	Nc

			Check if effort value is >=		Check if effort value is <=	
			Proc B	Procedure C		Proc B
Method	**Form**	**Field**	**Max**	**Max**	**Min**	**Min**
SJ	SJCER	Max number single reels in use	nc	40.0	nc	Nc
SLL	CELR	Total number hooks hauled in the day	2400.0	2000.0	100.0	60.0
SLL	CELR	Number of sets hauled in the day	nc	4.0	0.9	nc
SLL	TLCER	Total length of line (km)	160.0	nc	nc	4.0
SLL	TLCER	Total number of baskets	570.0	nc	nc	8.0
SLL	TLCER	Total number of hooks	3800.0	3300.0	100.0	60.0
SLL	TLCER2	Total length of line (n.mile) (2002 form)	nc	100	2	Nc
SLL	TLCER2	Number of light sticks (2002 form)	Nc	3300	0	Nc
SLL	TLCER2	Number of floats (2002 form)	Nc	570	8	Nc
SN	CELR	Fishing duration (hrs)	28.1	24.0	0.9	0.3
SN	CELR	Mesh size (mm)	nc	500.0	20.0	Nc
SN	CELR	Total length of nets hauled in day (m)	11000.0	9000.0	100.0	40.0
T	CELR	Total catching time (hrs)	nc	18.0	0.9	Nc
T	CELR	Max number of lines used at any time	nc	27.0	0.9	Nc
T	CELR	Max number of hooks used at any time	38.0	32.0	nc	0.9
TL	CELR	Total number hooks hauled in the day	nc	2250.0	110.0	nc
TL	CELR	Number of sets hauled in the day	9.0	7.0	nc	0.9

Notes:

1) "nc" means that no check will be performed for this value (except that a minimum value cannot be < 0)

Table 5: Non-ITQ fishstocks for which it is possible to get a fishing permit listed in Schedule 5 of the Fisheries (Commercial Fishing) Regulations (2001)

Description of authorised stocks			
Common name	**Scientific name**	**FMA**	**Fishstock code**
Albacore tuna	*Thunnus alalunga*	1-10	ALB1
Bigeye tuna	*Thunnus obesus*	1-10	BIG1
Butterfly tuna	*Gasterochisma melampus*	1-10	BTU1
Northern bluefin tuna	*Thunnus thynnus*	1-10	NTU1
Southern bluefin tuna	*Thunnus maccoyii*	1-10	STN1
Yellowfin tuna	*Thunnus albacares*	1-10	YFN1
Skipjack tuna	*Katsuwonus pelamis*	1-10	SKJ1
Slender tuna	*Allothunnus fallai*	1-10	STU1
Pacific bluefin tuna	*Thunnus orientalis*	1-10	TOR1
Beach cast-seaweed	-	1 2 3 4 5 6 7 8 9	SEO1 SEO2 SEO3 SEO4 SEO5 SEO6 SEO7 SEO8 SEO9
Anchovy	*Engraulis australis*	1 2 7 8 9	ANC1 ANC2 ANC7 ANC8 ANC9
Seal shark	*Scymnorhinus licha*	3 7	BSH3 BSH7
Butterfish	*Odax pullus*	2 3 5 7 8	BUT2 BUT3 BUT5 BUT7 BUT8
Surf clam: frilled venus shell	*Bassinia yatei*	7	BYA7
Brown bullhead catfish	*Ictalurus nebulosus*	1 9	CAT1 CAT9
Cockle	*Austrovenus stutchburyi*	1 3 7	COC1 COC3 COC7
Cooks turban shell	*Cookia sulcata*	5	CTU5
Surf clam: ringed dosinia	*Dosinia anus*	3 7	DAN3 DAN7
Surf clam: silky dosinia	*Dosinia subrosea*	7	DSU7

Description of authorised stocks			
Common name	**Scientific name**	**FMA**	**Fishstock code**
Blue English mackerel	*Scomber australasicus*	1 2 7 8 9	EMA1 EMA2 EMA7 EMA8 EMA9
Flying fish	*Exocoetidae*	1 2 7 8 9	FLY1 FLY2 FLY7 FLY8 FLY9
Garfish	*Hyporhamphus ihi*	1 2 5 7 8 9	GAR1 GAR2 GAR5 GAR7 GAR8 GAR9
Gracilaria weed	*Gracilaria spp*	1 2 3 9	GRA1 GRA2 GRA3 GRA9
Hagfish	*Eptatretus cirrhatus*	2	HAG2
Kahawai	*Arripis trutta*	1 2 3 4 5 6 7 8 9	KAH1 KAH2 KAH3 KAH4 KAH5 KAH6 KAH7 KAH8 KAH9
Bladder kelp	*Macrocystis pyrifera*	3 4	KBB3 KBB4
Bull kelp	*Durvillea spp*	2	KBL2
Kingfish (yellowtail)	*Seriola lalandi*	1 2 7 8 9	KIN1 KIN2 KIN7 KIN8 KIN9
Koheru	*Decapterus koheru*	1 9	KOH1 KOH9
Koi carp	*Cyprinus carpio*	1 9	KOI1 KOI9
Lookdown dory	*Cyttus traversi*	2 7	LDO2 LDO7
Leatherjacket	*Parika scaber*	2 7 8	LEA2 LEA7 LEA8
Lessonia	*Lessonia spp*	2	LES2

Description of authorised stocks			
Common name	**Scientific name**	**FMA**	**Fishstock code**
Long-finned eel	*Anguilla dieffenbachii*	1 2 4 8 9	LFE1 LFE2 LFE4 LFE8 LFE9
Surf clam: trough shell	*Mactra discors*	7	MDI7
Surf clam: trough shell	*Mactra muchisoni*	3 7	MMI3 MMI7
Green-lipped mussel	*Perna canaliculus*	1 7 9	MSG1 MSG7 MSG9
Northern spiny dogfish	*Squalus mitsukurii*	8	NSD8
Octopus	*Octopus maorum*	1 2 7 8 9	OCT1 OCT2 OCT7 OCT8 OCT9
Dredge oyster	*Tiostrea chilensis*	4 5B	OYS4 OYS5B
Paddle crab	*Ovalipes catharus*	1 2 3 4 5 7 8 9	PAD1 PAD2 PAD3 PAD4 PAD5 PAD7 PAD8 PAD9
Surf clam: deepwater tuatua	*Paphies donacina*	3 7	PDO3 PDO7
Pilchard	*Sardinops neopilchardus*	1 2 7 8 9	PIL1 PIL2 PIL7 PIL8 PIL9
Pacific oyster	*Crassostrea gigas*	7	POY7
Pipi	*Paphies australis*	1	PPI1
-	*Porphyra spp*	3	PRP3
-	*Pterocladia lucida* and *Pterocladia capillacea*	1 2 9	PTE1 PTE2 PTE9
Queen scallop	*Chlamys delicatula*	3 5	QSC3 QSC5
Rays bream	*Brama brama*	1 7	RBM1 RBM7
Surf clam: triangle shell	*Spisula aequilateralis*	3 7	SAE3 SAE7
Scallop	*Pecten novaezelandiae*	4 Coromandel	SCA4 SCACS

Description of authorised stocks			
Common name	**Scientific name**	**FMA**	**Fishstock code**
		controlled fishery	
Scampi	*Metanephrops challengeri*	1 2 3 4 5 6A 6B 7 8 9	SCI1 SCI2 SCI3 SCI4 SCI5 SCI6A SCI6B SCI7 SCI8 SCI9
Silver dory	*Cyttus novaezelandiae*	2 7	SDO2 SDO7
Short-finned eel	*Anguilla australis*	1 2 4 8 9	SFE1 SFE2 SFE4 SFE8 SFE9
Skate	*Rajidae arhynchobatidae (families)*	3 7 8	SKA3 SKA7 SKA8
Spiny dogfish	*Squalus acanthias*	1 2 3 5 7 8 9	SPD1 SPD2 SPD3 SPD5 SPD7 SPD8 SPD9
Sprats	*Sprattus antipodum* and *Sprattus muelleri*	7	SPR7
Kina	*Evechinus chloroticus*	1 2 3 4 5 7 9	SUR1 SUR2 SUR3 SUR4 SUR5 SUR7 SUR9
Tuatua	*Paphies subtriangulata*	9	TUA9

Table 6: Commercial species valid for use on catch effort forms

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
ACR	1	0	0	0	0	Mud Snail	Amphibola crenata
AFO	1	0	0	0	0	Royal Red Prawn	Aristaeomorpha foliacea
AGR	0	1	1	1	0	Ribbonfish	Agrostichthys parkeri
ALB	0	1	1	1	0	Albacore Tuna	Thunnus alalunga
ANC	0	1	1	1	0	Anchovy	Engraulis australis
API	1	0	0	0	0	Alert Pigfish	Alertichthys blacki
ART	1	0	0	0	0	Brine Shrimp	Artemia salina
ASH	1	0	0	0	0	Circular Saw Shell	Astrea heliotropium
ATC	1	0	0	0	0	Antlered Crab	Paromola petterdi
ATO	0	1	1	1	1	Antarctic Toothfish	Dissostichus mawsoni
ATS	1	0	0	0	0	Atlantic Salmon	Salmo salar
BAC	1	0	0	0	0	Codheaded Rattail	Bathygadus cottoides
BAF	1	0	0	0	0	Black Anglerfish	N/A
BAN	1	0	0	0	0	Borostomias antarcticus	Borostomias antarcticus
BAR	0	1	1	1	0	Barracouta	Thyrsites atun
BAS	0	1	1	1	0	Bass Groper	Polyprion americanus
BAT	1	0	0	0	0	Large Headed Slickhead	Rouleina sp.
BBA	1	0	0	0	0	Black Barracouta	Nesiarchus nasutus
BBE	0	1	1	1	0	Banded Bellowsfish	Centriscops humerosus
BCA	0	1	1	1	0	Barracudina	Magnisudis prionosa
BCD	0	1	1	1	0	Black Cod	Paranotothenia magellanica
BCO	0	1	1	1	0	Blue Cod	Parapercis colias
BCR	1	0	0	0	0	Blue Cusk Eel	Brotulotaenia crassa
BDA	1	0	0	0	0	Barracuda	Sphyraena novaehollandiae
BEA	1	0	0	0	1	Eaton's Skate	Bathyraja eatoni
BEE	0	1	1	1	0	Basketwork Eel	Diastobranchus capensis
BEL	0	1	1	1	0	Bellowsfish	Centriscops spp.
BEM	0	1	1	1	0	Blue Marlin	Makaira mazara
BEN	1	0	0	0	0	Scabbardfish	Benthodesmus spp.
BER	1	0	0	0	0	Numbfish	Typhlonarke spp.
BET	1	0	0	0	0	Big-eye Thresher Shark	Alopias superciliosus
BFL	0	1	1	1	0	Black Flounder	Rhombosolea retiaria
BGZ	1	0	0	0	0	Banded Giant Stargazer	Kathetostoma spp
BIG	0	1	1	1	0	Bigeye Tuna	Thunnus obesus
BKM	0	1	1	1	0	Black Marlin	Makaira indica
BLO	1	0	0	0	0	Feeler Fish	Bathypterois longifilis
BLU	1	0	0	0	0	Bluefish	Girella cyanea
BMA	0	1	1	1	0	Blue Maomao	Scorpis violaceus
BMO	1	0	0	0	0	Borostomias mononema	Borostomias mononema

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
BNS	0	1	1	1	0	Bluenose	Hyperoglyphe antarctica
BOA	0	1	1	1	0	Sowfish	Paristiopterus labiosus
BOE	0	1	1	1	0	Black Oreo	Allocyttus niger
BOT	1	0	0	0	0	Lefteyed Flounders	Bothidae
BOX	1	0	0	0	0	Boxfish	Ostracion cubicus
BPE	1	0	0	0	0	Butterfly Perch	Caesioperca lepidoptera
BPF	0	1	1	1	0	Banded Wrasse	Notolabrus fucicola
BRA	0	1	1	1	0	Short-tailed Black Ray	Dasyatis brevicaudatus
BRC	0	1	1	1	0	Northern Bastard Cod	Pseudophycis breviuscula
BRE	1	0	0	0	0	Codlet	Bregmaceros macclellandi
BRI	0	1	1	1	0	Brill	Colistium guntheri
BRZ	0	1	1	1	0	Brown Stargazer	Xenocephalus armatus
BSH	0	1	1	1	0	Seal Shark	Scymnorhinus licha
BSK	0	1	1	1	0	Basking Shark	Cetorhinus maximus
BSL	1	0	0	0	0	Black Slickhead	Xenodermichthys spp.
BSP	0	1	1	1	0	Big-scale Pomfret	Taratichthys longipinnis
BSQ	0	1	1	1	0	Broad Squid	Sepioteuthis australis
BSU	1	0	0	0	0	Benthosema suborbitale	Benthosema suborbitale
BTH	1	0	0	0	0	Bluntnose Skate	Bathyraja sp.
BTR	1	0	0	0	0	Brown Trout	Salmo trutta
BTU	0	1	1	1	0	Butterfly Tuna	Gasterochisma melampus
BUL	1	0	0	0	0	Bully	Eleotridae
BUT	0	1	1	1	0	Butterfish	Odax pullus
BWH	0	1	1	1	0	Bronze Whaler Shark	Carcharhinus brachyurus
BWS	0	1	1	1	0	Blue Shark	Prionace glauca
BYA	0	1	1	1	0	Frilled Venus Shell	Bassina yatei
BYS	1	0	0	0	0	Alfonsino	Beryx splendens
BYX	0	1	1	1	0	Alfonsino & Long-finned Beryx	Beryx splendens & B decadactylus
CAC	0	1	1	1	0	Cancer Crab	Cancer novaezelandiae
CAM	1	0	0	0	0	Sabre Prawn	Camplyonotus rathbonae
CAN	1	0	0	0	0	Brown Brotula	Cataetyx niki
CAR	0	1	1	1	0	Carpet Shark	Cephaloscyllium isabella
CAT	0	1	1	1	0	Catfish (freshwater)	Ictalurus nebulosus
CAU	1	0	0	0	0	Goldfish	Carassius auratus
CAX	1	0	0	0	0	White Brotula	Cataetyx sp.
CBE	1	0	0	0	0	Crested Bellowsfish	Notopogon lilliei
CBL	1	0	0	0	0	Crested Blenny	Parablennius laticlavius
CBO	1	0	0	0	0	Bollons Rattail	Caelorinchus bollonsi
CCR	1	0	0	0	0	Globosehead Rattail	Cetonurus crassiceps
CDL	0	1	1	1	0	Cardinal Fish	Epigonus telescopus
CDO	1	0	0	0	0	Capro Dory	Capromimus abbreviatus
CEN	1	0	0	0	0	Deepsea Sharks	Centroscymnus spp.

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
CFA	1	0	0	0	0	Banded Rattail	Caelorinchus fasciatus
CGR	1	0	0	0	0	Convict Groper	Epinephelus octofasciatus
CHC	1	0	0	0	0	Chaceon spp	Chaceon spp
CHG	1	0	0	0	0	Chimaera, Giant	Chimaera phantasma
CHI	0	1	1	1	0	Chimaera sp.	Chimaera sp.
CHP	1	0	0	0	0	Chimaera, Purple	Chimaera sp.
CIO	1	0	0	0	0	Freshwater Mussels	Cucumerunio spp
CMA	1	0	0	0	0	Mahia Rattail	Caelorinchus matamua
CMO	0	1	1	1	0	Copper Moki	Latridopsis forsteri
COB	1	0	0	0	0	Black Coral	Antipatharia (order)
COC	0	1	1	1	0	Cockle	Austrovenus stutchburyi
COD	1	0	0	0	0	Cod	N/A
COE	1	0	0	0	0	Coelenterata	N/A
COL	1	0	0	0	0	Olivers Rattail	Caelorinchus oliverianus
COM	1	0	0	0	0	Cosmopolitan Rattail	Coryphaenoides armatus
CON	0	1	1	1	0	Conger Eel	Conger spp.
COR	1	0	0	0	0	Red Coral	Stylasterina (order)
COS	1	0	0	0	0	Cockle Spat	Austrovenus stutchburyi
COT	1	0	0	0	0	Bonyskull Toadfish	Cottunculus nudus
CPD	1	0	0	0	0	Centrolophidae	Centrolophidae
CRA	0	1	1	1	0	Rock Lobster	Jasus edwardsii
CRB	0	1	1	1	0	Crab	N/A
CSH	1	0	0	0	0	Catshark	N/A
CSQ	0	1	1	1	0	Centrophorus squamosus	Centrophorus squamosus
CST	1	0	0	0	0	Manefish	Caristius sp.
CTU	0	1	1	1	0	Cooks Turban Shell	Cookia sulcata
CUB	1	0	0	0	0	Cubehead	Cubiceps spp
CUC	1	0	0	0	0	Cucumber Fish	Chlorophthalmus nigripinnis
CYO	1	0	0	0	0	Smooth Skin Dogfish	Centroscymnus owstoni
CYP	1	0	0	0	0	Centroscymnus crepidater	Centroscymnus crepidater
DAN	0	1	1	1	0	Ringed Dosinia	Dosinia anus
DCK	1	0	0	0	0	Dog Cockle	Tucetona laticostata
DCS	1	0	0	0	0	Dawsons Catshark	Halaelurus dawsoni
DEA	0	1	1	1	0	Dealfish	Trachipterus trachypterus
DIS	1	0	0	0	0	Discfish	Diretmus argenteus
DOF	0	1	1	1	0	Dolphinfish	Coryphaena hippurus
DOS	1	0	0	0	0	Oysters Dredge Spat	Tiostrea chilensis
DRE	1	0	0	0	0	Diaphus regani	Diaphus regani
DRU	1	0	0	0	0	Silver Drummer	Kyphosus sydneyanus
DSK	1	0	0	0	0	Deepwater Spiny Skate	Amblyraja sp.
DSM	1	0	0	0	0	Dead Striped Marlin	Tetrapturus audax
DSS	1	0	0	0	0	Deepsea Smelt	Bathylagus spp.
DSU	0	1	1	1	0	Fine Dosinia	Dosinia subrosea

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
DWD	0	1	1	1	0	Deepwater Dogfish	N/A
DWE	0	1	1	1	0	Deepwater Eel	N/A
DWO	1	0	0	0	0	Deepwater Octopus	N/A
ECK	1	0	0	0	0	Ecklonia	Ecklonia (genus)
ECN	1	0	0	0	0	Echinoid (sea Urchin)	N/A
ECO	0	1	1	1	0	Prickly Shark	Echinorhinus cookei
EEL	0	1	1	1	0	Eels, Marine	NULL
EEU	0	0	0	1	0	Eels, Freshwater	N/A
EGR	0	1	1	1	0	Eagle Ray	Myliobatis tenuicaudatus
ELE	0	1	1	1	0	Elephant Fish	Callorhynchus milii
EMA	0	1	1	1	0	Blue Mackerel	Scomber australasicus
EMO	1	0	0	0	0	Blackbelly Lantern Shark	Etmopterus molleri
EMP	0	1	1	1	0	Emperor	Lethrinidae
EPD	0	1	1	1	0	White Cardinalfish	Epigonus denticulatus
EPL	0	1	1	1	0	Bigeye Cardinalfish	Epigonus lenimen
EPO	1	0	0	0	0	Limp Eel Pout	Melanostigma gelatinosum
EPR	0	1	1	1	0	Robust Cardinalfish	Epigonus robustus
ERA	0	1	1	1	0	Electric Ray	Torpedo fairchildi
ESO	0	1	1	1	0	N.Z. Sole	Peltorhamphus novaezeelandiae
ESQ	1	0	0	0	0	Enoploteuthis Squid	Enoploteuthis spp.
ETB	1	0	0	0	0	Baxters Lantern Dogfish	Etmopterus baxteri
ETL	1	0	0	0	0	Lucifer Dogfish	Etmopterus lucifer
ETM	1	0	0	0	0	Etmopterus sp.	Etmopterus sp.
ETP	1	0	0	0	0	Etmopterus pusillus	Etmopterus pusillus
FAN	1	0	0	0	0	Fanfish	Pterycombus petersii
FBA	1	0	0	0	0	False Barracouta	Neolatus tripes
FET	1	0	0	0	0	Fish Extra Territorial	N/A
FHD	0	1	1	1	0	Deepsea Flathead	Hoplichthys haswelli
FIS	1	0	0	0	0	Fish	N/A
FLA	0	1	1	1	0	Flats	N/A
FLO	1	0	0	0	0	Flounder	N/A
FLU	1	0	0	0	0	Perch	Perca fluviatilis
FLY	0	1	1	1	0	Flying Fish	Exocoetidae
FOR	1	0	0	0	0	Forsterygion spp	Forsterygion spp
FOX	1	0	0	0	0	Fox Fish	Bodianus sp.
FRO	0	1	1	1	0	Frostfish	Lepidopus caudatus
FRS	1	0	0	0	0	Frill Shark	Chlamydoselachus anguineus
FRX	1	0	0	0	1	Trichiuridae (frostfishes)	N/A
FTU	1	0	0	0	0	Frigate Tuna	Auxis thazard
FUR	1	0	0	0	0	New Zealand Fur Seal	Arctocephalus forsteri
GAR	0	1	1	1	0	Garfish	Hyporhamphus ihi
GBI	1	0	0	0	0	Gobies	Gobiidae(family)

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
GFL	0	1	1	1	0	Greenback Flounder	Rhombosolea tapirina
GGA	1	0	0	0	0	Gigartina Sp.	Genus gigartina
GGO	1	0	0	0	0	Giant Bully	Gobiolorphus gobioides
GLX	1	0	0	0	0	Galaxiid (adult)	Family galaxiidae (adult)
GMU	0	1	1	1	0	Grey Mullet	Mugil cephalus
GON	1	0	0	0	0	Gonorynchus gonorynchus	Gonorynchus gonorynchus
GRA	0	1	1	1	0	Gracilaria Weed	Gracilaria secundata
GRC	1	0	0	0	0	Grenadier Cod	Tripterophycis gilchristi
GRG	1	0	0	0	0	Large grenadier cod	Tripterophycis sp.
GRP	1	0	0	0	0	Grass Carp	Ctenopharyngodon idella
GSC	1	0	0	0	0	Giant Spider Crab	Jacquinotia edwardsii
GSE	0	1	1	1	0	Snake Mackerel	Gempylus serpens
GSH	0	1	1	1	0	Ghost Shark	Hydrolagus novaezealandiae
GSP	0	1	1	1	0	Pale Ghost Shark	Hydrolagus sp b2
GSQ	1	0	0	0	0	Giant Squid	Architeuthis spp
GTR	0	1	1	1	0	Marblefish	Aplodactylus arctidens
GUL	1	0	0	0	0	Gulper	Eurypharynx pelecanoides
GUR	0	1	1	1	0	Gurnard	Chelidonichthys kumu
HAG	0	1	1	1	0	Hagfish	Eptatretus cirrhatus
HAK	0	1	1	1	0	Hake	Merluccius australis
HAP	0	1	1	1	0	Hapuku	Polyprion oxygeneios
HCO	1	0	0	0	0	Hairy Conger	Bassanago hirsutus
HCR	1	0	0	0	0	Mud Crab	Helice crassa
HEP	1	0	0	0	0	Sharpsnouted Sevengill Shark	Heptranchias perlo
HEX	1	0	0	0	0	Sixgill Shark	Hexanchus griseus
HHS	0	1	1	1	0	Hammerhead Shark	Sphyrna zygaena
HIA	1	0	0	0	0	Prickly Anglerfish	Himantolophus appelii
HJO	1	0	0	0	0	Johnson's Cod	Halargyreus johnsonii
HLA	1	0	0	0	0	Freshwater Mussels	Hyridella spp
HOK	0	1	1	1	0	Hoki	Macruronus novaezelandiae
HOR	0	1	1	1	0	Horse Mussel	Atrina zelandica
HPB	0	1	1	1	0	Hapuku & Bass	Polyprion oxygeneios & p americanus
HSI	1	0	0	0	0	Jackknife Prawn	Haliporoides sibogae
HYP	1	0	0	0	0	Purple Finned Hydrolagus	Hydrolagus sp
IBR	1	0	0	0	0	Cookiecutter Shark	Isistius brasiliensis
ICX	0	1	1	1	1	Icefishes	Channichthyidae
JAV	0	1	1	1	0	Javelin Fish	Lepidorhynchus denticulatus
JCA	1	0	0	0	0	Eastern Pacific Rock Lobster	Jasus caveorum
JDO	0	1	1	1	0	John Dory	Zeus faber
JFI	1	0	0	0	0	Jellyfish	N/A
JGU	0	1	1	1	0	Japanese Gurnard	Pterygotrigla picta
JMA	0	1	1	1	0	Jack Mackerel	Trachurus declivis, t.m., t.nz.

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
KAH	0	1	1	1	0	Kahawai	Arripis trutta
KAI	1	0	0	0	0	Kali indica	Kali indica
KAN	1	0	0	0	0	Krefftichthys anderssoni	Krefftichthys anderssoni
KBB	0	1	1	1	0	Bladder Kelp	Macrocystis pyrifera
KBL	0	1	1	1	0	Kelp Bull	Durvillea spp.
KEL	0	1	1	1	0	Kelpfish	Chironemus marmoratus
KIC	1	0	0	0	0	King Crab	L murrayi N brodiei
KIN	0	1	1	1	0	Kingfish	Seriola lalandi
KOH	0	1	1	1	0	Koheru	Decapterus koheru
KOI	0	1	1	1	0	Koi Carp	Cyprinus carpio
KOU	1	0	0	0	0	Koura	Paranephrops planifrons & P zealandicus
KSP	1	0	0	0	0	Kina Spat	Evechinus chloroticus
KTA	0	1	1	1	0	King Tarakihi	Nemadactylus sp
LAM	1	0	0	0	0	Lamprey	Geotria australis
LAN	1	0	0	0	0	Lantern Fish	Myctophidae
LAT	1	0	0	0	0	Lancetfish	Alepisaurus ferox
LCH	0	1	1	1	0	Long-nosed Chimaera	Harriotta raleighana
LDO	0	1	1	1	0	Lookdown Dory	Cyttus traversi
LEA	0	1	1	1	0	Leatherjacket	Parika scaber
LEG	1	0	0	0	0	Giant Lepidion	Lepidion schmidti & lepidion inosimae
LEL	1	0	0	0	0	Longimactra elongata	Longimactra elongata
LEO	1	0	0	0	0	Leopard Seal	Hydruga leptonyx
LEP	0	1	1	1	0	Escolar	Lepidocybium flavobrunneum
LES	0	1	1	1	0	Lessonia	Lessonia (genus)
LFB	0	1	1	1	0	Longfinned Boarfish	Zanclistius elevatus
LFE	0	1	1	1	0	Long-finned Eel	Anguilla dieffenbachii
LIM	0	1	1	1	0	Limpets	N/A
LIN	0	1	1	1	0	Ling	Genypterus blacodes
LLT	1	0	0	0	0	Lithodes longispinus turritus	Lithodes longispinus turritus
LOU	1	0	0	0	0	Louvar	Luvaris imperialis
LSO	0	1	1	1	0	Lemon Sole	Pelotretis flavilatus
LUN	1	0	0	0	0	Cats Eye	Lunella sp.
LYC	1	0	0	0	0	Lyconus sp.	Lyconus sp.
MAC	1	0	0	0	0	Mackerels	N/A
MAK	0	1	1	1	0	Mako Shark	Isurus oxyrinchus
MAN	1	0	0	0	0	Finless Flounder	Neoachiropsetta milfordi
MAO	0	1	1	1	0	Maomao	N/A
MAR	1	0	0	0	0	Marlin	N/A
MBS	1	0	0	0	0	Blue Mussel Spat	Mytilus galloprovincialis
MCA	1	0	0	0	1	Ridge Scaled Rattail	Macrourus carinatus
MDI	0	1	1	1	0	Large Trough Shell	Mactra discors

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
MDO	0	1	1	1	0	Mirror Dory	Zenopsis nebulosus
MEL	1	0	0	0	0	Melanonus gracilis	Melanonus gracilis
MHI	1	0	0	0	0	Stalk-eyed Mud Crab	Macrophthalmus hirtipes
MIQ	1	0	0	0	0	Warty Squid	Moroteuthis ingens
MIX	1	0	0	0	0	Mixed Fish	N/A
MJA	1	0	0	0	0	Manta ray	Mobula japonica
MMI	0	1	1	1	0	Trough Shell	Mactra murchisoni
MOD	1	0	0	0	0	Morid	N/A
MOK	0	1	1	1	0	Moki	Latridopsis ciliaris
MOO	0	1	1	1	0	Moonfish	Lampris guttatus
MOR	0	1	1	1	0	Moray Eel	Muraenidae (family)
MOY	1	0	0	0	0	Yellow Moray Eel	Gymnothorax prasinus
MRL	0	1	1	1	1	Moray Cods	Muraenolepididae
MRO	1	0	0	0	0	Freshwater Prawn	Macrobrachium rosenbergii
MRQ	1	0	0	0	0	Warty Squid	Moroteuthis robsoni
MSB	1	0	0	0	0	Blue Mussel	Mytilus galloprovincialis
MSG	0	1	1	1	0	Green-lipped Mussel	Perna canaliculus
MSL	1	0	0	0	0	Starfish	Mediaster sladeni
MSP	0	1	1	1	0	Green Mussel Spat	Perna canaliculus
MUN	0	1	1	1	0	Munida gregaria	Munida gregaria
MUR	1	0	0	0	0	Moray Cod	Muraenolepis marmoratus
MUS	0	1	1	1	0	Mussels	N/A
MUU	1	0	0	0	0	Mullet	N/A
NEM	1	0	0	0	0	Slender Snipe Eel	Nemichthys scolopaceus
NOT	0	1	1	1	1	Antarctic Rock Cods	Nototheniidae
NSD	0	1	1	1	0	Northern Spiny Dogfish	Squalus mitsukurii
NTU	0	1	1	1	0	Northern Bluefin Tuna	Thunnus thynnus
OAR	0	1	1	1	0	Oarfish	Regalecus glesne
OBS	1	0	0	0	0	Oblong sunfish	Ranzania laevis
OCT	0	1	1	1	0	Octopus	Octopus maorum
ODO	1	0	0	0	0	Sand Shark	Odontaspis ferox
OEO	0	1	1	1	0	Oreos	Oreosomatidae
OFF	0	0	0	1	0	Offal	N/A
OFH	0	1	1	1	0	Oilfish	Ruvettus pretiosus
ONG	0	1	1	1	0	Sponges	Porifera (phylum)
ONO	1	0	0	0	0	Oplophorus novaezeelandiae	Oplophorus novaezeelandiae
OPA	1	0	0	0	0	Opalfish	Hemerocoetes spp.
OPE	0	1	1	1	0	Orange Perch	Lepidoperca aurantia
ORH	0	1	1	1	0	Orange Roughy	Hoplostethus atlanticus
OSD	0	1	1	1	0	Other Sharks And Dogs	N/A
OSE	1	0	0	0	0	Snake Eel	Ophisurus serpens
OSP	1	0	0	0	0	Pacific Oyster Spat	Crassostrea gigas
OYS	0	1	1	1	0	Oysters Dredge	Tiostrea chilensis

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
OYU	0	1	1	1	0	Oysters Dredge	Tiostrea chilensis
PAA	1	0	0	0	0	Haliotis australis	Haliotis australis
PAD	0	1	1	1	0	Paddle Crab	Ovalipes catharus
PAH	1	0	0	0	0	Opah	Lampris immaculatus
PAI	1	0	0	0	0	Haliotis iris	Haliotis iris
PAL	1	0	0	0	0	Barracudinas	Paralepididae
PAR	0	1	1	1	0	Parore	Girella tricuspidata
PAU	0	1	1	1	0	Black Paua & Yellowfoot Paua	Haliotis iris & h australis
PAV	1	0	0	0	0	Haliotis virginea	Haliotis virginea
PDG	1	0	0	0	0	Prickly Dogfish	Oxynotus bruniensis
PDO	0	1	1	1	0	Deepwater Tuata	Paphies donacina
PDS	1	0	0	0	0	False Frostfish	Paradiplospinus gracilis
PEN	1	0	0	0	0	Penaeus Prawns	Penaeus spp
PER	1	0	0	0	0	Persparsia kopua	Persparsia kopua
PGR	0	1	1	1	1	Plunderfish	Pogonophyrne permitini
PHC	0	1	1	1	0	Packhorse Rock Lobster	Jasus verreauxi
PHO	1	0	0	0	0	Lighthouse Fish	Photichthys argenteus
PIG	0	1	1	1	0	Pigfish	Congiopodus leucopaecilus
PIL	0	1	1	1	0	Pilchard	Sardinops neopilchardus
PIP	0	1	1	1	0	Pipefish	Syngnathidae
PLS	1	0	0	0	0	Plunkets Shark	Scymnodon plunketi
PLZ	1	0	0	0	0	Scaly Stargazer	Pleuroscopus pseudodorsalis
PMA	0	1	1	1	0	Pink Maomao	Caprodon longimanus
POE	1	0	0	0	0	Porpoise	N/A
POP	0	1	1	1	0	Porcupine Fish	Allomycterus jaculiferus
POR	0	1	1	1	0	Porae	Nemadactylus douglasi
POS	0	1	1	1	0	Porbeagle Shark	Lamna nasus
POT	1	0	0	0	0	Parrotfish	N/A
POY	0	1	1	1	0	Oysters Pacific	Crassostrea gigas
PPA	1	0	0	0	0	Deepwater Rock Lobster	Projasus parkeri
PPI	0	1	1	1	0	Pipi	Paphies australis
PRA	0	1	1	1	0	Prawn	N/A
PRK	0	1	1	1	0	Prawn Killer	Ibacus alticrenatus
PRO	1	0	0	0	0	Protomyctophum spp.	Protomyctophum spp.
PRP	1	0	0	0	0	Porphyra	Porphyra (genus)
PSK	1	0	0	0	0	Longnosed Deepsea Skate	Bathyraja shuntovi
PSL	1	0	0	0	0	Paralomis dosleini	Paralomis dosleini
PSP	1	0	0	0	0	Scissortail	Psenes pellucidus
PSY	1	0	0	0	0	Psychrolutes	Psychrolutes sp
PTE	0	1	1	1	0	Pterocladia	Pterocladia lucida & p. capillacea
PTO	0	1	1	1	0	Patagonian Toothfish	Dissostichus eleginoides
PUF	1	0	0	0	0	Pufferfish	Sphoeroides pachygaster

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
PWI	1	0	0	0	0	Periwinkle	Genus littorina
PZL	1	0	0	0	0	King Clam	Panopea zelandica
QSC	0	1	1	1	0	Queen Scallop	Chlamys delicatula
RAG	1	0	0	0	0	Ragfish	Icichthys australis
RAT	0	1	1	1	0	Rattails	Macrouridae
RAY	1	0	0	0	0	Rays	Torpedinidae narkidae dasyatididae myliobatid
RBM	0	1	1	1	0	Rays Bream	Brama brama
RBP	1	0	0	0	0	Red banded perch	Hypoplectrodes huntii
RBT	0	1	1	1	0	Redbait	Emmelichthys nitidus
RBY	0	1	1	1	0	Ruby Fish	Plagiogeneion rubiginosus
RCO	0	1	1	1	0	Red Cod	Pseudophycis bachus
RDD	1	0	0	0	0	Rudd	Scardinius erythrophthalmus
RDO	0	1	1	1	0	Rosy Dory	Cyttopsis roseus
REC	1	0	0	0	0	Red Rock Crab	Plagusia chabrus
REP	1	0	0	0	0	Rexea prometheoides	Rexea prometheoides
RHY	0	1	1	1	0	Common Roughy	Paratrachichthys trailli
RIB	0	1	1	1	0	Ribaldo	Mora moro
RLA	1	0	0	0	0	Resania lanceolata	Resania lanceolata
RMO	0	1	1	1	0	Red Moki	Cheilodactylus spectabilis
RMU	1	0	0	0	0	Red Mullet	Upeneichthys lineatus
ROC	0	1	1	1	0	Rock Cod	Lotella rhacinus
ROY	1	0	0	0	0	Oysters Rock	Saccostrea glomerata
RPE	0	1	1	1	0	Red Perch	N/A
RPI	1	0	0	0	0	Red Pigfish	Bodianus vulpinus
RRC	0	1	1	1	0	Red Scorpion Fish	Scorpaena cardinalis & s. papillosus
RSC	1	0	0	0	0	Red Scorpion Fish	Scorpaena papillosus
RSK	0	1	1	1	0	Rough Skate	Dipturus nasutus
RSN	0	1	1	1	0	Red Snapper	Centroberyx affinis
RSQ	1	0	0	0	0	Ommastrephes bartrami	Ommastrephes bartrami
RUB	1	0	0	0	0	Rubbish Other Than Fish	N/A
RUD	0	1	1	1	0	Rudderfish	Centrolophus niger
SAE	0	1	1	1	0	Triangle Shell	Spisula aequilateralis
SAI	0	1	1	1	0	Sailfish	Istiophorus platypterus
SAL	0	1	1	1	0	Salps	N/A
SAM	0	1	1	1	0	Quinnat Salmon	Oncorhynchus tshawytscha
SAR	1	0	0	0	0	Squilla armata	Squilla armata
SAU	0	1	1	1	0	Saury	Scomberesox saurus
SBI	1	0	0	0	0	Slickhead, Bigscaled Brown	Alepocephalus sp.
SBK	0	1	1	1	0	Spineback	Notacanthus sexspinis
SBO	0	1	1	1	0	Southern Boarfish	Pseudopentaceros richardsoni
SBR	1	0	0	0	0	Southern Bastard cod	Pseudophycis barbata

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
SBW	0	1	1	1	0	Southern Blue Whiting	Micromesistius australis
SCA	0	1	1	1	0	Scallop	Pecten novaezelandiae
SCC	0	1	1	1	0	Sea Cucumber	Stichopus mollis
SCD	1	0	0	0	0	Smallscaled Cod	Paranotothenia microlepidota
SCG	0	1	1	1	0	Scaly Gurnard	Lepidotrigla brachyoptera
SCH	0	1	1	1	0	School Shark	Galeorhinus galeus
SCI	0	1	1	1	0	Scampi	Metanephrops challengeri
SCM	1	0	0	0	0	Roughskin Dogfish	Scymnodon macracanthus
SCO	0	1	1	1	0	Swollenhead Conger	Bassanago bulbiceps
SDF	1	0	0	0	0	Spotted Flounder	Azygopus pinnifasciatus
SDO	0	1	1	1	0	Silver Dory	Cyttus novaezealandiae
SDR	1	0	0	0	0	Spiny Seadragon	Solegnathus spinosissimus
SEA	1	0	0	0	0	Seal	N/A
SEE	1	0	0	0	0	Silver Conger	Gnathophis habenatus
SEL	1	0	0	0	0	Seriolella labyrinthica	Seriolella labyrinthica
SEM	1	0	0	0	1	Small Eye Moray Cod	Muraenolepis micropis
SEO	1	0	0	0	0	Seaweed	N/A
SEV	0	1	1	1	0	Broadsnouted Sevengill Shark	Notorynchus cepedianus
SFE	0	1	1	1	0	Short-finned Eel	Anguilla australis, anguilla reinhardtii
SFI	0	1	1	1	0	Starfish	Starfish
SFL	0	1	1	1	0	Sand Flounder	Rhombosolea plebeia
SFN	0	1	1	1	0	Spinyfin	Diretmoides parini
SHE	1	0	0	0	0	Sherwoods Dogfish	Scymnodalatias sherwoodi
SHL	1	0	0	0	0	Shovelnosed Lobster	Scyllarus sp
SHO	1	0	0	0	0	Seahorse	Hippocampus abdominalis
SHR	1	0	0	0	0	Sea Hare	Order aplysiomorpha
SIT	1	0	0	0	0	Silver trumpeter	Silver trumpeter
SKA	0	1	1	1	0	Skate	Rajidae arhynchobatidae (families)
SKI	0	1	1	1	0	Gemfish	Rexea solandri
SKJ	0	1	1	1	0	Skipjack Tuna	Katsuwonus pelamis
SLB	1	0	0	0	0	White Tail Dogfish	Scymnodalatias albicauda
SLG	0	1	1	1	0	Sea Slug	Scutus breviculus
SLK	0	1	1	1	0	Slickhead	Alepocephalidae
SLL	1	0	0	0	0	Slipper Lobsters	Scyllaridae
SLO	0	1	1	1	0	Spanish Lobster	Arctides sp.
SLR	1	0	0	0	0	Slender Roughy	Optivus elongatus
SLS	1	0	0	0	0	Slender Sole	Peltorhamphus tenuis
SMC	1	0	0	0	0	Small-headed Cod	Lepidion microcephalus
SME	1	0	0	0	0	Smelt	Retropinna retropinna
SMI	1	0	0	0	0	Somniosus microcephalus	Somniosus microcephalus
SNA	0	1	1	1	0	Snapper	Pagrus auratus

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
SND	0	1	1	1	0	Shovelnose Spiny Dogfish	Deania calcea
SNE	1	0	0	0	0	Snubnosed Eel	Simenchelys parasiticus
SNI	1	0	0	0	0	Snipefish	Macrorhamphosus scolopax
SNR	1	0	0	0	0	Rough Shovelnose Dogfish	Deania histricosa
SNS	1	0	0	0	0	Sunset	Family sanguinolariidae
SOL	1	0	0	0	0	Sole	N/A
SOP	1	0	0	0	0	Pacific Sleeper Shark	Somniosus pacificus
SOR	0	1	1	1	0	Spiky Oreo	Neocyttus rhomboidalis
SOS	1	0	0	0	0	Sockeye Salmon	Oncorhynchus nerka
SPA	1	0	0	0	0	Slender Sprat	Sprattus antipodum
SPD	0	1	1	1	0	Spiny Dogfish	Squalus acanthias
SPE	0	1	1	1	0	Sea Perch	Helicolenus sp.
SPF	0	1	1	1	0	Scarlet Wrasse	Pseudolabrus miles
SPI	0	1	1	1	0	Spider Crab	N/A
SPK	1	0	0	0	0	Spikefish	Macrorhamphosodes uradoi
SPL	1	0	0	0	0	Scopelosaurus sp.	Scopelosaurus sp.
SPO	0	1	1	1	0	Rig	Mustelus lenticulatus
SPP	0	1	1	1	0	Splendid Perch	Callanthias allporti
SPR	0	1	1	1	0	Sprats	Sprattus antipodum, s.muelleri
SPZ	0	1	1	1	0	Spotted Stargazer	Genyagnus monopterygius
SQI	1	0	0	0	0	Squirrelfish	Pristilepis oligolepis
SQP	1	0	0	0	0	Sepiolid Squid	Sepioloidea pacifica
SQU	0	1	1	1	0	Arrow Squid	Nototodarus sloanii & n gouldi
SQX	0	1	1	1	0	Squid	N/A
SRH	1	0	0	0	0	Silver Roughy	Hoplostethus mediterraneus
SRP	1	0	0	0	0	Silver Carp	Hypophthamichthys molitrix
SRR	1	0	0	0	1	Amblyraja georgiana	Amblyraja georgiana
SSC	1	0	0	0	0	Giant Masking Crab	Leptomithrax australis
SSF	0	1	1	1	0	Shortbill Spearfish	Tetrapturus angustirostris
SSH	0	1	1	1	0	Slender Smooth-hound	Gollum attenuatus
SSI	0	1	1	1	0	Silverside	Argentina elongata
SSK	0	1	1	1	0	Smooth Skate	Dipturus innominatus
SSM	1	0	0	0	0	Slickhead, Smallscaled Brown	Alepocephalus australis
SSO	0	1	1	1	0	Smooth Oreo	Pseudocyttus maculatus
SSP	1	0	0	0	0	Scallop Spat	Pecten novaenelandiae
STA	0	1	1	1	0	Giant Stargazer	Kathetostoma giganteum
STG	1	0	0	0	0	Stargazer	N/A
STK	1	0	0	0	0	Stokells Smelt	Stokellia anisodon
STM	0	1	1	1	0	Striped Marlin	Tetrapturus audax
STN	0	1	1	1	0	Southern Bluefin Tuna	Thunnus maccoyii
STR	0	1	1	1	0	Stingray	N/A
STU	0	1	1	1	0	Slender Tuna	Allothunnus fallai
STY	1	0	0	0	0	Spotty	Notolabrus celidotus

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
SUM	1	0	0	0	0	Pelagic Butterfish	Schedophilus maculatus
SUN	0	1	1	1	0	Sunfish	Mola mola
SUR	0	1	1	1	0	Kina	Evechinus chloroticus
SWA	0	1	1	1	0	Silver Warehou	Seriolella punctata
SWE	1	0	0	0	0	Sweep	Scorpis lineolatus
SWO	0	1	1	1	0	Broadbill Swordfish	Xiphias gladius
SYN	1	0	0	0	0	Synaphobranchidae	Synaphobranchidae
TAR	0	1	1	1	0	Tarakihi	Nemadactylus macropterus
TEL	1	0	0	0	0	Telescope Fish	Mendosoma lineatum
THR	0	1	1	1	0	Thresher Shark	Alopias vulpinus
TIN	1	0	0	0	0	Tinselfish	Xenolepidichthys dalgleishi
TIS	1	0	0	0	0	Tiger Shark	Galeocerdo cuvier
TNI	1	0	0	0	0	Triphoturus nigrescens	Triphoturus nigrescens
TOA	0	1	1	1	0	Toadfish	Neophrynichthys sp.
TOD	1	0	0	0	0	Dark Toadfish	Neophrynichthys latus
TOH	1	0	0	0	0	Toheroa	Paphies ventricosa
TOP	1	0	0	0	0	Pale Toadfish	Neophrynichthys angustus
TOR	0	1	1	1	0	Pacific Bluefin Tuna	Thunnus orientalis
TRA	1	0	0	0	0	Roughies	Trachichthyidae(family)
TRC	1	0	0	0	0	Triangle Crab	Eurynolambrus australis
TRE	0	1	1	1	0	Trevally	Pseudocaranx dentex
TRI	1	0	0	0	0	Tripod Fish	Bathypterois spp.
TRS	1	0	0	0	0	Trachyscorpia capensis	Trachyscorpia capensis
TRU	0	1	1	1	0	Trumpeter	Latris lineata
TSQ	1	0	0	0	0	Todarodes filippovae	Todarodes filippovae
TUA	0	1	1	1	0	Tuatua	Paphies subtriangulata
TUB	1	0	0	0	0	Tubbia tasmanica	Tubbia tasmanica
TUL	1	0	0	0	0	Sea Tulip	Pyura pachydermatina
TUR	0	1	1	1	0	Turbot	Colistium nudipinnis
ULV	1	0	0	0	0	Ulva	Ulva (genus)
UND	1	0	0	0	0	Wakame	Undaria pinnatifida
UNI	1	0	0	0	0	Unidentified	N/A
UNX	1	0	0	0	0	All and any unidentified species	N/A
URO	1	0	0	0	0	Sea Urchin Other	N/A
VCO	0	1	1	1	0	Violet Cod	Antimora rostrata
VIT	1	0	0	0	0	Deep Sea Spider Crab	Vitjazmaia latidactyla
VLA	1	0	0	0	0	Venerupis largillierti	Venerupis largillierti
VOL	1	0	0	0	0	Volute	Family volutidae
VSQ	1	0	0	0	0	Violet Squid	Histioteuthis spp.
WAH	0	1	1	1	0	Wahoo	Acanthocybium solanderi
WAR	0	1	1	1	0	Common Warehou	Seriolella brama
WGR	1	0	0	0	1	M whitsoni	M whitsoni
WHE	0	1	1	1	0	Whelks	N/A

Species Code	P (passable)	T (target)	E (effort)	L (landing)	X (only on high seas)	Preferred Common Name	Correct Scientific Name
WHI	1	0	0	0	0	Whitebait	Family galaxiidae (juvenile)
WHR	1	0	0	0	0	White Rattail	Trachyrincus longirostris
WHX	1	0	0	0	0	Unicorn Rattail	Trachyrincus sp.
WIN	1	0	0	0	0	Wingfish	Pteraclis velifera
WIT	0	1	1	1	0	Witch	Arnoglossus scapha
WOE	0	1	1	1	0	Warty Oreo	Allocyttus verrucosus
WPS	1	0	0	0	0	White Pointer Shark	Carcharodon carcharias
WRA	0	1	1	1	0	Whiptail Ray	Dasyatis thetidis
WSE	0	1	1	1	0	Wrasses	Labridae (family)
WSQ	0	1	1	1	0	Warty Squid	Moroteuthis spp.
WWA	0	1	1	1	0	White Warehou	Seriolella caerulea
YBF	0	1	1	1	0	Yellow-belly Flounder	Rhombosolea leporina
YBO	1	0	0	0	0	Yellow Boarfish	Pentaceros decacanthus
YCO	1	0	0	0	0	Yellow Cod	Parapercis gilliesi
YEM	0	1	1	1	0	Yellow-eyed Mullet	Aldrichetta forsteri
YFN	0	1	1	1	0	Yellowfin Tuna	Thunnus albacares
ZOS	1	0	0	0	0	Zostera	Zostera (genus)

Table 7: Table of unreasonable species/method combinations ('X' indicates that the combination is considered unreasonable)

Species group	Dredge (D)	Gathering (DI, H, HG)	Jigging (SJ)	Lining (BLL, DL, SLL, TL)	Trolling etc (HL, PL, T)	Passive netting (SN, DN)	Potting (CP, EP, FN, FP, RLP)	Seining (BS, DPS, DS, L, PS, RN)	Trawling (BPT,BT, MPT,MW)
Crayfish (CRA and PHC)	X		X	X	X	X		X	X
Crab(PAD,CRB)	X		X	X	X				X
Eels (LFE, SFE, EEU)	X		X	X	X			X	X
Octopus (OCT)	X	X	X	X	X	X		X	X
Seaweed (KBL, KBB, LES, GRA,PTE, PRP)	X		X	X	X	X	X	X	X
Squid (SQU)	X	X		X	X	X	X	X	
Sea urchins (SUR)			X	X	X	X	X	X	X
Tuna (BIG, ALB,STN, NTU, SKJ,YFN, TUN)	X	X	X			X	X		X
Cockles and pipis (COC, PIP)	X		X	X	X	X	X	X	X
Oysters, scallops, tuatua (SCA,OYS,OYU,TUA,QSC,POY)			X	X	X	X	X	X	
Mussels (MUS, MSP, MSG)			X	X	X	X	X	X	X
Paua (PAU)	X		X	X	X	X	X	X	X
Hoki (HOK)	X	X	X	X	X	X	X	X	
Moki (MOK)	X	X	X	X	X			X	
School shark (SCH)	X	X	X					X	
Snapper (SNA)	X	X	X						
Stargazer (STA)	X	X	X	X	X		X	X	
Silver warehou (SWA)	X	X	X	X	X	X	X	X	
Gurnard (GUR)	X	X	X		X		X		

Table 8: Landed/Processed Species associated with Estimated Catch Species

Estimated Catch Species	Landed/Processed Species
BFL BRI ESO GFL LSO SFL TUR YBF	FLA
BOE SOR SSO	OEO
BAS HAP	HPB
EEU LFE SFE	EEU LFE SFE

Table 9: Maximum total catch figures by method and form type

Form type	Fishing Method	Maximum total weight (Procedure C check if value is greater than this)
CEL	BLL	20000
CEL	BPT	10000
CEL	BS	2000
CEL	BT	25000
CEL	CP	3250
CEL	CRP	1500
CEL	D	50000
CEL	DI	3000
CEL	DL	3000
CEL	DN	1000
CEL	DPN	1500
CEL	DPS	10000
CEL	DS	10000
CEL	EP	500
CEL	FN	1750
CEL	FP	1000
CEL	H	5000
CEL	HL	2000
CEL	L	10000
CEL	MH	15000
CEL	MW	80000
CEL	MPT	200000

Form type	Fishing Method	Maximum total weight (Procedure C check if value is greater than this)
CEL	OCP	250
CEL	PL	5000
CEL	PS	200000
CEL	PSN	7500
CEL	RLP	1000
CEL	RN	2000
CEL	SCN	1000
CEL	SCP	3250
CEL	SLL	2000
CEL	SN	7500
CEL	T	4000
CEL	TL	2000
TCP	BPT	10000
TCP	BT	75000
TCP	MPT	200000
TCP	MW	250000

Table 10: Allowed ranges of estimated catches for species/method combinations

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
AGR	MW	1000	2000	greenwt
ALB	BLL	350	700	count
ALB	DL	350	700	count
ALB	HL	350	700	count
ALB	PL	350	700	count
ALB	SLL	141	282	count
ALB	T	353	707	count
ALB	TL	350	700	count
ATC	BT	500	1000	greenwt
ATO	BLL	5000	10000	greenwt
BAR	BLL	303	606	greenwt
BAR	BPT	1010	2020	greenwt
BAR	BT	23482	46965	greenwt
BAR	DS	505	1010	greenwt
BAR	MW	27775	55550	greenwt
BAR	PS	2500	5000	greenwt
BAR	SN	141	282	greenwt
BAR	T	1010	2020	greenwt
BAS	BLL	757	1515	greenwt
BAS	DL	1010	2020	greenwt
BBE	BT	1250	2500	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
BCD	BLL	2500	5000	greenwt
BCO	BLL	858	1717	greenwt
BCO	BT	17028	34057	greenwt
BCO	CP	2020	4040	greenwt
BCO	DL	212	424	greenwt
BCO	HL	338	676	greenwt
BCO	RLP	1060	2121	greenwt
BCO	SN	414	828	greenwt
BEE	BT	500	1000	greenwt
BEN	MW	500	1000	greenwt
BFL	BT	555	1111	greenwt
BFL	SN	181	363	greenwt
BIG	BLL	10	10	count
BIG	DL	10	10	count
BIG	HL	10	10	count
BIG	PL	10	10	count
BIG	SLL	13	13	count
BIG	T	10	10	count
BIG	TL	10	10	count
BMA	BLL	500	1000	greenwt
BMA	SN	75	151	greenwt
BNS	BLL	3515	7030	greenwt
BNS	BT	15150	30300	greenwt
BNS	DL	2828	5656	greenwt
BNS	MW	20200	40400	greenwt
BNS	SN	606	1212	greenwt
BNS	TL	378	757	greenwt
BOA	BLL	70	141	greenwt
BOA	BT	2020	4040	greenwt
BOE	BT	20200	40400	greenwt
BOE	MW	3750	7500	greenwt
BRC	BLL	90	181	greenwt
BRC	SN	75	151	greenwt
BRE	SN	50	100	greenwt
BRI	BT	404	808	greenwt
BRI	SN	35	70	greenwt
BRZ	BT	500	1000	greenwt
BSH	BLL	1024	2047	greenwt
BSH	BT	4040	8080	greenwt
BSH	DL	500	1000	greenwt
BSH	MW	1000	2000	greenwt
BSH	SN	2020	4040	greenwt
BSK	BT	5000	10000	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
BSK	MW	12500	25000	greenwt
BSQ	BT	353	707	greenwt
BTU	BLL	10	10	count
BTU	DL	10	10	count
BTU	HL	10	10	count
BTU	PL	10	10	count
BTU	SLL	10	10	count
BTU	T	10	10	count
BTU	TL	10	10	count
BUT	RLP	50	100	greenwt
BUT	SN	657	1313	greenwt
BWH	BLL	500	1000	greenwt
BWH	SN	324	649	greenwt
BYX	BLL	151	303	greenwt
BYX	BT	30300	60600	greenwt
BYX	MW	12625	25250	greenwt
BYX	SN	126	252	greenwt
CAR	RLP	125	250	greenwt
CAT	FN	202	404	greenwt
CDL	BLL	500	1000	greenwt
CDL	BT	45450	90900	greenwt
CDL	MW	14140	28280	greenwt
CHG	BT	500	1000	greenwt
CMO	SN	50	100	greenwt
COC	H	1515	3030	greenwt
COC	MH	4777	9555	greenwt
COD	BT	500	1000	greenwt
CON	BLL	400	801	greenwt
CON	BT	121	242	greenwt
CON	CP	176	353	greenwt
CON	DL	75	151	greenwt
CON	RLP	152	303	greenwt
CON	SN	50	100	greenwt
CRA	CP	126	252	greenwt
CRA	DI	303	606	greenwt
CRA	RLP	927	1854	greenwt
CRB	BT	2020	4040	greenwt
DEA	MW	1010	2020	greenwt
DIS	BLL	3750	7500	greenwt
DSK	BT	500	1000	greenwt
DWD	BT	3750	7500	greenwt
DWD	MW	500	1000	greenwt
DWE	BT	500	1000	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
EEL	FN	125	250	greenwt
EEU	BLL	35	70	greenwt
EEU	EP	242	484	greenwt
EEU	FN	370	741	greenwt
EGR	SN	126	253	greenwt
ELE	BT	9090	18180	greenwt
ELE	SN	2020	4040	greenwt
EMA	BT	3030	6060	greenwt
EMA	MW	27270	54540	greenwt
EMA	PS	90395	180790	greenwt
EMA	SN	410	820	greenwt
ESO	BT	833	1667	greenwt
ESO	SN	151	303	greenwt
FLA	BPT	500	1000	greenwt
FLA	BS	50	100	greenwt
FLA	BT	1818	3636	greenwt
FLA	D	101	202	greenwt
FLA	DS	250	500	greenwt
FLA	FN	50	100	greenwt
FLA	RN	125	250	greenwt
FLA	SN	505	1010	greenwt
FLO	BT	505	1010	greenwt
FRO	BLL	40	80	greenwt
FRO	BT	20200	40400	greenwt
FRO	DS	250	500	greenwt
FRO	MW	25250	50500	greenwt
GAR	BS	252	505	greenwt
GAR	L	250	500	greenwt
GFL	BT	303	606	greenwt
GFL	SN	161	323	greenwt
GMU	BS	530	1060	greenwt
GMU	DN	407	813	greenwt
GMU	RN	858	1717	greenwt
GMU	SN	1262	2525	greenwt
GSH	BLL	681	1363	greenwt
GSH	BT	5050	10100	greenwt
GSH	MW	500	1000	greenwt
GSH	SN	662	1324	greenwt
GSP	BLL	500	1000	greenwt
GSP	BT	758	1515	greenwt
GUR	BLL	505	1010	greenwt
GUR	BPT	757	1515	greenwt
GUR	BT	2020	4040	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
GUR	DI	757	1515	greenwt
GUR	DS	1768	3535	greenwt
GUR	H	1250	2500	greenwt
GUR	MW	500	1000	greenwt
GUR	RN	50	100	greenwt
GUR	SN	454	909	greenwt
GUR	T	151	303	greenwt
HAG	RLP	50	100	greenwt
HAK	BLL	151	303	greenwt
HAK	BT	40400	80800	greenwt
HAK	DL	250	500	greenwt
HAK	MPT	5000	10000	greenwt
HAK	MW	31815	63630	greenwt
HAK	SN	202	404	greenwt
HAP	BLL	757	1515	greenwt
HAP	BT	1908	3817	greenwt
HAP	DL	707	1414	greenwt
HAP	MW	500	1000	greenwt
HAP	SN	2525	5050	greenwt
HHS	BT	500	1000	greenwt
HHS	SN	250	500	greenwt
HJO	BT	500	1000	greenwt
HOK	BLL	116	232	greenwt
HOK	BT	83325	166650	greenwt
HOK	MPT	100000	200000	greenwt
HOK	MW	101000	202000	greenwt
HOK	SN	252	505	greenwt
HPB	BLL	1262	2525	greenwt
HPB	BT	1908	3817	greenwt
HPB	DL	1565	3131	greenwt
HPB	DS	125	250	greenwt
HPB	HL	750	1500	greenwt
HPB	MW	606	1212	greenwt
HPB	RLP	50	100	greenwt
HPB	SN	1012	2024	greenwt
HPB	TL	687	1374	greenwt
HSI	BT	500	1000	greenwt
JAV	BT	6565	13130	greenwt
JAV	MW	5050	10100	greenwt
JDO	BLL	75	151	greenwt
JDO	BPT	159	318	greenwt
JDO	BS	50	100	greenwt
JDO	BT	555	1111	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
JDO	DS	2020	4040	greenwt
JDO	SN	212	424	greenwt
JGU	BLL	75	151	greenwt
JGU	BT	2020	4040	greenwt
JGU	DL	250	500	greenwt
JMA	BLL	343	686	greenwt
JMA	BPT	1250	2500	greenwt
JMA	BS	50	100	greenwt
JMA	BT	28027	56055	greenwt
JMA	MW	25250	50500	greenwt
JMA	PS	121200	242400	greenwt
JMA	SN	249	498	greenwt
KAH	BLL	505	1010	greenwt
KAH	BPT	1704	3409	greenwt
KAH	BS	505	1010	greenwt
KAH	BT	9090	18180	greenwt
KAH	DN	318	636	greenwt
KAH	DS	500	1000	greenwt
KAH	PS	45450	90900	greenwt
KAH	RN	1010	2020	greenwt
KAH	SN	1414	2828	greenwt
KAH	T	278	556	greenwt
KBB	H	7322	14645	greenwt
KBL	H	1565	3131	greenwt
KEL	SN	50	100	greenwt
KIN	BLL	454	909	greenwt
KIN	BPT	500	1000	greenwt
KIN	BS	227	454	greenwt
KIN	BT	454	909	greenwt
KIN	DL	454	909	greenwt
KIN	DS	75	151	greenwt
KIN	PS	3750	7500	greenwt
KIN	SN	757	1515	greenwt
KIN	T	125	250	greenwt
KOH	SN	50	100	greenwt
KOI	FN	48	96	greenwt
KOI	SN	224	448	greenwt
KTA	BLL	454	909	greenwt
KTA	TL	116	232	greenwt
LCH	BT	500	1000	greenwt
LDO	BT	2020	4040	greenwt
LDO	MW	1010	2020	greenwt
LEA	BPT	500	1000	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
LEA	BT	6565	13130	greenwt
LEA	CP	101	202	greenwt
LEA	DS	151	303	greenwt
LEA	RLP	25	51	greenwt
LES	H	106	212	greenwt
LFE	EP	191	383	greenwt
LFE	FN	688	1377	greenwt
LFE	FP	505	1010	greenwt
LIN	BLL	7575	15150	greenwt
LIN	BT	34592	69185	greenwt
LIN	CP	568	1136	greenwt
LIN	DL	757	1515	greenwt
LIN	MW	5858	11716	greenwt
LIN	RLP	146	292	greenwt
LIN	SN	2727	5454	greenwt
LIN	TL	750	1500	greenwt
LSO	BT	2215	4430	greenwt
LSO	SN	106	212	greenwt
MAK	BLL	500	1000	greenwt
MAK	BT	1000	2000	greenwt
MAK	MW	500	1000	greenwt
MDO	BT	454	909	greenwt
MIQ	BT	500	1000	greenwt
MIQ	MW	500	1000	greenwt
MOK	BT	1212	2424	greenwt
MOK	MW	500	1000	greenwt
MOK	SN	2525	5050	greenwt
MOO	MW	500	1000	greenwt
MOO	SLL	252	505	greenwt
MOY	BLL	500	1000	greenwt
MSG	D	5050	10100	greenwt
MUS	D	5000	10000	greenwt
NOT	BLL	936	1872	greenwt
NSD	BLL	1111	2222	greenwt
NSD	SN	3131	6262	greenwt
NTU	BLL	10	10	count
NTU	DL	10	10	count
NTU	HL	10	10	count
NTU	PL	10	10	count
NTU	SLL	10	10	count
NTU	T	10	10	count
NTU	TL	10	10	count
OAR	MW	1181	2363	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
OCT	BLL	30	61	greenwt
OCT	BT	1010	2020	greenwt
OCT	CP	116	232	greenwt
OCT	D	106	212	greenwt
OCT	FP	75	151	greenwt
OCT	RLP	404	808	greenwt
OCT	SN	40	80	greenwt
OEO	BT	40400	80800	greenwt
OFH	BLL	556	1111	greenwt
OFH	BT	500	1000	greenwt
ONG	BT	1250	2500	greenwt
OPE	BT	5050	10100	greenwt
ORH	BT	40400	80800	greenwt
OSD	BLL	1512	3025	greenwt
OSD	BT	7575	15150	greenwt
OSD	CP	125	250	greenwt
OSD	DL	250	500	greenwt
OSD	MW	7575	15150	greenwt
OSD	RLP	107	214	greenwt
OSD	SLL	1000	2000	greenwt
OSD	SN	1161	2323	greenwt
OYS	D	404	808	greenwt
OYU	D	44541	89082	count
PAD	BT	1263	2525	greenwt
PAD	CP	191	383	greenwt
PAD	FP	505	1010	greenwt
PAD	RLP	50	100	greenwt
PAD	RN	164	328	greenwt
PAD	SN	378	757	greenwt
PAH	MW	500	1000	greenwt
PAR	BS	303	606	greenwt
PAR	RN	196	393	greenwt
PAR	SN	505	1010	greenwt
PAU	D	1250	2500	greenwt
PAU	DI	2032	4065	greenwt
PAU	FP	125	250	greenwt
PAU	H	555	1111	greenwt
PHC	RLP	479	959	greenwt
PIG	BT	500	1000	greenwt
PIL	PS	8080	16160	greenwt
PIL	SN	50	101	greenwt
PMA	BLL	257	515	greenwt
PMA	SN	151	303	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
POR	BLL	101	202	greenwt
POR	BT	90	181	greenwt
POR	SN	505	1010	greenwt
POS	MW	1262	2525	greenwt
PPI	H	101	202	greenwt
PTO	BLL	1281	2563	greenwt
QSC	BT	3750	7500	meatwt
QSC	D	1712	3424	meatwt
RAG	MW	500	1000	greenwt
RAT	BLL	921	1842	greenwt
RAT	BT	9090	18180	greenwt
RAT	MW	4545	9090	greenwt
RBM	BLL	134	269	greenwt
RBM	BT	2020	4040	greenwt
RBM	MW	5050	10100	greenwt
RBM	T	125	250	greenwt
RBT	BT	1250	2500	greenwt
RBT	MW	25250	50500	greenwt
RBY	BLL	30	60	greenwt
RBY	BT	12625	25250	greenwt
RBY	MW	15150	30300	greenwt
RCO	BLL	1109	2218	greenwt
RCO	BT	22220	44440	greenwt
RCO	CP	166	333	greenwt
RCO	DL	151	303	greenwt
RCO	MW	12120	24240	greenwt
RCO	RLP	101	202	greenwt
RCO	SN	202	404	greenwt
RCO	T	1010	2020	greenwt
RDO	MW	3750	7500	greenwt
RIB	BLL	4040	8080	greenwt
RIB	BT	1515	3030	greenwt
RIB	DL	250	500	greenwt
RIB	MW	2525	5050	greenwt
RIB	SN	136	272	greenwt
RMO	RLP	50	100	greenwt
RPE	BLL	61	121	greenwt
RRC	BLL	151	303	greenwt
RRC	SN	149	299	greenwt
RSK	BLL	1464	2929	greenwt
RSK	BT	1262	2525	greenwt
RSK	SN	101	202	greenwt
RSN	BLL	399	798	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
RSN	BT	6565	13130	greenwt
RSN	DL	250	500	greenwt
RSN	SN	292	585	greenwt
RSN	TL	50	100	greenwt
RUD	BT	500	1000	greenwt
RUD	MW	1515	3030	greenwt
RUD	SLL	20	40	greenwt
SBO	BLL	500	1000	greenwt
SBO	BT	1515	3030	greenwt
SBW	BT	6333	12667	greenwt
SBW	MW	108575	217150	greenwt
SCA	D	8000	16000	meatwt
SCH	BLL	2777	5555	greenwt
SCH	BPT	665	1329	greenwt
SCH	BT	2525	5050	greenwt
SCH	DL	938	1876	greenwt
SCH	HL	250	500	greenwt
SCH	MW	364	729	greenwt
SCH	SN	5807	11615	greenwt
SCH	TL	353	707	greenwt
SCI	BT	877	1754	greenwt
SCO	BLL	500	1000	greenwt
SDO	BLL	500	1000	greenwt
SDO	BT	2525	5050	greenwt
SDO	MW	1515	3030	greenwt
SFE	EP	191	383	greenwt
SFE	FN	1530	3059	greenwt
SFE	FP	404	808	greenwt
SFE	SN	278	556	greenwt
SFI	SN	101	202	greenwt
SFL	BT	1010	2020	greenwt
SFL	D	202	404	greenwt
SFL	DS	859	1717	greenwt
SFL	SN	179	359	greenwt
SHF	SLL	50	100	greenwt
SHF	SN	250	500	greenwt
SKA	BLL	1431	2863	greenwt
SKA	BT	909	1818	greenwt
SKA	DL	250	500	greenwt
SKA	MW	500	1000	greenwt
SKA	RN	250	500	greenwt
SKA	SN	101	202	greenwt
SKI	BLL	376	752	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
SKI	BT	6060	12120	greenwt
SKI	DL	75	151	greenwt
SKI	MW	3030	6060	greenwt
SKI	SN	2020	4040	greenwt
SKJ	PL	500	1000	greenwt
SKJ	PS	73225	146450	greenwt
SKJ	SN	50	100	greenwt
SKJ	T	960	1919	greenwt
SLK	BT	5000	10000	greenwt
SNA	BLL	984	1969	greenwt
SNA	BPT	7575	15150	greenwt
SNA	BS	353	707	greenwt
SNA	BT	6060	12120	greenwt
SNA	DS	4040	8080	greenwt
SNA	HL	176	353	greenwt
SNA	RN	40	81	greenwt
SNA	SLL	125	250	greenwt
SNA	SN	1010	2020	greenwt
SND	BLL	1364	2727	greenwt
SND	BT	2525	5050	greenwt
SNI	MW	12500	25000	greenwt
SOL	BT	500	1000	greenwt
SOL	SN	61	121	greenwt
SOR	BT	3484	6969	greenwt
SPD	BLL	7139	14279	greenwt
SPD	BT	25250	50500	greenwt
SPD	CP	125	250	greenwt
SPD	DL	253	505	greenwt
SPD	MW	10100	20200	greenwt
SPD	RLP	125	250	greenwt
SPD	SN	3817	7635	greenwt
SPE	BLL	1010	2020	greenwt
SPE	BT	3393	6787	greenwt
SPE	CP	39	79	greenwt
SPE	DL	50	101	greenwt
SPE	HL	250	500	greenwt
SPE	MW	500	1000	greenwt
SPE	RLP	30	60	greenwt
SPE	SN	176	353	greenwt
SPI	BT	500	1000	greenwt
SPO	BLL	106	212	greenwt
SPO	BPT	500	1000	greenwt
SPO	BT	954	1908	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
SPO	DS	151	303	greenwt
SPO	MW	1250	2500	greenwt
SPO	RN	404	808	greenwt
SPO	SN	3535	7070	greenwt
SPZ	BT	404	808	greenwt
SPZ	DS	250	500	greenwt
SPZ	SN	30	60	greenwt
SQU	BT	22725	45450	greenwt
SQU	MW	25250	50500	greenwt
SSH	BT	500	1000	greenwt
SSI	BT	606	1212	greenwt
SSK	BLL	1844	3688	greenwt
SSK	BT	2525	5050	greenwt
SSK	MW	500	1000	greenwt
SSK	SN	187	375	greenwt
SSO	BT	42925	85850	greenwt
SSP	BT	500	1000	greenwt
STA	BT	2868	5736	greenwt
STA	MW	750	1500	greenwt
STA	SN	757	1515	greenwt
STN	BLL	10	10	count
STN	DL	10	10	count
STN	HL	10	10	count
STN	PL	10	10	count
STN	SLL	10	10	count
STN	T	10	10	count
STN	TL	10	10	count
STR	SN	125	250	greenwt
STU	MW	1250	2500	greenwt
SUR	BT	500	1000	greenwt
SUR	D	409	818	greenwt
SUR	DI	2525	5050	greenwt
SUR	H	1818	3636	greenwt
SUR	SN	50	100	greenwt
SWA	BLL	500	1000	greenwt
SWA	BT	32825	65650	greenwt
SWA	MW	22725	45450	greenwt
SWA	SN	395	791	greenwt
SWO	BLL	10	10	count
SWO	DL	10	10	count
SWO	HL	10	10	count
SWO	MW	500	1000	greenwt
SWO	PL	10	10	count

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
SWO	SLL	11	11	count
SWO	T	10	10	count
SWO	TL	10	10	count
SYN	BLL	500	1000	greenwt
TAR	BLL	1010	2020	greenwt
TAR	BPT	1250	2500	greenwt
TAR	BT	8232	16463	greenwt
TAR	CP	125	250	greenwt
TAR	DL	260	520	greenwt
TAR	DS	1768	3535	greenwt
TAR	MW	1000	2000	greenwt
TAR	RLP	250	500	greenwt
TAR	SN	1262	2525	greenwt
THR	BT	500	1000	greenwt
THR	MW	500	1000	greenwt
TOA	BLL	12500	25000	greenwt
TRE	BLL	267	535	greenwt
TRE	BPT	6818	13635	greenwt
TRE	BS	1010	2020	greenwt
TRE	BT	10100	20200	greenwt
TRE	DS	657	1313	greenwt
TRE	HL	250	500	greenwt
TRE	PS	50000	100000	greenwt
TRE	RN	181	363	greenwt
TRE	SN	909	1818	greenwt
TRU	BLL	757	1515	greenwt
TRU	BT	141	283	greenwt
TRU	CP	101	202	greenwt
TRU	DL	500	1000	greenwt
TRU	RLP	252	505	greenwt
TRU	SN	656	1313	greenwt
TUA	D	585	1171	greenwt
TUR	BT	227	454	greenwt
VCO	BLL	500	1000	greenwt
WAR	BT	25250	50500	greenwt
WAR	MW	25250	50500	greenwt
WAR	SN	2777	5555	greenwt
WHE	BT	500	1000	greenwt
WIT	BT	500	1000	greenwt
WOE	BT	1250	2500	greenwt
WSE	CP	101	202	greenwt
WSE	RLP	50	101	greenwt
WSE	SN	125	250	greenwt

species code	method code	Proc C check if catch value is greater than or equal to this number	Proc A check if catch value is greater than or equal to this number	units of measure
WSQ	BT	505	1010	greenwt
WSQ	MW	101	202	greenwt
WWA	BT	29795	59590	greenwt
WWA	MW	2171	4343	greenwt
WWA	SN	1111	2222	greenwt
YBF	BS	50	100	greenwt
YBF	BT	257	515	greenwt
YBF	SN	252	505	greenwt
YEM	BS	707	1414	greenwt
YEM	DN	202	404	greenwt
YEM	SN	286	573	greenwt
YFN	BLL	11	11	count
YFN	DL	11	11	count
YFN	HL	11	11	count
YFN	PL	11	11	count
YFN	SLL	15	15	count
YFN	T	11	11	count
YFN	TL	11	11	count
Any species/method combination not listed above		10000	100000	

Table 11: A table of valid product state codes

Code	Description	State Type	Start Date	End Date	Landed	Processed	Gazetted	Admin
ACC	Accidental Loss	PRI	Oct 1 1986	Dec 31 2999	N	Y	Y	N
BAG	Bags	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
BEA	Beak and mouth	ADD	Oct 1 1994	Dec 31 2999	Y	Y	Y	N
BKF	SBW Mince SKF	PRI	Jun 23 2000	Apr 1 2001	Y	Y	Y	N
BKS	SBW Mince SKF/TSK	ADD	Jun 23 2000	Dec 31 2999	Y	Y	Y	N
CAL	Calculated Greenweight	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
CHK	Cheeks	ADD	Oct 1 1994	Dec 31 2999	Y	Y	Y	N
DFT	de-fat fillets	PRI	Oct 1 2000	Jun 6 2067	Y	Y	Y	N
DIS	Discarded	PRI	Oct 1 1986	Dec 31 2999	N	Y	Y	N
DRE	Dressed	PRI	Oct 1 1990	Dec 31 2999	Y	Y	Y	N
DSC	Dressed - Straight Cut	PRI	Oct 1 1991	Dec 31 2999	Y	Y	Y	N
DVC	Dressed - Vcut	PRI	Oct 1 1991	Dec 31 2999	Y	Y	Y	N
EAT	Eaten	PRI	Oct 1 1990	Feb 1 1998	N	N	N	Y
FIL	Filleted	PRI	Oct 1 1986	Dec 31 2999	Y	Y	Y	N

FIN	Fins	PRI	Oct 1 1993	Dec 31 2999	Y	Y	Y	N
FIT	Fish Tails	ADD	Apr 5 2001	Dec 31 2999	Y	Y	Y	N
FLP	Flaps	ADD	Oct 1 1994	Dec 31 2999	Y	Y	Y	N
GBP	Gut by-product	ADD	Oct 1 1999	Dec 31 2999	Y	Y	Y	N
GGU	Gilled and Gutted	PRI	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
GRE	Green, wholefish	PRI	Jan 1 1901	Dec 31 2999	Y	Y	Y	N
GUT	Gutted	PRI	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
HDS	Heads	ADD	Oct 1 1994	Dec 31 2999	Y	Y	Y	N
HED	Heads	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
HET	Heads and Tentacles	ADD	Oct 1 1994	Dec 31 2999	Y	Y	Y	N
HGF	Headed, gutted and finned	PRI	Oct 1 1998	Dec 31 2999	Y	Y	Y	N
HGT	Headed, gutted and tailed	PRI	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
HGU	Headed and Gutted	PRI	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
HGV	Headed and Gutted V Cut	PRI	Jan 1 2001	Dec 31 2999	Y	N	N	N
LIB	Livers By-product	ADD	Apr 5 2001	Dec 31 2999	Y	Y	Y	N
LIV	Liver	PRI	Oct 1 1993	Dec 31 2999	Y	Y	Y	N
LUG	Lugs or collars	ADD	Oct 1 1994	Dec 31 2999	Y	Y	Y	N
MBH	Minced by-product, HGU	ADD	Apr 5 2001	Dec 31 2999	Y	Y	Y	N
MBS	Minced by-product, SKF	ADD	Apr 5 2001	Dec 31 2999	Y	Y	Y	N
MEA	Meal	PRI	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
MEB	Fish Meal By-product	ADD	Apr 5 2001	Dec 31 2999	Y	Y	Y	N
MGU	Minced, Headed and Gutted	PRI	Apr 5 2001	Dec 31 2999	Y	Y	Y	N
MIN	Mince	PRI	Oct 1 1994	Feb 1 1998	N	N	N	Y
MKF	Minced, Skin-off Fillets	PRI	Oct 7 1994	Dec 31 2999	Y	Y	Y	N
MTE	Meat	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
MWH	Used for Meal/Meal Wholeweight	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
NUM	Number of fish	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
OCT	Other Crustacea Tails	PRI	Oct 1 1994	Feb 1 1998	N	N	N	Y
ODD	Oddity/Error	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
OIL	Oil	ADD	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
OTH	Other	PRI	Jan 1 1970	Feb 1 1998	N	N	N	Y
RET	Whole or Part of specimen retained by a scientific observer	PRI	Jan 1 1999	Dec 31 2999	Y	Y	N	Y
RLT	Rock Lobster Tail	PRI	Apr 8 1989	Dec 31 2999	Y	Y	Y	N
ROE	Roe	ADD	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
SCT	Tailed (Scampi)	PRI	Oct 1 1992	Dec 31 2999	Y	Y	Y	N
SHF	Shark Fins	ADD	Apr 5 2001	Dec 31 2999	Y	Y	Y	N
SHU	Shucked or shelled	PRI	Apr 8 1989	Dec 31 2999	Y	Y	Y	N
SKF	Skin-off Fillets	PRI	Oct 1 1990	Dec 31 2999	Y	Y	Y	N

SUR	Surimi	PRI	Oct 1 1986	Dec 31 2999	Y	Y	Y	N
SWB	Sounds or swim bladders	ADD	Oct 1 1994	Dec 31 2999	Y	Y	Y	N
TEN	Tentacles	PRI	Oct 1 1990	Dec 31 2999	Y	Y	Y	N
TNB	Tentacles by-product	ADD	Jul 15 1999	Dec 31 2999	Y	Y	Y	N
TRF	Fillets:Skin-on Trimmed	PRI	Oct 1 1992	Dec 31 2999	Y	Y	Y	N
TRU	Trunked	PRI	Oct 1 1986	Feb 1 1998	N	N	N	Y
TSK	Fillets:Skin-off Trimmed	PRI	Sep 24 1993	Dec 31 2999	Y	Y	Y	N
USK	Fillets:Skin-off untrimmed	PRI	Oct 1 1993	Dec 31 2999	Y	Y	Y	N
UTF	Fillets:Skin-on untrimmed	PRI	Oct 1 1992	Dec 31 2999	Y	Y	Y	N
WIN	Wings	ADD	Oct 1 1991	Dec 31 2999	Y	Y	Y	N

Table 12: A table of valid container types

Container Type	Description	Minimum Weight	Maximum Weight
BAG	Bag	0.0	2000
BAS	Basket	0.0	1000
BIN	Bin	0.0	200000
BLO	Block	0.0	2000
BOX	Box	0.0	1000
CAG	Cage	0.0	20000
CAR	Carton	0.0	1000
FIS	Fish	0.0	50000
SAC	Sack	0.0	2000
STR	String	0.0	2000
TRA	Tray	0.0	200

Table 13: State codes for which greenweight is not required (additional state codes)

State code	State Description	State type	Start Date	End Date
BEA	Beak and mouth	ADD	Oct 1 1994	Dec 31 2999
BKS	SBW Mince SKF/TSK	ADD	Jun 23 2000	Dec 31 2999
CHK	Cheeks	ADD	Oct 1 1994	Dec 31 2999
FIT	Fish Tails	ADD	Apr 5 2001	Dec 31 2999
FLP	Flaps	ADD	Oct 1 1994	Dec 31 2999
GBP	Gut by-product	ADD	Oct 1 1999	Dec 31 2999
HDS	Heads	ADD	Oct 1 1994	Dec 31 2999
HET	Heads and Tentacles	ADD	Oct 1 1994	Dec 31 2999
LIB	Livers By-product	ADD	Apr 5 2001	Dec 31 2999
LUG	Lugs or collars	ADD	Oct 1 1994	Dec 31 2999
MBH	Minced by-product, HGU	ADD	Apr 5 2001	Dec 31 2999
MBS	Minced by-product, SKF	ADD	Apr 5 2001	Dec 31 2999
MEB	Fish Meal By-product	ADD	Apr 5 2001	Dec 31 2999
OIL	Oil	ADD	Oct 1 1986	Dec 31 2999
ROE	Roe	ADD	Oct 1 1986	Dec 31 2999
SHF	Shark Fins	ADD	Apr 5 2001	Dec 31 2999
SWB	Sounds or swim bladders	ADD	Oct 1 1994	Dec 31 2999
TNB	Tentacles by-product	ADD	Jul 15 1999	Dec 31 2999
WIN	Wings	ADD	Oct 1 1991	Dec 31 2999

Table 14: Allowed ranges of landed greenweights for species

species code	Proc C check if landing value is greater than or equal to this number	Proc A check if landing value is greater than or equal to this number	units of measure
AGR	2714	5429	green wt
ALB	12807	25615	green wt
ATO	192711	385423	green wt
BAR	265058	530116	green wt
BAS	9299	18599	green wt
BBE	5605	11211	green wt
BCD	15356	30713	green wt
BCO	3263	6526	green wt
BEE	833	1666	green wt
BEL	2692	5383	green wt
BEN	13659	27318	green wt
BFL	3383	6767	green wt
BIG	2119	4239	green wt
BMA	969	1937	green wt
BNS	24099	48198	green wt
BOA	6317	12635	green wt
BOE	349061	698122	green wt

species code	Proc C check if landing value is greater than or equal to this number	Proc A check if landing value is greater than or equal to this number	units of measure
BRC	303	607	green wt
BRI	3383	6767	green wt
BRZ	1002	2004	green wt
BSH	26164	52328	green wt
BSK	12150	24300	green wt
BSQ	424	848	green wt
BTU	2326	4652	green wt
BUT	1725	3450	green wt
BWH	695	1391	green wt
BWS	11862	23724	green wt
BYX	110623	221246	green wt
CAT	202	404	green wt
CDL	115399	230799	green wt
CHG	4366	8731	green wt
CMO	170	341	green wt
COC	4499	8998	green wt
CON	3694	7389	green wt
CRA	1007	2013	green wt
CRB	7388	14776	green wt
DEA	4242	8484	green wt
DWD	15442	30885	green wt
EEL	359	717	green wt
EEU	1398	2796	green wt
EGR	335	671	green wt
ELE	5878	11756	green wt
EMA	291196	582392	green wt
ESO	3383	6767	green wt
FHD	2921	5785	green wt
FLA	3383	6767	green wt
FLO	567	1135	green wt
FRO	132774	265549	green wt
GAR	253	505	green wt
GFL	3383	6767	green wt
GMU	1037	2074	green wt
GSE	1251	2502	green wt
GSH	25209	50419	green wt
GSP	22042	44084	green wt
GUR	10443	20886	green wt
HAG	524	1048	green wt
HAK	310150	620301	green wt
HAP	9299	18599	green wt
HHS	315	630	green wt
HOK	1086089	2172178	green wt

species code	Proc C check if landing value is greater than or equal to this number	Proc A check if landing value is greater than or equal to this number	units of measure
HPB	9299	18599	green wt
JAV	122169	244339	green wt
JDO	5483	10967	green wt
JGU	2559	5119	green wt
JMA	691266	1382533	green wt
KAH	79777	159555	green wt
KIN	1605	3211	green wt
KOH	11154	22309	green wt
KOI	106	212	green wt
KTA	1144	2288	green wt
LCH	1611	3223	green wt
LDO	12429	24859	green wt
LEA	26796	53592	green wt
LEP	357	714	green wt
LES	177	355	green wt
LFE	1398	2796	green wt
LIN	256121	512241	green wt
LSO	2839	5679	green wt
MAK	1784	3569	green wt
MDO	2296	4593	green wt
MIQ	2649	5299	green wt
MOK	3941	7882	green wt
MOO	2701	5403	green wt
MSG	4848	9697	green wt
MUS	4756	9513	green wt
NOT	3039	6079	green wt
NSD	3154	6309	green wt
NTU	286	572	green wt
OAR	5599	11198	green wt
OCT	6047	12095	green wt
OEO	476373	952746	green wt
OFH	3003	6006	green wt
ONG	12832	25664	green wt
OPE	10277	20555	green wt
ORH	442205	884410	green wt
OSD	24858	49716	green wt
OYS	569	1137	green wt
OYU	21958	43917	count
PAD	4898	9797	green wt
PAR	1758	3516	green wt
PAU	3035	6071	green wt
PHC	296	591	green wt
PIG	909	1818	green wt

species code	Proc C check if landing value is greater than or equal to this number	Proc A check if landing value is greater than or equal to this number	units of measure
PIL	9959	19918	green wt
PIP	101	202	green wt
PMA	1357	2714	green wt
POP	253	505	green wt
POR	688	1377	green wt
POS	8520	17040	green wt
PPI	537	1074	green wt
QSC	5345	10691	meat wt
RAG	1018	2036	green wt
RAT	136422	272845	green wt
RBM	28000	55999	green wt
RBT	117503	235006	green wt
RBY	35757	71514	green wt
RCO	165383	330766	green wt
RDO	20446	40892	green wt
RHY	5631	11262	green wt
RIB	58041	116082	green wt
RMO	40	81	green wt
RPE	154	309	green wt
RRC	336	672	green wt
RSK	4470	8941	green wt
RSN	3332	6664	green wt
RUD	5090	10180	green wt
SAM	106	106	green wt
SBK	169	169	green wt
SBO	14453	28906	green wt
SBW	1229755	2459511	green wt
SCA	12348	24696	meat wt
SCH	10549	21099	green wt
SCI	14933	29866	green wt
SCO	105	210	green wt
SDO	17732	35463	green wt
SEV	121	242	green wt
SFE	1398	2796	green wt
SFL	3383	6767	green wt
SFN	171	342	green wt
SHA	10605	21210	green wt
SHF	2022	4045	green wt
SKA	6608	13217	green wt
SKI	32475	64951	green wt
SKJ	150607	301213	green wt
SLK	4197	8393	green wt
SNA	12891	25782	green wt

species code	Proc C check if landing value is greater than or equal to this number	Proc A check if landing value is greater than or equal to this number	units of measure
SND	23404	46808	green wt
SNI	204	409	green wt
SOL	3383	6767	green wt
SOR	349061	698122	green wt
SPD	102573	205146	green wt
SPE	20349	40698	green wt
SPO	5157	10315	green wt
SPZ	850	1700	green wt
SQU	532090	1064181	green wt
SSH	6534	13069	green wt
SSI	4565	9130	green wt
SSK	15544	31088	green wt
SSO	349061	698122	green wt
STA	10449	20898	green wt
STN	25158	50316	green wt
STR	881	1762	green wt
STU	11368	22737	green wt
SUN	1737	3474	green wt
SUR	4641	9282	green wt
SWA	181582	363164	green wt
SWO	6208	12416	green wt
TAR	14170	28340	green wt
THR	1545	3090	green wt
TOA	1044	2088	green wt
TRE	43193	86387	green wt
TRU	2526	5052	green wt
TUA	707	1414	green wt
TUR	3383	6767	green wt
WAR	214986	429973	green wt
WHE	3803	7605	green wt
WIT	678	1357	green wt
WOE	3964	7928	green wt
WSE	113	226	green wt
WSQ	2649	5299	green wt
WWA	151348	302697	green wt
YBF	3383	6767	green wt
YEM	729	1459	green wt
YFN	571	1142	green wt
All other species	10000	100000	

Table 15: Details of comparison between calculated weight and number of units calculation

15a) Minimum Greenweight to generate the error:

Green Weight
20,000

15b) Species that need calculated weight adjusted by a conversion factor and their respective State Codes:

Species Code	State Code
SCA	SHU

15c) Percentage tolerances for different values of the calculated weight

Minimum Calculated Weight	Maximum Calculated Weight	Tolerance %
0	50	50
50.001	100	50
100.001	1,000,000,000	50

15d) Absolute tolerance for absolute difference:

Tolerance
200

Table 16: Range of possible values for lengths and durations of tows on a TCEPR

Specification	Min	Max
Tow duration	0	20 hours
Displacement from start to end position	0	70 n.mile
Displacement from end of last effort to start of effort	0	140 n.mile
Distance towed (speed times time)	0	80 n.mile

Table 17: Details of comparison between processed weight and number of units calculation (Difference tolerance for processed weight range)

Minimum Processed Weight	Maximum Processed Weight	Tolerance %
0	50	20
50.001	100	10
100.001	99999999	5

Table 18: Details of comparison between calculated weight and processed weight times conversion factor calculation

Minimum Calculated Weight	Maximum Calculated Weight	Tolerance %
0	50	99
50.001	100	50
100.001	500	25
500.001	99999999	10

Table 19: Valid ranges for displacements and durations on a TLCER

Time	Minimum	Maximum
Hauling time (hours)	1	48
Setting time (hours)	0	10
Soaking time (hours)	0	48
Total time (hours)	4	50
Displacement from last set end position (within the same day) to set start position (n. mile)	0	140
Displacement from start to end position (n.mile)	0	100

Table 20: Valid ranges for processed catch weights and numbers of fish on a TLCER

Species_code	Processed catch weight		Number of fish	
	Maximum likely (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)	**Maximum likely** (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)
ALB	2600	5200	300	600
BIG	556	1111	13	26
BTU	220	440	7	14
BWS	1600	4500	150	400
DEA	300	600	150	300
DOF	500	1500	50	80
LEP	150	900	10	50
MAK	550	1500	11	25
MOO	500	1600	30	60
TOR	600	1200	10	30
OFH	1010	2020	30	70

Species_code	Processed catch weight		Number of fish	
	Maximum likely (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)	**Maximum likely** (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)
POS	700	1400	30	60
RBM	200	400	220	440
RUD	100	300	10	30
SCH	80	160	8	16
OSD	500	1000	55	110
SKJ	150	300	20	60
STN	2000	4000	35	60
STU	100	200	12	24
SUN	800	1600	11	22
SWO	1200	2222	17	35
THR	300	600	5	10
YFN	405	810	15	60
All other species	200	1000	50	150

Table 21: Valid ranges for catch weights on a SJCER

Species_code	**Maximum likely** (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)	**units of measure**
SQU	21000	42000	greenwt
SQX	7500	15000	greenwt
All other species	350	700	greenwt

Table 22 Valid ranges for greenweights and numbers of discarded fish on a TLCER (2002 version)

Species_code	Greenweight		Number of fish	
	Maximum likely (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)	**Maximum likely** (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)
ALB	2990	5980	300	600
BIG	640	1280	13	26
BTU	250	500	7	14

Species_code	Greenweight		Number of fish	
	Maximum likely (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)	**Maximum likely** (Proc C check if catch value is greater than or equal to this number)	**Maximum** (Proc A check if catch value is greater than or equal to this number)
BWS	1840	5175	150	400
DEA	345	5000	150	500
GSE	125	5000	13	500
LEP	170	5000	10	500
MAK	630	5000	11	500
MOO	575	5000	30	500
TOR	400	5000	4	500
OFH	1160	5000	30	500
POS	805	5000	30	500
RBM	230	5000	220	500
RUD	115	5000	10	500
SCH	90	5000	8	500
SHA	575	5000	55	500
SKJ	170	5000	20	500
STM	2010	5000	20	500
STN	2300	5000	35	500
STU	115	5000	12	500
SUN	920	5000	11	500
SWO	1380	5000	17	500
THR	345	5000	5	500
YFN	465	5000	15	500
BSH	5000	5000	500	500
BKM	5000	5000	500	500
BEM	5000	5000	500	500
BWH	5000	5000	500	500
SAI	5000	5000	500	500
SSF	5000	5000	500	500
BSP	5000	5000	500	500
DOF	5000	5000	500	500
All other species	230	5000	50	500