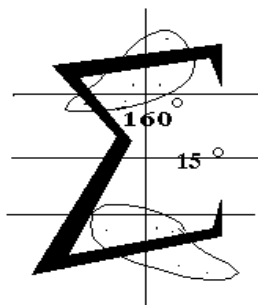


# **COOK ISLANDS STATISTICS OFFICE**



## **Household Income and Expenditure Survey Data Entry Application Reference Guide**

November 20, 2015

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## Installing CPro 6.1

First, we should obtain a copy of CPro 6.1 by going to web link.

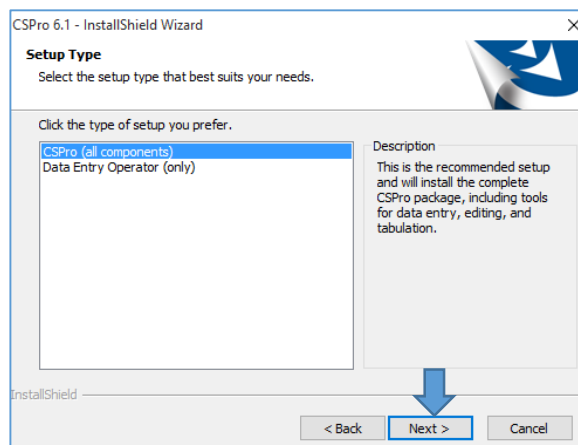
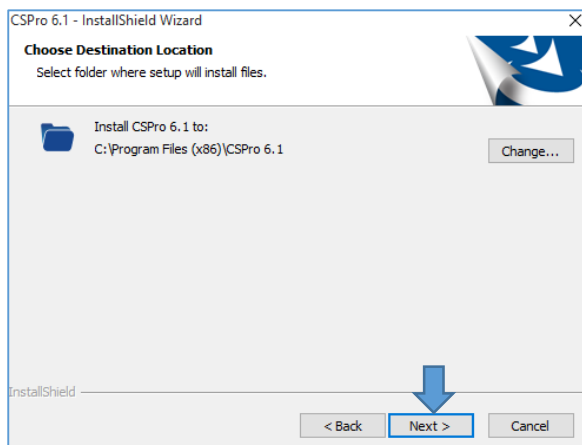
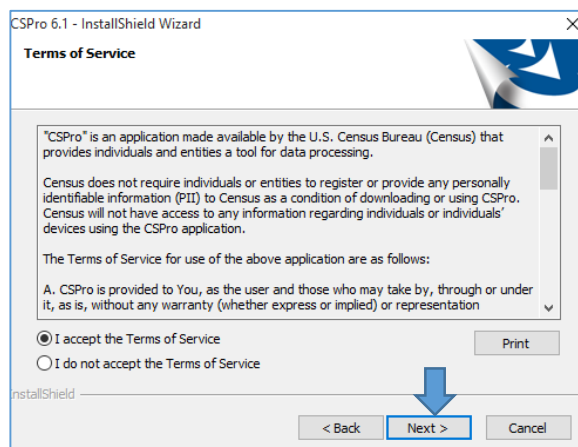
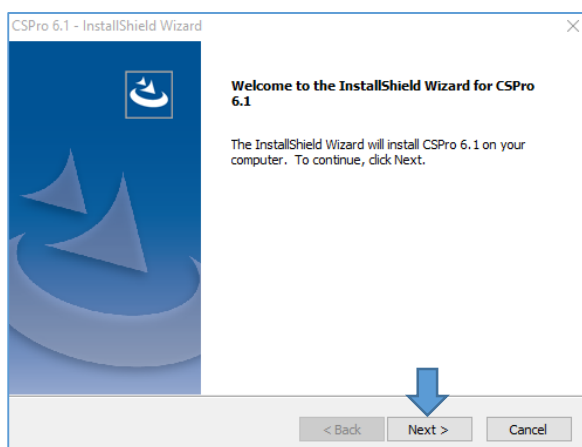


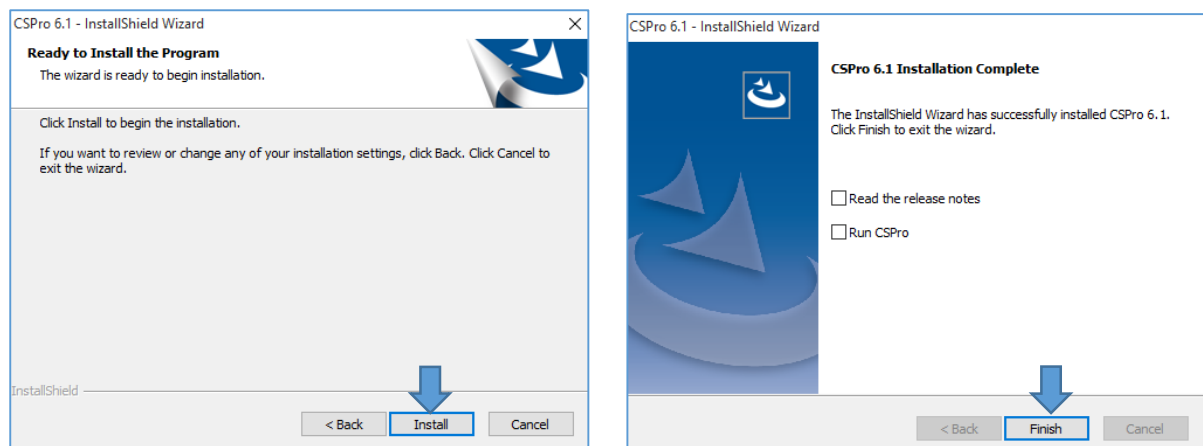
<http://www.census.gov/population/international/software/cspro/>

On this webpage there should be a link that says “Download CPro.” After downloading the file locate the newly downloaded file and open the file to start the installation procedures. The downloaded program icon should look like the icon displayed to the left of this paragraph.

CPro can run only on PC running these Operating Systems, Windows XP, Windows Vista, Windows 7, Windows 8, Windows 8.1, and Windows 10.

After initiating the installation procedure the follow the windows below –





After clicking the “Install” button, a series of install prompts will flash and an installation folder window may show. Just close this window and your computer is now ready for the installation of the HIES program.

## Installing the HIES Application

The installation procedures are straightforward but depends if the install folder is compressed or not. We are going to assume that the file you have received from SPC is compressed and first thing that we need to do is to decompress the folder.

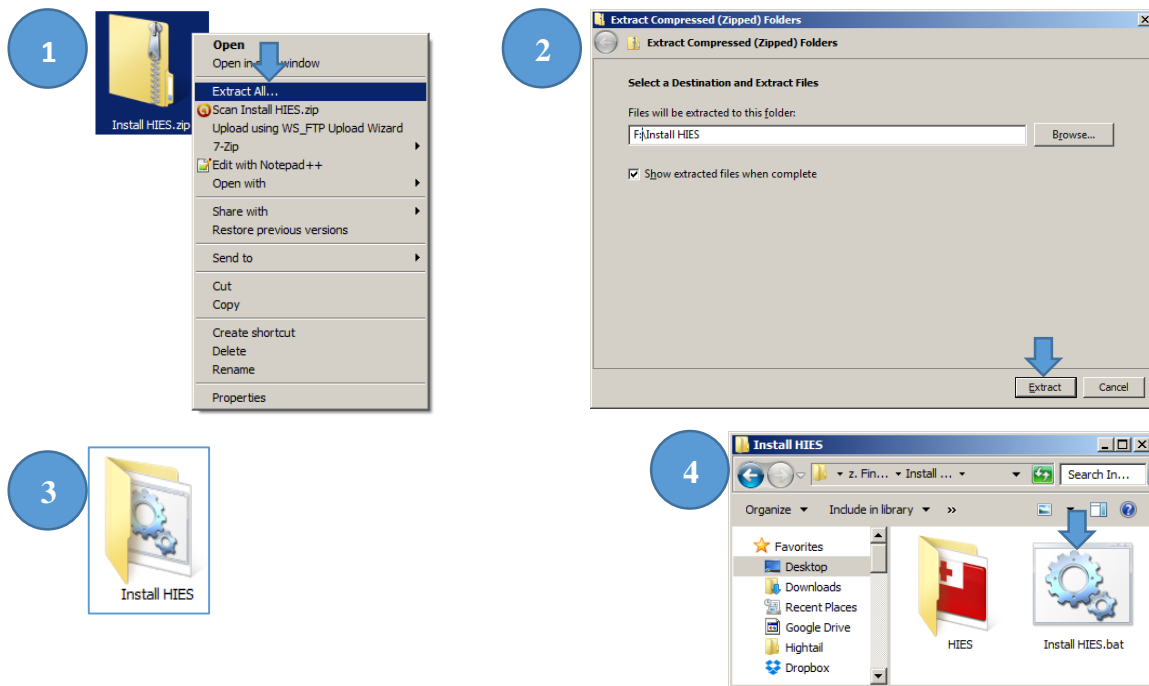
[1] Locate the file the HIES installation file called “Install HIES.zip” this can be located by a picture that looks like a folder with a zipper. If your “Install HIES” icon has a picture of a folder and zipper that means that your file is compressed and we will need to decompress the folder to properly install the HIES program into your computer. If your folder does not have a zipper image on it, it means the folder is already decompressed and should look like the icon shown on step three. If this is the case, go to step three.

Continuing, right click over the compressed folder then there should be a new pop-up menu that will appear. Take your mouse and navigate to the “Extract All...” option then left click to open a new window shown in step two.

[2] In this new window, “Extract Compressed (Zipped) Folders”, just click on the “Extract” button. You do not have to worry about the location. By default, the extraction location is in the same folder as the “Install HIES.zip” file.

[3] After the extraction process, a new folder should appear in your current working folder having the same name “Install HIES.” However, this time this new folder icon does NOT have a zipper and it is now an official Windows folder. Opening this folder will contain one (1) file and one (1) folder, illustrated in step

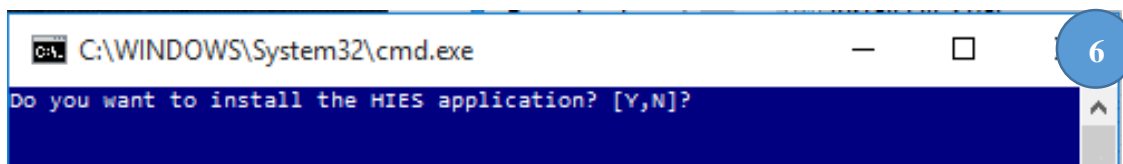
[4] The folder that you have just extracted should contain one folder called “HIES” and one file called “Install HIES.bat”. Double click (open) the “Install HIES.bat” file to install the HIES program.



[5] Double clicking on the “Install HIES.bat” file will start the installation program. After you close all CSPro applications press the enter key at the prompt.



[6] The program will ask if you want to install the HIES application. Press the letter “y” on your key board to continue. Pressing “n” will abort the installation.



[7] If the HIES program was previously installed, you will get the message below – “The HIES program is already installed. Do you want to re-install the HIES program? Your data files will be saved but, any program updates will have to be downloaded again.” To reinstall is almost like a factory reboot restoring all the files to its original settings. This means that you will need to download any updates

from the server. Do worry this process will not delete or overwrite any of the files that you have entered into your computer.

```
Do you want to install the HIES application? [Y,N]?Y
The HIES program is already installed.
Do you want to re-install the HIES Program?
Your datafiles will be saved but, any program updates will have to be
downloaded again.
-
Do you want to re-install? [Y,N]?
```

7

[8] The "new install" and "re-install" prompts will show a window similar to the one below.

```
All good!
Happy Keying!
Press any key to continue . . .
```

8

## Using the HIES Data Management System

[1] After installing the HIES application there will be a new icon on your desktop called "Tonga HIES" and will have an icon like that of your national flag. Double clicking (open) the "Tonga HIES" shortcut will open the "2015-16 Tonga HIES Interface." The image below show the how the screen will look like one you open the program.

**2015 - 2016 Cook Islands HIES version 1.3**

Status:

Data File Exists!  
Location: ..\data  
\01\_01\_01\01\_01\_01\_99999.dat

Number of Cases: 1  
Number of Partial Cases: 1  
Number of Verified Cases: 0

Interface identification 1

Island Number 01  
Rarotonga

Team Number 01\_01  
Team 1.1

Block Number 01\_01\_01  
01Rarotonga\_01Team\_01Round

Household Sequence Number 99999

Password (delete / restore)

Datafiles in the Block:

01Rarotonga_01Team_01Round	"..\data\01_01_01"
----------------------------	--------------------

If the installation is a new or re-installation, the version number will always be between 1.1 and 1.9. Always insure that you are using the latest version by checking for updates discussed later in this document. The HIES interface window is similar to any Windows application and contains the same options such as top-right buttons - minimize, maximize and close window. We will go over the different parts of the interface window in different parts of this document.

## Selecting the Household Sequence Number / HIES Household ID

[2] The HIES interface is preloaded with all the sample households but need a way to display only relevant households to the user. It can do this by filtering Household Sequence Numbers that are island, team and block specific. So let us pick the “Island number” first. In our example, we will choose “01 Rarotonga.”

[3] Once we select correct Island Number, the computer will display the team number. Select the appropriate team number. In our example, we selected “01\_01 Team.1.1.”

[4] The interface will now display all the block numbers that are associated with team “01\_11 Team.1.1.” Again in our example we will pick “01\_01\_01 01Rarotonga\_01Team\_01Round.”

[5] After selecting the correct Block Number, the interface will then show all the “HIES HOUSEHOLD IDs” associated with the round. All we have to do is find the household ID on the form and match it to the one in the interface.

Note: The “HIES household ID” shown in the questionnaire is the same as the “Household Sequence Number.”

The Household Sequence Number is probably the most important number in the cover form. The Household Sequence Number is used to link all the data together. If you cannot find the household number double check that you selected the correct “Island Number” the correct “Team Number”

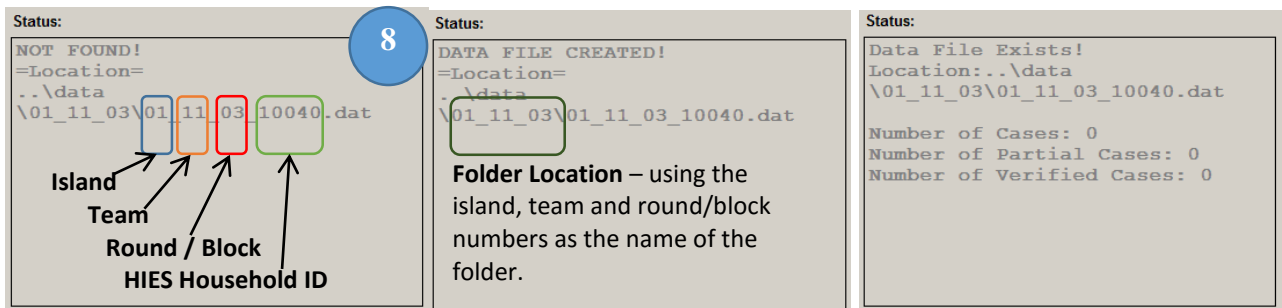
The screenshot shows a multi-step interface for selecting household information. It is divided into four numbered sections:

- Section 2 (Island Number):** A list of islands: 01 Rarotonga, 02 Atutaki, 03 Mangaia, 04 Atiu, 09 Pukapuka, and 11 Manihiki.
- Section 3 (Team):** A list of teams: 01\_01 Team.1.1 and 01\_02 Team.1.2.
- Section 4 (Block Number):** A list of block numbers: 01\_01\_01 01Rarotonga\_01Team\_01Round, 01\_01\_02 01Rarotonga\_01Team\_02Round, 01\_01\_03 01Rarotonga\_01Team\_03Round, and 01\_01\_04 01Rarotonga\_01Team\_04Round.
- Section 6:** A list of household IDs: 99999 (TEST) 01Rarotonga\_01Team\_01Round :{99999}, 1001 01Rarotonga\_01Team\_01Round :{01001}, 1002 01Rarotonga\_01Team\_01Round :{01002}, 1003 01Rarotonga\_01Team\_01Round :{01003}, 1004 01Rarotonga\_01Team\_01Round :{01004}, and 1005 01Rarotonga\_01Team\_01Round :{01005}.
- Section 7:** A confirmation dialog asking "Would you like to create the data file, [01\_11\_03\_10040.dat]?" with "Yes" and "No" options and a "Yes" button.

and the correct “Block Number” if you continue to have the wrong sequence number, please contact the HIES staging office.

[7] After you select the correct “Household Sequence Number,” the interface will ask you – “Would you like to create the data file ...?” If you think, you may have already entered the data file but the interface is asking to create the data file, it is best to confirm that you have entered the correct Island, Team and Block number. Do not make mistakes in assigning Household Sequence Numbers. Once a sequence number is assigned, and you later realize later that the sequence number you assigned to a data file was a mistake, you will need to recreate a new data file with the proper data file name and re-enter all the information. You will also need to delete any old or conflicting data. Deleting will be discussed later in this guidebook.

[8] The structure of the data file goes like this – the first set of numbers “01” represents the island so, in our case this is Rarotonga. The second set, “11” represent the team and again in our case “11” represents Team 1.1. The third set of numbers “03” represent the round which is tagged to a particular block number so, “03” is the third round of Rarotonga Island, which is assigned to Team 1.1. The last five numbers “10040” is the HIES household ID. Looking at illustration 8 shows the naming structure of the data file. It is important to know this structure just in case there is a need to

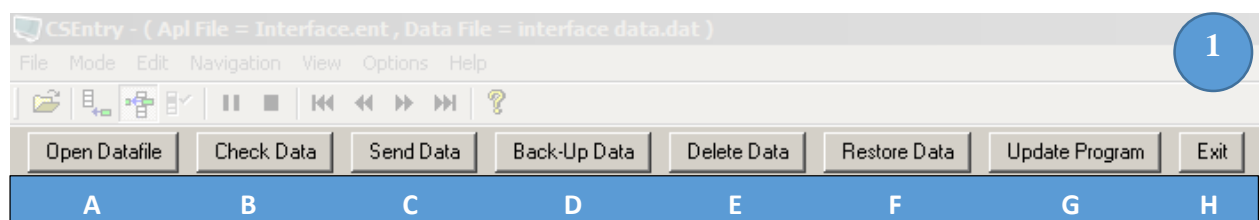


manually locate data in your computer.

Referring again to illustration 8, shows three different screen shots of status messages. These messages are invoked depending if the interface can find the data file. The first status message is displayed when the HIES household ID selected, cannot be located or it is the first time that the interface is asked to locate the HIES household ID. The second status message is displayed after you are prompted and agreed to create a new data file as illustrated in illustration 7 above. The third status message is displayed after selecting a HIES household ID / Household Sequence Number and the data file has already been created. A number of zero (0) displayed beside the “Number of cases:” means that a file associated with the selected HIES household ID exists but no data has been entered. A value of one (1) shown on this line means that the data exists in the data file.

## Exploring the Toolbar

Although the menu and tool bars seem a bit confusing we have made a special tool bar with some



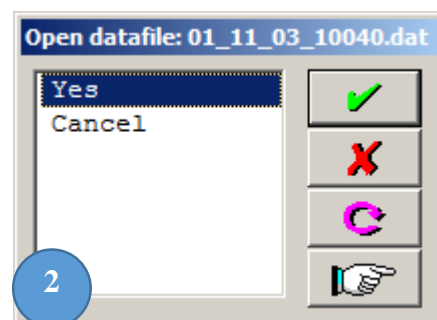
shortcut buttons to make managing HIES data easier for you.

### [1A] Adding Data to the Data File

After selecting a HIES household ID from the interface’s menu the buttons above will be active. The first button is the “Open Datafile” clicking this button will allow us to open the HIES entry system.



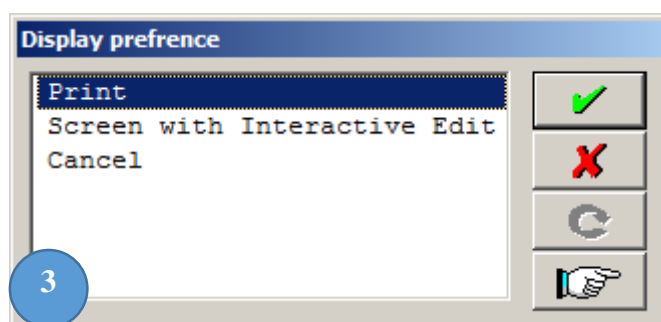
[2] Confirm your selection again by selecting “Yes” and clicking on the green check mark. After confirming that you want to open the data file a new window will open showing the HIES data entry application. We will discuss more on the HIES data entry application in a different part of this document. If you want to know more about entering HIES data go the section heading “Entering HIES data,” later in this document. For now, we will explore the different buttons and actions in the tool bar.



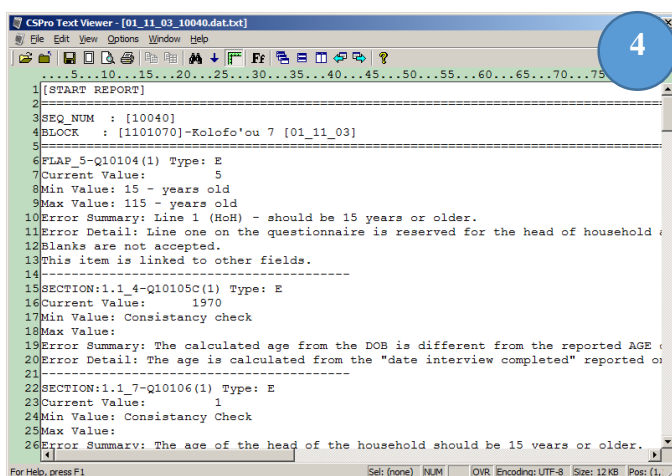
#### [1B] Checking the Data File

After you have entered HIES data you might want to double check if the data has any faults that was keyed either by the operator, recorded by the enumerator or communicated by the interviewee. To do this we click on the button “Check Data.”

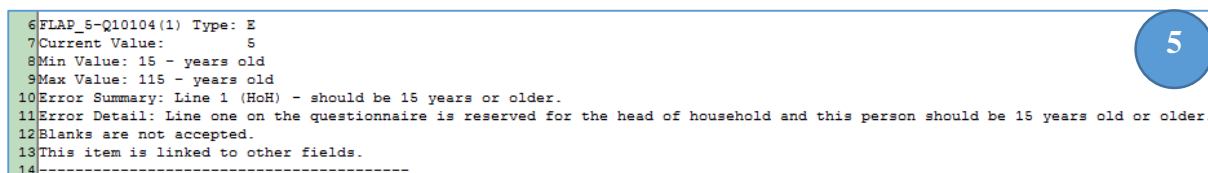
[3] Once you invoke the check data button, a new popup window will be displayed showing two types of display preferences. The first option will format all the faults in printable pages allowing you to print all the faults associated with the selected HIES household ID. Illustration 4 shows an example of the fault report formatted for print.



[4] The fault report contains all the faults for the selected household evaluated for its quality. This report will only show the faults that were captured by the system. Each report starts with the HIES household ID and what block this household is located. The information can help the HIES team locate the proper household if it deemed necessary for a revisit to correct or clarify information.



[5] The second part of the printed fault report is the fault details. Dashed lines separate each fault detail and each fault detail contains key information that will help the enumerator and supervisor figure out how to correct the fault.



The first line of this fault detail tells us four different things that are important to helping us identifying which part of the questionnaire and entry system invoked the fault.

6FLAP\_5-Q10104(1) Type: E

**FLAP\_5** is the name of the fault message. This name can be linked to other documents such as the fault report, fault summaries that will be provided after each round to help the HIES team find areas of improvement. The next section **Q10104 (1)** is the question number in the questionnaire and the entry system. In this example, question Q10104 is the age of the person on line number 1, shown in brackets. If there is a “2” in the brackets such as **Q10104 (2)**, then this is referring to the person on line number 2, so on and so forth.

There are two types of fault messages. The first is displayed as “Type: E” and informs the operator that the fault detail is an error. Error faults must be corrected. The second is fault type is displayed as “Type: W” which informs the operator that the fault is a warning. Warnings will be displayed if a question response is not normal and will need to be confirmed but not necessarily changed. For example, a 15 year old widow is not a very likely situation but possible. So a situation like this will be flagged a warning and displayed to the user.

7Current Value: 5

The second line displays, to the operator, the current value entered for question Q10104 (Age) for the person on line 1. So the based on the information that we have interpreted so far the Age of the person on line 1 is 5 years old.

8Min Value: 15 - years old  
9Max Value: 115 - years old

The third and fourth lines are related to the possible values that this question can accept. Hence, the lowest value is 15 and the highest value is 115. Any value that falls below or over these values will not be acceptable and will cause a fault. By this time, you should be thinking that the current person is 5 years old and the minimum value is 15 years old. However, it is possible for a person to less than 15 years old, so why is this telling us that this is an error?

10Error Summary: Line 1 (HoH) - should be 15 years or older.

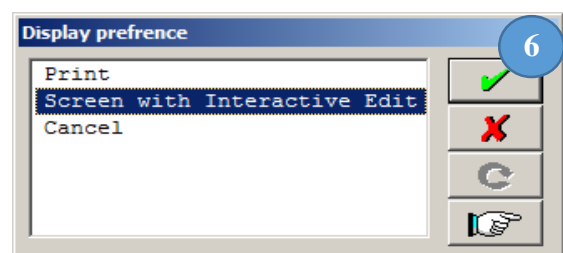
This is an error because the rules of HIES reserves line 1 for the head of the household and that this person should be 15 years old or older.

The next couple of lines in the fault detail will provide more information such as linkages and other details to help the operator take necessary step to correct the fault.

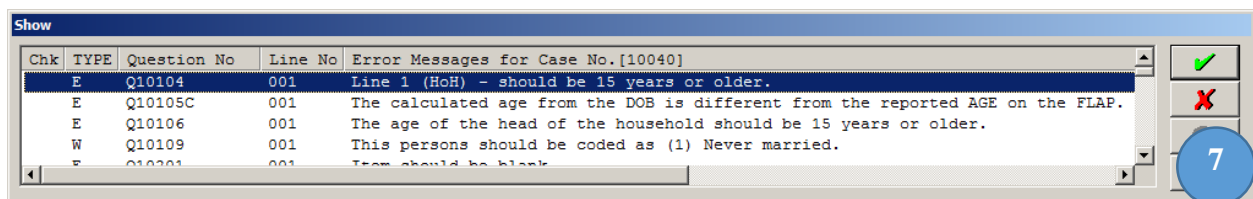
[6] There is an interactive fault checking system incorporated into the interface. This system is designed to make fault checking and correcting easier to tackle by pinpointing faults in the questionnaire and allowing the operator to navigate effortlessly to the question that caused the fault.

To use this system clicking on the “Check Data” button will show the display preference window shown in illustration 6. Selecting “Screen with Interactive Edit” will display a list of faults shown in illustration 7.

[7] Using our same example fault, we can see some similarities between the printed fault report and the interactive edit fault details. The fault prompt shown

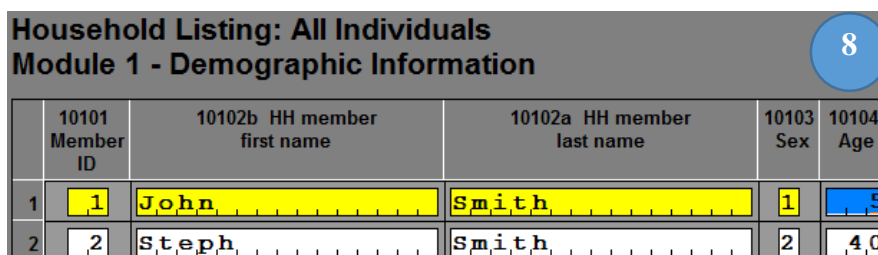


in illustration 7 shows a window with five columns. The first column, “Chk”, informs the operator if the fault has been checked or investigated. The second column is “TYPE,” again informing the operator if the fault is an error or a warning. The “Question No.” and “Line No.” is similar to the printed fault report. Instead of using a bracket to separate the question and line number, the prompt just displays two numbers. There is not that much space in these fault prompts so they will only display a summary of the fault related to the HIES household ID displayed in the top heading. To investigate a fault we must highlight the fault that we want to investigate and click on the green check mark.



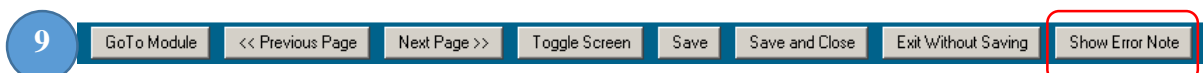
Chk	TYPE	Question No	Line No	Error Messages for Case No. [10040]
E		Q10104	001	Line 1 (HoH) - should be 15 years or older.
E		Q10105C	001	The calculated age from the DOB is different from the reported AGE on the FLAP.
E		Q10106	001	The age of the head of the household should be 15 years or older.
W		Q10109	001	This persons should be coded as (1) Never married.
E		Q10201	001	Item should be blank.

[8] After clicking on a fault, the prompt will attempt to open the associated questionnaire and automatically advance to the question that caused the fault. In our example, the fault prompt will open the entry system and navigate to the first line of question Q10104 as shown in illustration 8. Looking at the cell colors as explained in the “Entering HIES data” section, the yellow cells are skipped cells and blue cells are active. The blue highlighted cell is on the first line of Q10104, meaning that this cell is the one that caused the fault.

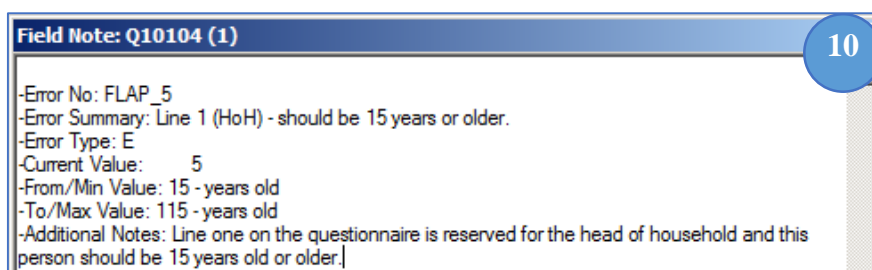


	10101 Member ID	10102b HH member first name	10102a HH member last name	10103 Sex	10104 Age
1	1	John	Smith	1	5
2	2	Steph	Smith	2	40

[9] The tool bar located at the top of the questionnaire entry screen, which helps with navigation, will have a new button called “Show Error Note.” Clicking this button will open up more details of the fault in a format similar to the fault report.

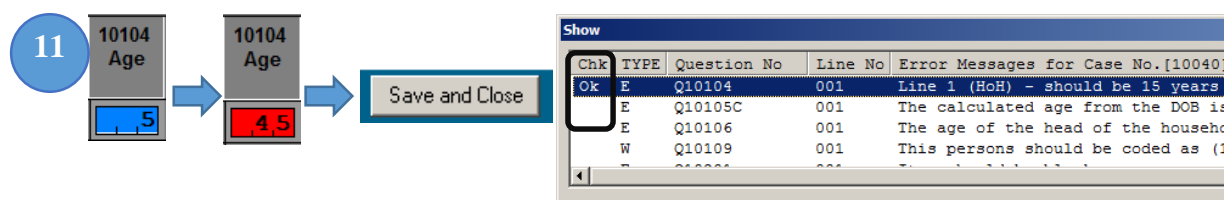


[10] Just like the fault report shown earlier, the fault note report will only show the fault associated with one question and in our case, showing the fault details of question 10104, line number 1. All the details of this fault are the same. Refer a bit earlier in this document for more specifics about the content of the displayed fault details.

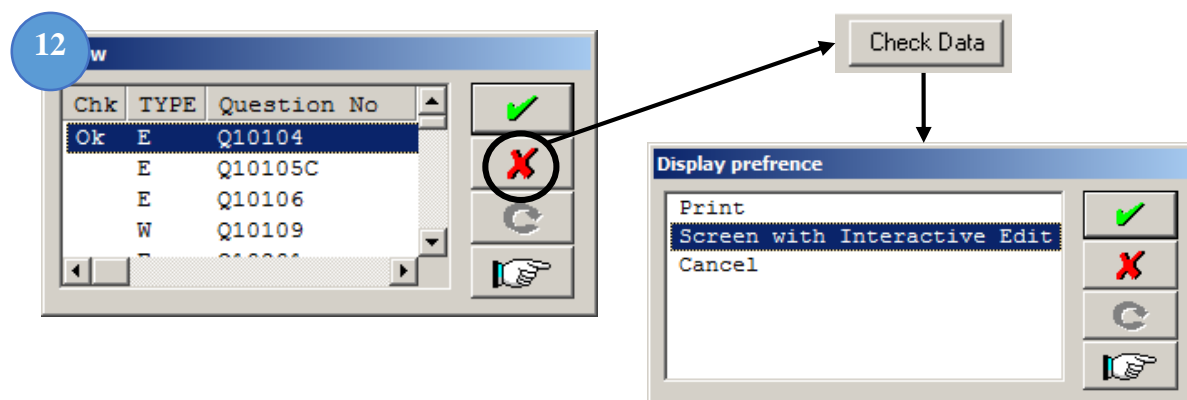


Field Note: Q10104 (1)
-Error No: FLAP_5
-Error Summary: Line 1 (HoH) - should be 15 years or older.
-Error Type: E
-Current Value: 5
-From/Min Value: 15 - years old
-To/Max Value: 115 - years old
-Additional Notes: Line one on the questionnaire is reserved for the head of household and this person should be 15 years old or older.

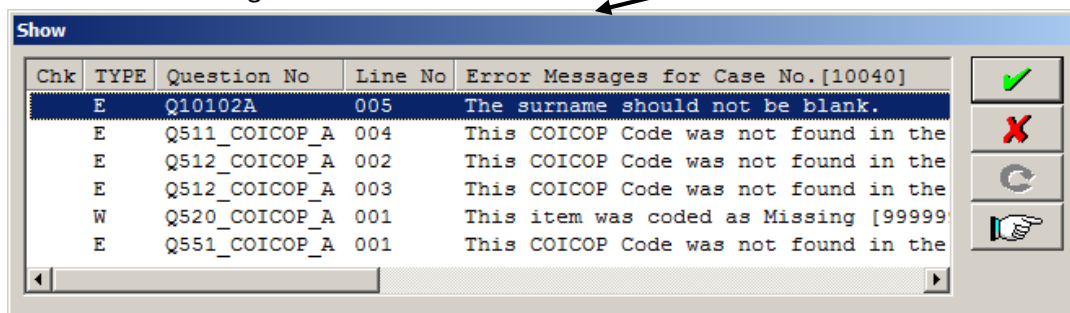
[11] You will need to figure out appropriate ways to correct faults. Normally, operators find it systematically easier to first check for keying faults by comparing what is on the form with what has been entered in the entry system. If both values are the same, the next step is to look for linkages such as checking for consistencies between age and date of birth. If this seems to be correct look for enumerator faults. For example, the person on line number 1 is actually the son of the household head who is actually 5 years old. If this is the case then appropriate actions should be completed to ensure that the enumerator fills the questionnaire correctly and the operator should try to swap this person with actual head of the household. Taking extra care to move or renumber reference numbers to appropriate line numbers. In our example, it was just a simple mistake in keying and the age was changed from 5 to 45. After you have corrected the fault click save and close the entry will save your changes and close the entry screen then go back to display the faults. You will notice that there will be an “Ok” written under the “Chk” column. This means that you have checked this question. The interface does not know if the new value that you have entered is correct or incorrect. You will need to rerun the fault checking process once more to refresh all the faults as shown in illustration 12.




[12] Often times it is a good process to refresh the fault messages. Refreshing the fault messages will clear faults that have passed the tests and continue to display ones that failed. Each time you correct an error or warning, click on “Save and Close” then click on the “X” button on the fault messages that show that you have checked a question. Click on “Check Data” again and click on “Screen with Interactive Edit.” The new fault messages displayed are now reflecting the changes.



All the fault messages have been refreshed.



After you have entered, verified, and cleaned all the data of a single round you will need to submit the data to SPC's servers. To do this all you need is to click on the "Send Data" button. Clicking on this button will display a new prompt for sending options.

 You will need an active Internet connection to send the data to our servers. It is best to send the whole BLOCK first. If any clarifications or corrections are needed, sending corrected SEQ\_NUM level cases will be sufficient.

13

Send Data

Where would you like to send the data?

- FTP Server
- SPC E-mail
- Cancel

What would you like to send?

- Block
- SEQ\_NUM:10040
- Cancel

C:\Windows\system32\cmd.exe

```

[
Testing server2.

% Total      % Received % Xferd  Average Speed   Time    Time     Time    Current
   0      0     0       0      0      0     0         0      0  --:--:--  --:--:--  --:--:--  Speed
   0      0     0       0      0      0     0         0      0

```

C:\Windows\system32\cmd.exe

```

[
Sending data to server 2.

% Total      % Received % Xferd  Average Speed   Time    Time     Time    Current
   0      0     0       0      0      0     0         0      0  --:--:--  0:00:01  --:--:--  Speed
   0      0     0       0      0      0     0         0      0

```

C:\Windows\system32\cmd.exe

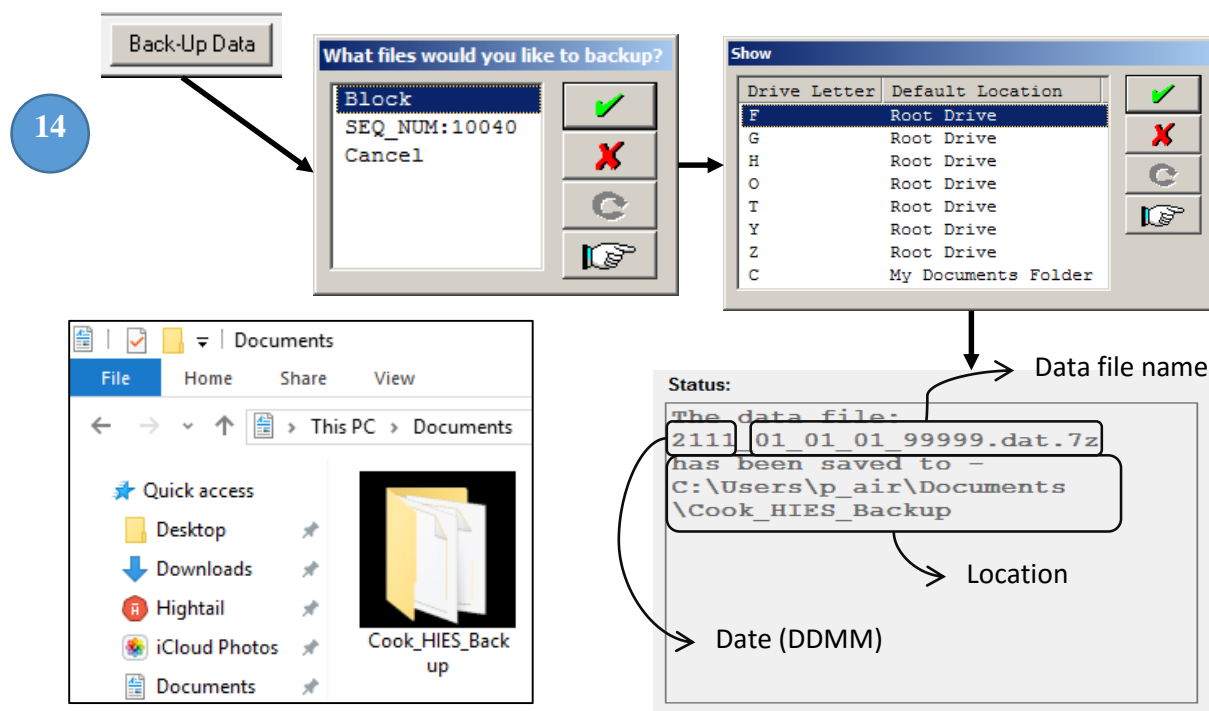
```

[
Sending confirmation email to HIES team Noumea.
[ This may take a few few minutes so take a little break =>
[
Mail sent successfully
Press any key to continue . . .

```

#### [1D] Backing up Data Files

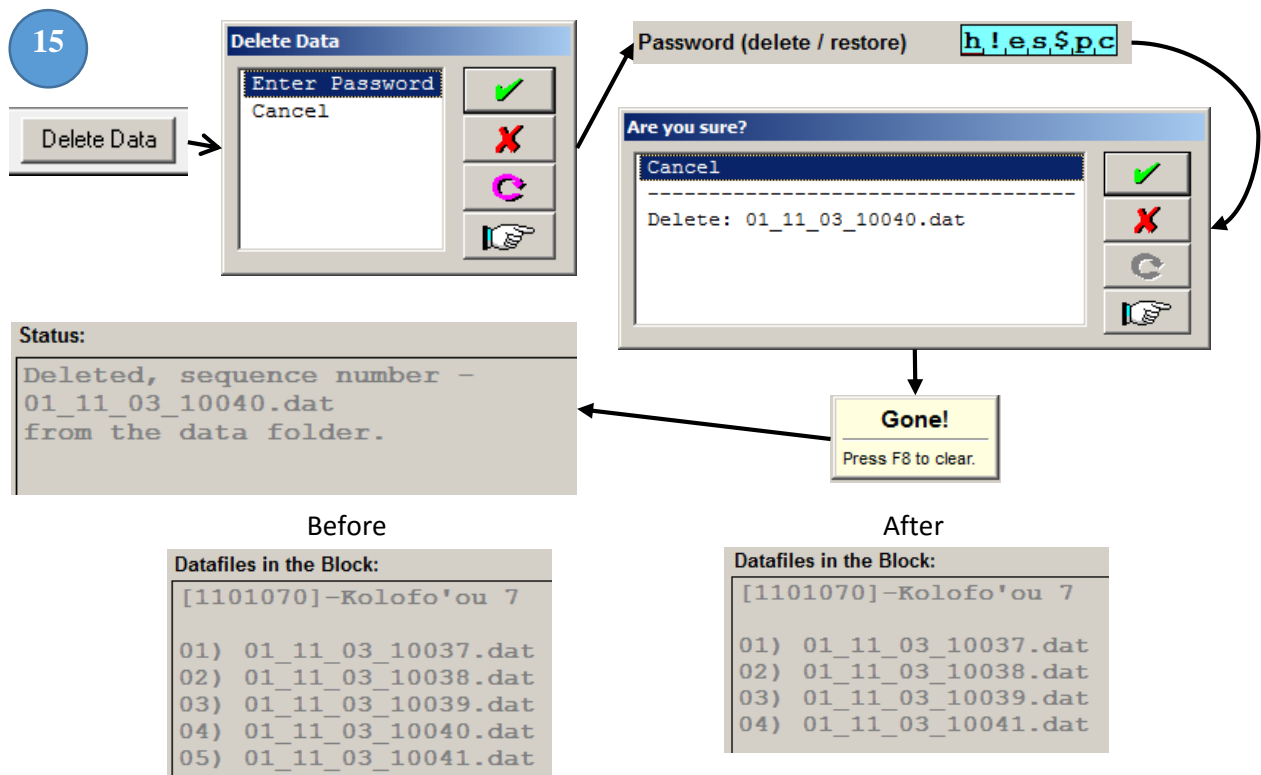
[14] To back up the data, you will need to select “Backup Data” [1D] on the tool bar. You will need to back up either the block or the case. Again choosing block will back up all the households interviewed and keyed in for that particular block/round. If you choose “SEQ\_NUM” or case, it will back up only the case that has been currently selected. **It is better to back up by case level instead of block. This is because the restore tool will only work on a single case level.** If you were to restore



on a block level it will have to be done manually by special instructions. The backup will work only with drives that read/write access and if there is a drive in the computer that has both read and write access then the interface will automatically display those files on the popup window. If you are backing up your data files to a flash USB drive, please make sure that it is connected to the computer.

#### [1E] Deleting Data Files at the Household Level

[15] Sometimes, it is easier to reenter data than to correct data or other times the operator will wrongly assign an incorrect case number. If this is the situation then, you might want to delete a case. You can delete a case by selecting the “Delete Data” button. The interface will then prompt you to enter a password to continue. In the password field enter the password “h!es\$pc” without the quotes. The password is case sensitive so make sure that you type the password as shown. If the password is correct then the interface will ask you to confirm your decision. Select “Delete: 00\_00\_00\_00000.dat” to continue. Once you confirm the interface will proceed to delete the selected case.



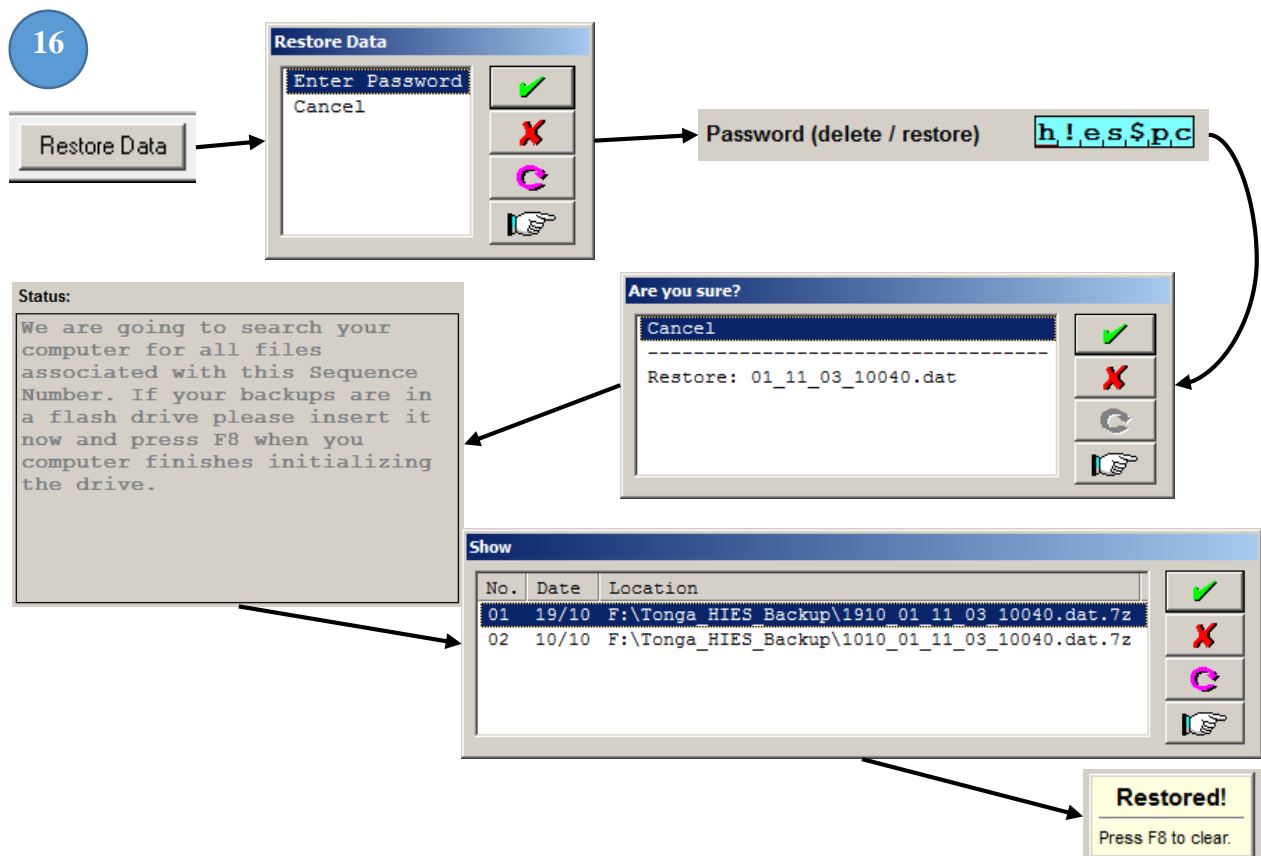
#### [1F] Restoring a Data File from a Backup

[16] The interface allows the operator to restore a previously saved case file from that was produced from the backup menu. The restore tool only works with case files and does not work with block. This was intentional to prevent the user from rewriting blocks of data that may be older or incomplete. To restore data click on the “Restore Data” button. The interface will then prompt you for a password. Using the default password of “h!es\$pc” the interface will then ask you for confirmation that you want to restore the selected sequence number. Once you confirm that you want to restore a particular HIES household ID then the interface will search your computer for all the default backup locations for the selected HIES household ID. There can be multiple files for the same HIES household ID in different location in your computer and the interface will try to locate all of them. This may a few minutes depending on the number of drives that were initialized in your computer. Select the correct file that you want to restore and continue with the green checkmark to complete the restore process.



**The restore program will only work with case/household SEQ\_NUM level backups. So do not forget to back up all households level items in the computer on a regular basis.**





#### [1G] Updating the HIES Application

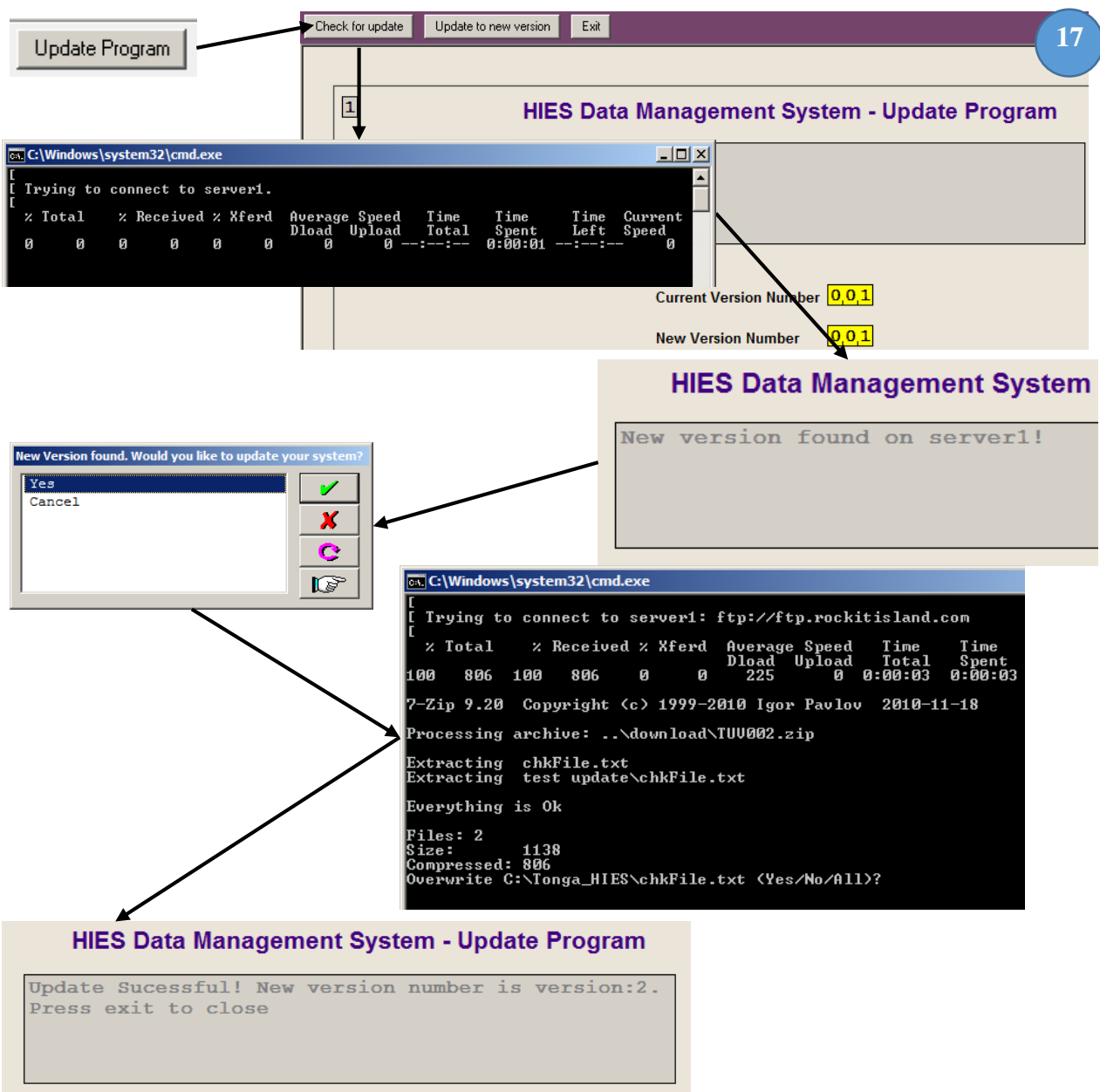
Sometime during the course of the HIES project we will encounter questionnaire faults or entry system faults. This will require us to update the computer either by an update patch sent by email from the main office or by using the interface to update for us. Using the interface to update our program is the easiest way and fastest way to update the HIES entry system.

On the HIES interface tool bar click on the “Update Program” button. Once you have clicked the button the Interface will shut down and open an external program called the “HIES Data Management System – Update Program.” After the external program opens, click on the button that says, “Check for Update”. This program will then connect to SPC’s server and look for a specific update for your machine. If it finds one the program will inform you that a new version was found on the server and ask if you would like to update to the new version. Clicking on “Yes” will download the update file and automatically install the updates. The program will inform you if there are any complications and instructions for comments to tell the HIES head office. If you have a proper internet connection, you should have no problems.

**! A reliable Internet connection is required to update the HIES program. If you are unsure if you have an active Internet connection, contact your HIES IT team.**

Sometime the update program will download the file but there is already a copy installed in the machine and the program will stop and wait for your input to overwrite files. **Enter a letter “A” for “All”, meaning that the program will overwrite/update all the files in the destination folder.** This is a normal procedure.





The computer's command box will stop and ask for your confirmation to overwrite the files in the computer. It is OK, press "a" to overwrite/update the files.

## Entering HIES Data – Using the HIES Entry System

### Envelope, Cover pages and flow

[1] After clicking the "Open Datafile" button on the interface tool bar, a HIES entry program will open the selected case and allow you to enter information collected from the field. We have tried to make the system work as smooth as possible by limiting mouse movements and trying to keep numeric inputs most of the time. We believe that the best way to learn the system is to jump in and start entering data. However, it is best to go gradually. We will display those instructions in relevant screen shots. Often times, we will show a filled questionnaire and try showing their associated parts

of the entry system along with diagrams. For the most part, each item in the questionnaire matches the item fields in the Entry System. The cover sheet is the only one that is a bit different in terms of layout comparability between the questionnaire and entry system. The rest of the pages in the entry system follow the pages layout in the questionnaire.

[1A] This is the information that identifies the case that we are entering. This section is automatically filled-in by the computer and will be skipped to the next editable field.

[1B] Enumerator, supervisor and data clerk's identification numbers are entered in this section but, we only collect that last two digits of the of the full code.

[1C] This section records the completion of each module and the interview as a whole. Below are the conditions to determine complete and incomplete questionnaires.



**Do not forget to update the Module and Diary Status codes each time you begin to enter the data. Often times, data entry operators forget to update these fields.**

Modules and Diary		
1	Fully Complete	No missing information with the exception of some minor refusals
2	Partially Complete	Missing 1 or 2 whole sections in the modules. For example refusal in business characteristics in 4.6 and/or wages in 4.1. Missing 3 or more days of diary information.
3	Empty / Incomplete	Missing 3 or more sections in the modules. Missing 1 or more days of diary information.
Interview Status		
1	Fully Complete	All Modules have a code of 1. AND Both Diaries have a code of 1.
2	Partially Complete	All Modules have a code of 1 and only one diary has a code of 1. OR Both Diaries have a code on 1 and only two modules have a code of 1.
3	Empty / Incomplete	All others

[1D] The **total number of males, females and persons in the household is very important** it is linked throughout the whole data entry system. So be sure that this mirrors the total number of person recorded in the flap.

[1E] The form number should always be zero, unless there is more than one form attached for the household. If this is the case then you should record the number of forms in this manner.

Form 1 of 1 = Form number (0)	Form 1 of 4 = Form number (4)
Form 1 of 2 = Form number (2)	...
Form 1 of 3 = Form number (3)	Form 1 of 9 = Form number (9)

[1F] – Sometime there will be items in the entry system that do not exist in the questionnaire such as this example in the screen shot. To save multiple key strokes there are items that allow the operator to skip over different fields. In the example shown, the entry system requires the operator to enter any value to allow you to enter a field note. In the screen shot, the active field will display an "X" but this field will accept any letter or number and will automatically change the value entered to an "X". Leaving this field blank will jump to the next page.

## HOUSEHOLD DETAILS

1

HIES HOUSEHOLD ID 1 0 0 4 0

Set A, B, C A

ROUND 0 3

HOUSEHOLD HEAD (HH)

First name

John Smith

Surname

HOUSEHOLD SIZE

Males	0 3
Females	0 2
TOTAL	0 5

Phone number (optional)

FORM # 1 of 1

ISLAND GROUP Tongatapu

Code 1

VILLAGE Kolofo'ou

Code 0 1

DISTRICT Kolofo'ou

Code 1

BLOCK Kolofo'ou - 7

Code 0 7 0



Module data must be entered a day or two after completion. The computer will flag errors for correction. The best way to get good data is to find the errors in the data and quickly correcting those errors while your enumerators are still in the field.

Name

Code

Signature

Mary White

1 1 1

Mary White

Grace Jones

1 1 0

Grace Jones

Grace Jones

1 1 0

DATE INTERVIEW COMPLETED (dd/mm/yy)

1 2 / 0 8 / 1 5

DATE DATA ENTRY COMPLETED (dd/mm/yy)

1 3 / 0 8 / 1 5

## NOTES

Head of the household agreed but said that it is best to come after 5pm.

## Household Details

HIES household ID 1,0,0,4,0

Set A, B, or C A

Round 3

Island Name

Tongatapu

01

Block Name

[1101070]-Kolofo'ou 7

Team Name

Team 1.1

01 11

01 11 03

Enumerator Name

Mary White

Code

1,1

Supervisor Name

Grace Jones

Code

1,0

Data Clerk Name

Grace Jones

Code

1,0

[1] Fully complete

[2] Partially complete

[3] Not complete

Module 1 Status 1

Module 3 Status 1

Diary Week 1 Status 1

Interview Status 1

[1] Fully Complete

[2] Partially Complete

[3] Empty / Incomplete

Module 2 Status 1

Module 4 Status 1

Diary Week 2 Status 1

## Module 1 - Cover Information

First Name

John

Surname

Smith

Phone

1,2,3,4,5,6

Males

3

Females

2

Total Persons

5

Form Number

This number should always be zero, unless there is more than 1 form for the HIES household ID.

Date Interview Completed

1,2 8 2,0,1,5

[ DD ] / [ MM ] / [ YYYY ]

Date Data Entry Completed

1,3 8 2,0,1,5

[ DD ] / [ MM ] / [ YYYY ]

☒ Is there a note written in module1?

Head of the household agreed but said that it is best to come after 5pm.

## Field Colors and their Meanings

[2] Item fields have different colors and the color of a field represents different conditions of the entry system.

HIES household ID **1,0,0,4,0** - Yellow represents skipped data fields. This controlled by the computer or manually mouse clicking different areas of the entry system. If you go through the computer's automated flow, it will skip certain fields (depending on the questionnaire) and those fields will be highlighted yellow. Computer skipping is a good way to check for enumerator errors. Take for example, illustration 2 shows that Q10205 was skipped on the entry system but its corresponding item in the form was filled-in. This is a common enumerator error and one of the largest potentials on unintentional errors. To correct this error, put a strike-through line on the filled-in skipped field on the questionnaire. Leave the entry system blank and continue entering data.

MAIN ACTIVITY	TYPE OF ACTIVITY (occupation)	WORKING INDUSTRY	WORKING HOURS	WILLING TO WORK MORE	NOTE ID
What was this ...'s <u>main activity</u> during <u>last week</u> ? (If away, due to holidays or illness, state what this person would normally be doing).  Codes are listed in the box below. Write the appropriate code in the box*  If 01 to 08, go to 10202 If 09 to 13, go to 10206	Examples: nurse, teacher, enumerator, security, cook, shop-keeper, farmer, fisherman	What industry did ... work in? Examples: health, education, security, restaurant, retail sales, agriculture, fisheries	How many hours did ... work in this <u>main activity</u> <u>last week</u> ? (Include sick, annual and statutory leave)  If 30+ hrs, go to 10206 If <30 hrs, go to 10205	Would ... be willing and able to work more hours in this <u>main activity</u> ?  1. Yes 2. No  Write the appropriate code in the box	2
10201	10202	10203	10204	10205	10299
01	Manager	Fisheries	60 hrs	1	

This field contains a number and should have been skipped. This can be identified by the yellow color in the image below.

10201 Main activity	10202 Occupation / (code)	10203 Industry / (code)	10204 Hours	10205 More hours	10299a Obs
1	MANAGER 1,3,1	FISHERY 0,3,1	6,0		

Entered  
Skipped  
Current

Set A, B, or C **A** - A red field means that the data field has been entered.

Round **3** - A blue field means that this is current field that the entry system is expecting a value. This is also indicated by a blinking cursor.

Module 1 Status ☐ - A white field means that the field was not been entered or skipped.

Block Name **[1101070]-Kolofo'ou 7** - A gray field means that the field is a protected field and this field cannot be changed. The entry system will not allow you to click on it.

## Entering Information, Use of the "Specify" Fields and Navigating

[3] The Flap is straightforward and all the information collected on the questionnaire will be captured in different parts of the entry system. The question numbers in the questionnaire are the

same as that displayed in the entry system. Because space is limited on the entry system, the field headings will contain just the keywords of the associated fields and will not contain the actual questions printed in the questionnaire. When filling in the questionnaire, most of the fields will contain zero filled items such as the age. In this case, you can enter the zeroes in the entry system and the system will automatically erase the zeroes to avoid confusion and reduce the size of the data file.

Sometime all the members of the household will have the same surname/last name. To save on keystrokes we have implemented a convenient way to copy the last names and entering a “1” in the surname field, from persons 2 on, will copy the previous surname and past that in the current field.

<div style="border: 1px solid black; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">3</div>	10102	10103	10104
01	First name Surname John Smith	1	0 4 5
02	First name Surname Steph Smith	2	0 4 0
03	First name Surname Sandra Smith		
04	First name Surname Dennis Smith		
05	First name Surname Pierre Smith		

	10101 Member ID	10102b HH member first name	10102a HH member last name	10103 Sex	10104 Age
1	1	John	Smith	1	4 5
2	2	Steph	Smith	2	4 0
3	3	Sandra	Smith	2	1 2
4	4	Dennis	Smith	1	9
5	5	Pierre	1	1	2

Entering a “1” under the surname/ last name field will automatically copy the surname of the previous person.

[4A] Some of the dates in the entry system require the full year. Keep in mind that some questions asked only for a 2-digit year. If this is the situation, convert all 2-digit years to 4-digit years.

[4B] We have made some changes to make notes more efficient for analysis. Take for example, a “1” is written in the observation number column indicating that there is an observation written on the form. Instead of writing a separate note, there is some space provided directly underneath the birthplace question to allow the operator to enter a few comments on birthplace, only if the response was “2.Abroad”. You will see this occurring throughout the entry system and these “specify” fields will be required if a response is a note, other or specify response.



**Try to have your enumerators create the household listing recording Head and Spouse on the first two lines, then try to list everyone from oldest to youngest.**

We prefer that you use this space if and only if the observation note is directly linked to an associated question. If the field note has no association to any of the page’s questions then you may want to use the observation space to write the field note. For example, a person might refuse a question, so an item is intentionally left blank. Computer would expect an answer and the only way to move to the next question is to use your mouse and manually click to the next field in the flow of questions. This situation will require an observation note.

4

	0101	10105	10106	10107	10108	10109	10110	10199
01	0	8/08/70	0 1	2	3	2	1	1
02								

2

ID	NOTES
1	John S. is English by decent but born in the U.S.A

S1.1 Demographic Profile

Current Person 01: Male Age: 45 John S.

M1-page 02

	10105 Date of Birth	10106 Relationship to HH head	10107 Birthplace	10108 Ethnicity	10109 Marital status	10110 Usually live	10199 Obs
1	8/8/1970	1	usa	3	2	1	

[5] Navigation within a page can be done using the arrow keys on a full-size keyboard, using the mouse to manually click on different fields, or using the page-up page-down keys. We have included some commonly used keys as buttons on the tool bar.

In the example below, pressing “GoTo Module” button and selecting “Module 2” will force the entry to the cover page of Module 2.

Pressing the previous page button from here will take you the last page of Module 1 or pressing the next page button will take you to the next page following the cover page of Module 2. This is the same as pressing the page-up and page-down keys on your keyboard.

It is easier in terms of navigation and flow to enter the data page-by-page without using the mouse or tool-bar buttons or keyboard keys for navigation. The system has been designed to allow the user to enter the data in fluid process going though each question with minimal use of the mouse.



**Try to enter as much information without using the mouse to navigate to a particular field. The entry program has built in flow control to allow you to enter day efficiently just by using the keyboard.**

GoTo Module << Previous Page Next Page >> Toggle Screen Save Save and Close Exit Without Saving **5**

Which module do you want to go to?

Module 1	✓
Module 2	✗
Module 3	
Module 4	
Diary 1	
Diary 2	

Module 2 - Household Expend

S1.6 Household Members who left the Household M1-page 11

10602	Person's name First name Surname	10603	Sex	10604	Age	10605	Contribute income	10606	Main activity / (other)	10607	Major expenses	10608	Main expense / (other)	10609	Months of stay	10699a	Obs
61	Chloe	2		74	1			8	pension from nz	1		4		6			
62																	
63																	
64																	

S2.1 Housing Characteristics M2-page 02

2.1.1 Description of Housing

20111	Type of living quarters	1	20114	Main material for floor	1
	other (write-in):			other (write-in):	
20112	Main material for roof	1	20115	Number of rooms	5
	other (write-in):		20116	Year of construction	1999
20113	Main material for walls	2	20117	Cooking area	1
	other (write-in):				

### Fault Messages during Data Entry

We have include a minimal set of fault messages into the entry system that will be displayed if a value entered in a particular field is inconsistent to previous responses or if the value is out-of-range of the field's acceptable values.

[6] For the examples below, we have deliberately changed age of the head on line 1 to 5 years old so that we can invoke the computer to show us some fault messages.

This fault message tells us that the calculated age from the date of the first interview (which is recorded on the cover) minus the date of birth does not equal the age report. To fix this fault, the operator should navigate to and correct the age on the Flap from "5" to "45" years.

**6**

Date Interview Completed

12	8	2015
[DD]	[MM]	[YYYY]

2015 year of interview  
- 1970 year of birth  
45 years old (calculated)  
5 years old (reported)

S1.1 Demographic Profile

Current Person 01:Male Age: 5 John S.

	10105	Date of Birth	10106	Relationship to HH head	10107	Birthplace	10108
1	8	8	1970	1	usa		
2	26	5	1975	2			
3	6	9	2003	3			
4	23	12	2005	3			
5	22	12	2012	4			

The calculated age from the DOB is different from the reported AGE on the FLAP.

The age is calculated from the "date interview completed" reported on the COVER (minus) the date of birth. Verify both values and correct.

Press F8 to clear.

[7] Here is another example of a data entry fault. After entering a value of "2" for the head of the household, a fault is triggered and stats that the persons is too young to be married, widowed, etc. Because we have changed the age of John from "45" to "5", the computer thinks that we have a five year old person that is legally married. Again correcting the age in the Flap will correct this and subsequent faults.

7

### S1.1 Demographic Profile

Current Person 01:Male Age: 5 John S.

	10105 Date of Birth	10106 Relationship to HH head	10107 Birthplace	10108 Ethnicity	10109 Marital status
1	<span style="background-color: red; color: white;">8</span> / <span style="background-color: red; color: white;">8</span> / <span style="background-color: yellow;">1,9,7,0</span>	<span style="background-color: red; color: white;">1</span>	<span style="background-color: red; color: white;">2</span>	<span style="background-color: red; color: white;">3</span>	<span style="background-color: blue; color: white;">2</span>
2	<span style="background-color: white; border: 1px solid black;">2,6</span> / <span style="background-color: white; border: 1px solid black;">5</span> / <span style="background-color: white; border: 1px solid black;">1,9,7,5</span>	<span style="background-color: white; border: 1px solid black;">2</span>	Error: Persons is too young to be [2]Legally Married [3]Widowed [4]Divorced or [5]Defacto Please correct. <small>Press F8 to clear.</small>	<span style="background-color: white; border: 1px solid black;">1</span>	<span style="background-color: white; border: 1px solid black;">2</span>
3	<span style="background-color: white; border: 1px solid black;">6</span> / <span style="background-color: white; border: 1px solid black;">9</span> / <span style="background-color: white; border: 1px solid black;">2,0,0,3</span>	<span style="background-color: white; border: 1px solid black;">3</span>		<span style="background-color: white; border: 1px solid black;">1</span>	<span style="background-color: white; border: 1px solid black;">1</span>
4	<span style="background-color: white; border: 1px solid black;">2,3</span> / <span style="background-color: white; border: 1px solid black;">1,2</span> / <span style="background-color: white; border: 1px solid black;">2,0,0,5</span>	<span style="background-color: white; border: 1px solid black;">3</span>		<span style="background-color: white; border: 1px solid black;">1</span>	<span style="background-color: white; border: 1px solid black;">1</span>

### Computer Assisted Coding of Occupation and Industry

Computer assisted coding is only available for questions that need proper codes for written descriptions. We need to code these items because when it comes time for analysis, we need a systematic way of assigning one code for multiple variations of the same description. For example, the occupation “farmer” can be written like “farm”, “gardener”, or “grower”. There are many different ways to describe a farming occupation, not to mention the misspellings, and localized descriptions. A human can only group these types of variations, thus this job requires human interaction and properly assign occupation and industry descriptions.

[8] The first item field that we need to code is “Q10202 Occupation”. This column has two fields, one for the text and the other for the code. Type the full description in the text field and in the code field leave this blank and press the “Enter” key to start the coding system.



The coding system starts with the keyword field is active and will automatically suggest a keyword. The suggested keyword works about 75% of the time but still may require a more defined keyword. Take for example the illustration below; John Smith is the owner/manager of his fish exporting company. The main task in his occupation is the **management** of the **transportation** of fish. Using

8

10201 Main activity	10202 Occupation / (code)	10203 Industry / (code)
1	MANAGER	FISHERY

Industry / Occupation Code Lookup

Coding Type 2 Occupation

Description

Key word MANAGER

Key word 2 TRANSPORTATION

Search type 2

What kind of search would you like to perform?

Search by Description ☒

Search by Example ☐


Select Case

Key I\_DESC

21324 SUPPLY, DISTRIBUTION AND RELATED MANAGERS

just one key word “MANAGER” to describe his occupation will come up with more than 20 results. We can narrow this search by including a second keyword, “TRANSPORTATION”. By using two keywords, we were able to narrow our resulting code to one unique code related to the management of fish transportation.

[9] We have to code the industry for John Smith and the industry coding works the same way but require us to think of the MAIN industry that John runs his business. Is it the transportation industry or the fishing industry? Because John does not do the fishing, for the exporting company, he does most of his time coordinating the logistics of shipping the fish to his customers. In our example, John's fish exporting company main industry is transportation. The illustration below shows that the enumerator put down fishery as an industry but in actuality, looking at the resulting descriptions for fisheries

 Do not spend too much time trying to accurately code Industry and Occupation. If you are unsure, coding a MISSING [9999] is better than incorrectly coding an item.

9

10203 Industry / (code)

**FISHERY**

Coding Type 1 **Industry**

Description

Key word **FISH**

Key word 2

Select Case

Key	I_DESC
10311	MARINE FISHING
10312	FRESHWATER FISHING
11020	PROCESSING AND PRESERVING OF FISH, CRUSTACEANS AND MOLLUSCS

Inclusion

THIS CLASS INCLUDES:- FISHING ON A COMMERCIAL BASIS IN OCEAN AND COASTAL WATERS- TAKING OF MARINE CRUSTACEANS AND MOLLUSCS- WHALE CATCHING- TAKING OF MARINE AQUATIC ANIMALS: TURTLES, SEA SQUIRTS, TUNICATES, SEA URCHINS ETC.THIS CLASS ALSO INCLUDES:- ACTIV

Coding Type 1 **Industry**

Description

Key word **TRANSPORTATION**

Key word 2

Select Case

Key	I_DESC
15221	SERVICE ACTIVITIES INCIDENTAL TO LAND TRANSPORTATION
15222	SERVICE ACTIVITIES INCIDENTAL TO WATER TRANSPORTATION
15223	SERVICE ACTIVITIES INCIDENTAL TO AIR TRANSPORTATION
15229	OTHER TRANSPORTATION SUPPORT ACTIVITIES

Inclusion

THIS CLASS INCLUDES:- FORWARDING OF FREIGHT- ARRANGING OR ORGANIZING OF TRANSPORT OPERATIONS BY RAIL, ROAD, SEA OR AIR- ORGANIZATION OF GROUP AND INDIVIDUAL CONSIGNMENTS (INCLUDING PICKUP AND DELIVERY OF GOODS AND GROUPING OF CONSIGNMENTS)- LOGISTICS ACTI

does not describe John's exporting company truly. In addition, the fishing industry does not contribute as much time to his overall business compared to the time dedicated to transportation of the fish.

10

Occupation and Industry key words used for subsistence based activities such as farming, fishing, livestock, hunting or a mixture of different activities.

Coding Type	2	Occupation	Coding Type	1	Industry
Description			Description		
Key word	SUBSISTENCE		Key word	PIG	
Key word 2	LIVESTOCK		Key word 2		
Key word 2	FARMER		Key word	CATTLE	
Key word 2	CROP		Key word	SHEEP	
Key word 2	FISH		Key word	FRUIT	
Key word 2	HUNT		Key word	VEGETABLE	
Key word 2	GATHERER		Key word	ROOT	
Key word 2	MIX		Key word	FISH	
			Key word	HUNT	
			Key word	GATHER	
			Key word	MIX	

Occupation and Industry key words used for “weaving” as a subsistence-based activity.

Coding Type	2	Occupation	Coding Type	1	Industry
Description			Description		
Key word	HANDICRAFT		Key word	WEAVING	
Key word 2			Key word 2		

Occupation and Industry key words used for “Unpaid Family Worker”.

Coding Type	2	Occupation	Coding Type	1	Industry
Description			Description		
Key word	DOMESTIC		Key word	DOMESTIC	
Key word 2	DUTIES		Key word 2	ACTIVITIES	

[10] Most of the time, the occupation and the industry of the person’s secondary activity will be some kind of subsistence activity such as farming or fishing. Take some time to study the patterns of keywords show below to help you properly code subsistence and home duty type of activities.

### Comparing the Questionnaire and Entry System

[11] The item layout in the questionnaire does not necessarily match the layout in the entry system. The reason for this is that some items are better collected in a certain layout formatted for a written

11

1. Yes, go to 10310 2. No, go to 10313	Date started program mm/yy	Name of training program	Name of provider
10309	10310	10311	10312
1	1/14	Value Added	USP

10309 Training program?	10310 month/year	10311+13112 Name of the training program and provider
1	1/14	Name VALUE ADDED Provider USP

form whereas a layout designed for transcribing information has a layout that tries to mimic the questionnaire but slight changes allow for efficiency and space saving. Illustration 11 shows filled

portions of the questionnaire verses its entry equivalent. As you can see question 10311 and 10312 are separated in the questionnaire but in the entry system, it is combined to save viewing space.

[12] Most of the time the layout of the questionnaire matches the layout in the entry system but again there are some questions that require an observation note and instead of writing the

PERSON NAME <i>First name</i> <i>Surname</i>	SEX 1 = Male 2 = Female <i>Write the appropriate code in the box</i>	AGE IN COMPLETE YEARS <i>Enter 000 for child under 1 year</i>	Contribute any income during the stay within this HH?  1. Yes 2. No  <i>If No, go to 10607</i>	What main paid activity did ... do? 1. Wages job 2. Own business 3. Sale of agricultural products 4. Sale of fish, sea food 5. Sale of livestock 6. Sale of handicraft 7. None 8. Other type of income ( <i>note</i> )	Incur any major personal expenses while with HH?  1. Yes 2. No  <i>If No, go to 10609</i>	What was the main expense incurred by ... ([HM])? 1. Household assets 2. Travel 3. Education expenditure 4. Health expenditure 5. Customs 6. Other ( <i>note</i> )	How many months did this person stay in HH over last 12 months?	12  NOTE ID
10602	10603	10604	10605	10606	10607	10608	10609	10699
Chloe	2	074	1	8	1	4	06 mths	1

ID	NOTES
1	Before Chloe passed away she was receiving a pension from New Zealand.

10602 Person's name First name Surname	10603 Sex	10604 Age	10605 Contribute income	10606 Main activity / (other)	10607 major expenses	10608 Main expense / (other)	10609 Months of stay	10699a Obs
Chloe	2	74	1	8	1	4	6	

observation note later in the entry system we combine the observation note and the associated question into one column such as Q10606 in illustration 12.

[13] Some of the information collected in the questionnaire is duplicated to ensure that information derived in one module can be linked back to the original set. This is useful for manually keeping track of modules between the field and data entry operators and making sure that separated modules can be linked back to the original set. This tracking system is not really needed when transcribing data and so redundant information is intentionally discarded. Looking at example Tonga cover sheet of module 2, in illustration 13, we can see that the household ID, set, round, names and other

redundant information is not entered in the entry system's mirror page of module 2's cover. The only information that is required are the dates that the interview for module 2 was completed and the date that module 2 was entered into the computer. The other piece of information that the entry system can expect from the cover page of all the modules is the notes associated with that module.

**13**

## MODULE 2 - HOUSEHOLD EXPENDITURE

TONGA STATISTICS DEPARTMENT

IN ACCORDANCE WITH THE TONGAN STATISTICS ACT (1978), ALL PRIVATE INFORMATION IN THIS ENVELOPE WILL BE KEPT STRICTLY CONFIDENTIAL

DATE INTERVIEW COMPLETED (dd/mm/yy)  
**14/08/15**

DATE DATA ENTRY COMPLETED (dd/mm/yy)  
**15/08/15**

# Module 2 - Household Expenditures

Date Interview Completed

**14 08 2015**

[ DD ] / [ MM ] / [ YYYY ]

Date Data Entry Completed

**15 08 2015**

[ DD ] / [ MM ] / [ YYYY ]

Module 2 note

[14] Sometime the questionnaire is filled using “X” and sometime the questionnaire uses “1” for “Yes” and “2” for “No”. The reason the questionnaire is designed with inconstant coding values is to lessen confusion with written values in the questionnaire. Take for example, illustration 14 shows a filled questionnaire. As you can see, it has very few pencil marks making it easier to fill and read.

However, its entry screen equivalent is shown using numbers instead of X’s. This is just a transcribing practice in that we make sure that every value entered in the



**You will get an error if you try to select “No” in Q20131 and mark and “1” in public piped water in Q20132\_1.**

**14** 20131. Is this house connected to the public utility water supply?  
 1. Yes 1 Write the appropriate code in the box  
 2. No

20132. Which source water do you have access to? Write 'X' in the appropriate box

<input checked="" type="checkbox"/> 1. Public piped water supply <input type="checkbox"/> 2. Community water supply <input type="checkbox"/> 3. Church water supply <input checked="" type="checkbox"/> 4. Another household water supply <input type="checkbox"/> 5. Household tank <input type="checkbox"/> 6. Protected dug wells <input type="checkbox"/> 7. Unprotected dug wells <input type="checkbox"/> 8. Water truck <input type="checkbox"/> 9. Bottled water <input checked="" type="checkbox"/> 8. Other (note) Natural Spring	20132_1 Source: Public piped water <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">1</span> 20132_2 Source: Community water supply <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> 20132_3 Source: Church water supply <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> 20132_4 Source: Another household water supply <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">1</span> 20132_5 Source: Household tank <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> 20132_6 Source: Protected dug well <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> 20132_7 Source: Unprotected dug well <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> 20132_8 Source: Water truck <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> 20132_9 Source: Bottled water <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">2</span> 20132_10 Source: Other <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">1</span> other (write-in): Natural Spring
--	---

20133. Does your HH boil its drinking water?  
 1. Yes 2 Write the appropriate code in the box  
 2. No

20131 Connected to public water supply 1

20133 Boil drinking water 2

computer has at least a value. In our case, an “X” is equivalent to a “1” or “Yes” and a blank is equivalent to a “2” or “No”. This practice makes the keying of data faster because you do not constantly need to move from the keyboard to the number pad and switching between letters and numbers.

[15] The illustration below is from section 2.3 and shows how to enter data from a list of values. It seems natural that items should be entered from left to right but, in this case it is easier to enter data in the computer when the user is concentrated on one column and values entered are either a 1 or 2.

[16] Sometimes, the questionnaire will separate the expenditure details based on the reference period. Looking at section 2.3.2

**16**

**SECTION S2.3.2: UTILITIES AND COMMUNICATION EXPENDITURES**  
20350: For all expenses identified in S2.3.1, please provide the expenditure details below.

Line no.	EXPENSE CODE (20303)	DETAILED DESCRIPTION OF THE EXPENDITURE	BENEFIT	1. This month	2. Another month
20351	20352	20353	20354	20355	20356
<b>1. List here all the monthly expenses from the list in S2.3.1</b>					
01	1 1	Monthly Electricity	1	\$ 50.00	1
02	7 1	Telephone bill	1	\$ 50.00	1
03	7 3	Home internet	1	\$ 50.00	1
<b>1. List here all the annual expenses from the list in S2.3.1</b>					
16	3 1	Butane gas refill	1	\$ 120.00	1
17	3 1	Telephone line rental	1	\$ 100.00	1

**S2.3.2 Utilities & Communication Expenditures** M2-page 07

20352 Exp. code	20353 Detailed description	20354 Benef.	20355 Amount	20356 Location provider	20399 Obs	203 COICOP
1 1	monthly electricity	1	50	1		0.45112501
7 1	telephone bill	1	50	1		0.83020904
7 3	home internet	1	50	1		0.83020908
3 1	butane gas	1	120	1		0.45212601
7 2	telephone line rental	1	100	1		

below, if the questionnaire was properly filled-out, all the monthly expenditures are listed in lines 1 to 15 and all annual expenditures are listed in lines 16 to 20. This separation of expenditures by reference period is excellent to help prompt the respondent to think about annual and monthly expenditure and allow a quick way to find errors in reported amounts. Separated monthly and annual amounts are linked by the expenditure codes. The only values needed during entry are the values recorded in the expenditure details.

### Computer Assisted COICOP Coding of Reported Purchases

[17] Just like assigning codes to a person's reported industry and occupation, we need to assign codes to their reported purchases. These codes are called the Classification of Individual Consumption According to Purchase (COICOP) and these codes help those involved with the analysis of HIES data determine where people spend their money. Not every section or every purchase will

require a COICOP code; this is because we already know some codes such as rents and donations that are recorded in module 2.

There are three ways to code purchases. The first is to search the keyword of the commodity. The second is to search the keyword in the class descriptions. The third way is to manually search by divisions. Let us look at the first two methods to find the COICOP code for the purchase “telephone line rental”. To start the coding system some transaction columns will have a special COICOP field as shown below.

After leaving the COICOP field blank the interface will automatically open the COICOP look up system and will immediately ask the operator for the type of search you would like to do. The first option is to search by commodity, which is the lowest level of search. Meaning that if you search for “PHONE” it will search the whole database for that particular keyword. The COICOP lookup system will automatically put the first three letters of the first word written in the description. For example, the detailed description is “telephone line rental” and so the computer will automatically suggest “TEL” as the search word. Most of the time this suggested keywords are not the best keywords and so the computer will give you the option of typing your own search keyword.

In our example, I changed the keyword from “TEL” to “PHONE” because I do not want suggestions like “HOTEL” or “MOTEL” to appear in the returned list. Remember that I picked “Search by commodity” and the result of the search will display all the commodities that have the “PHONE” in its description.

Sometime a commodity search can result in a large number of results. To help the operator narrow the list of commodities we have included a search to allow the user to search a list of sub classes then display a full list of commodities that fall under that sub-class. Take for example, we wanted to find “telephone line rental.” We search for “PHONE” in the sub-class descriptions. The computer returns three codes. The first code is “TELEPHONE AND TELEFAX EQUIPMENT PURCHASE,” the second is “TELEPHONE AND TELEFAX SERVICE,” and the third is the default code for a missing code. Since we know that we are looking for a telephone service-related purchase, we select the second resulting code, “TELEPHONE AND TELEFAX SERVICE.” Once we select this sub-class, the computer will display all the possible commodities that have been listed under “TELEPHONE AND TELEFAX SERVICE.” All together 10 codes including one code for missing.



**Try searching different words or using a part of a longer word. The smaller the search word the more results will be displayed.**

This process has been highlighted below where the light-blue box contains the sub-class code “0830209 TELEPHONE AND TELEFAX SERVICE.” The yellow colored box contains all the recorded commodity codes listed under this sub-class. The light-red box contains the default code for missing.

Both search options are have its benefits in regards to speed and accuracy. Most data entry operators find out that the class level seem to provide better results but take a bit longer to find a proper search word.



17

20352 Exp. code	20353 Detailed description	20354 Benef.	20355 Amount	20356 Location provider	20399 Obs	203 COICOP
5 72	telephone line rental	1	100	1	1	

Current description: telephone line rental

Type of serch: 1

Key word: PHONE

**Type of serch**

☐ 1 Search by commodity

☒ 2 Search by class first, then by commodity

☐ 3 Serach by division, then by group

**Type of serch**

☒ 1 Search by commodity

☐ 2 Search by class first, then by commodity

☐ 3 Serach by division, then by group

**Select Case**

Key	COI_DES
082020700	TELEPHONE AND TELEFAX EQUIPMENT PURCHASE
083020900	TELEPHONE AND TELEFAX SERVICES
999999900	MISSING

**Select Case**

Key	COI_DES2
082020701	MOBILE PHONE, SMART PHONE DEVICE
082020702	LAND LINE PHONE DEVICE
082020703	OTHER TELEPHONE DEVICE N E S
082020704	TELEPHONE DEVICE WITHOUT ANY DETAILS
082020801	REPAIR OF TELEPHONE
083020901	MOBILE PHONE SUBSCRIPTION BILL
083020902	MOBILE PHONE TOP UP
083020903	OTHER FEE RELATED TO MOBILE PHONE SERVICE
083020904	LAND LINE PHONE BILL
083020905	INSTALLATION AND SUBSCRIPTION COSTS OF LAND-LINE TELEPHONE EQUIPMENT
083020907	INTERNET TOP TUP ON CELL PHONE
083020909	OTHER FEES RELATED TO INTERNET OR LAND LINE PHONE
999999999	MISSING

**Select Case**

Key	COI_DES
082020700	TELEPHONE AND TELEFAX EQUIPMENT PURCHASE
083020900	TELEPHONE AND TELEFAX SERVICES
999999900	MISSING

**Select Case**

Key	COI_DES2
083020901	MOBILE PHONE SUBSCRIPTION BILL
083020902	MOBILE PHONE TOP UP
083020903	OTHER FEE RELATED TO MOBILE PHONE SERVICE
083020904	LAND LINE PHONE BILL
083020905	INSTALLATION AND SUBSCRIPTION COSTS OF LAND-LINE TELEPHONE EQUIPMENT
083020906	INTERNET CAFÉ
083020907	INTERNET TOP TUP ON CELL PHONE
083020908	INTERNET SERVICES AT HOME
083020909	OTHER FEES RELATED TO INTERNET OR LAND LINE PHONE
999999999	MISSING

[18] Sometimes, a keyword cannot be located in the database or the keyword has too many search results in different classes. On the other hand, maybe you prefer searching for the correct COCOP by manually searching the database. Whatever the reason, it is worth the time to explore the manual search feature of the COCOP lookup system.

Let us say we want to look for the COCOP code for a “DOOR LOCK.” We decide that we want to use the “Search by division, then by group” option. After selecting this option, the first of five prompts will be displayed to the operator. Each time you select a subsequent code the next set of codes will be displayed that is related to the grouping that you the operator has chosen. This continues again going down the next set of grouping from Division all the way down to fifth grouping (Commodity). Refer to illustration 18 for a more detailed explanation.

**!** Do not spend too much time trying to find the most accurate COCOP code. It is better for us if you code an item as MISSING [999999999].



18

**Type of search**

- ☐ 1 Search by commodity  
☐ 2 Search by class first, then by commodity  
☒ 3 Search by division, then by group

Key	COI DES
010000000	FOOD AND NON-ALCOHOLIC BEVERAGES
020000000	ALCOHOLIC BEVERAGES, TOBACCO AND NARCOTICS
030000000	CLOTHING AND FOOTWEAR
040000000	HOUSING, WATER, ELECTRICITY, GAS AND OTHER FUELS
050000000	FURNISHINGS, HOUSEHOLD EQUIPMENT AND ROUTINE HOUSEHOLD MAINTENANCE
060000000	HEALTH
070000000	TRANSPORT
080000000	COMMUNICATION
090000000	RECREATION AND CULTURE
100000000	EDUCATION
110000000	RESTAURANTS AND HOTELS
120000000	MISCELLANEOUS GOODS AND SERVICES

The first window shows the 12 divisions of COICOP.

Key	COI DES
051000000	FURNITURE AND FURNISHINGS, CARPETS AND OTHER FLOOR COVERINGS
052000000	HOUSEHOLD TEXTILES
053000000	HOUSEHOLD APPLIANCES
054000000	GLASSWARE, TABLEWARE AND HOUSEHOLD UTENSILS
055000000	TOOLS AND EQUIPMENT FOR HOUSE AND GARDEN
056000000	GOODS AND SERVICES FOR ROUTINE HOUSEHOLD MAINTENANCE

The second window shows the group associated with the selected division.

Key	COI DES
055100000	MAJOR TOOLS AND EQUIPMENT
055200000	SMALL TOOLS AND MISCELLANEOUS ACCESSORIES

The third window shows the class associated with the selected group.

Key	COI DES
055216100	HAND TOOLS EG HAMMERS
055216200	GARDEN TOOLS EG WHEELBARROWS
055216300	LADDERS AND STEPS
055216400	DOOR FITTINGS EG HANDLES
055216500	OTHER METAL ARTICLES FOR THE HOUSE EG HOOKS ETC
055216600	OTHER METAL ARTICLES FOR THE GARDEN EG STAKES ETC
055216700	SMALL ELECTRIC ACCESSORIES EG POWER SOCKETS, BELLS AND ALARMS ETC
055216800	REPAIR OF HAND TOOLS, GARDEN TOOLS, SMALL ELECTRIC ACCESSORIES

The fourth window shows the sub-class associated with the selected class.

Key	COI DES2
055216401	HANDLES
055216402	HINGES
055216403	LOCKS
055216404	OTHER DOOR FITTING N E S
999999900	MISSING
999999999	MISSING

The fifth window shows all the commodities associated with the selected sub-class.

### Inline Fault Messages

[19] Inline fault messages are fault prompts that are invoked when there is an inconsistency between the current field and a field that has been previously entered. An inline fault message can also be invoked, if the value that was entered is not part the item's values set. For example, the SEX field can only accept a value of "1" for males and "2" for females. An inline fault message will be displayed if the operator tries to enter a value other than a "1" or a "2". These error messages are not



**You must try your best to correct all the errors before you submit the data to the servers.**

common but to prevent future error down the line some fields that have multiple links have programmed to reduce error. Examples of these fields are Relationship, Age, Sex and Total amounts. Looking at illustration 19, we can see an example of an inline error message that we invoked when the operator tried to enter a Total amount that did not sum to the amounts previously entered in “20355 Amount.” It is important to double check the values written on the expenditure line and the calculations on the form this is because there is no other way to check for correct values other than matching sums and calculated totals.

**19** **2.2 Utilities & Communication Expenditures** M2-page 07

	20352 Exp. code	20353 Detailed description	20354 Benef.	20355 Amount	20356 Location provider	20399 Obs	203 COICOP
1	1.1	monthly electricity	1	50	1		045112501
2	7.1	telephone bill	1	50	1		083020904
3	7.3	Error: Total amount does not equal the sum of entered amounts in Q20355. Please double check the entered values.	1	50	1		083020908
4	3.1	Press F8 to clear.	1	120	1		045212601
5	7.2	telephone line rental	1	100	1		083020905
6							
7							
8							
9							
10							
Total amount				350			

### Entering Information in the Detail and Expenditure Sections

[20] Some parts of the questionnaire there will be a detail section where it will require the use of a mouse to put a mark in the intended field box. This can be seen in the example below. In the detail section 2.5.1, if an operator enters a “1” in Q20503, the check boxes as mimicked in the questionnaire will become active and will be indicated by these characters “=>” and “<=”. To mark a field (purchase, rent or repair), all that is needed is to use your mouse to click on the appropriate field box.

After you have entered the information collected in the detail section of the questionnaire, we must now enter all relevant information in the expenditure section 2.5.2. The computer will automatically check for marked expenditure types in the detail section with the data entered in the expenditure section. As a side note you will get an error if –

- 1) An item is marked in the detail section “#.#.1” but it is not listed in the expenditure section “#.#.2.” Or,
- 2) An item is listed in the expenditure section “#.#.2” but it is not listed in the detail section “#.#.1”

Line no.	Do you own?	In the last 12 months, did you spend on?	Expense code	Items description	Expenditure type (mark 'X' if applicable)			NO ID
	1. Yes	2. No			Purchase	Rent	Repair	
20501	20502	20503	20504	20505	20506	20507	20508	20549

#### 1 - Purchases related to furniture, furnishings and floor coverings

01	1	2	101	Beds, mattresses, bedroom sets (headboards, frames, etc.)				
02	2	2	102	Sofas, lounge chairs, couches, sofa sets, etc.				
03	1	2	103	Tables (dining, coffee, desks, etc) or table sets				
04	2	2	104	Floor lamps, fittings, hanging lights				
05	2	2	105	Other significant indoor furniture (book shelves, stands)				
06	2	2	106	Outdoor furniture, deck furniture, folding chairs/tables, etc.				
07	1	1	107	Carpets, rugs, mats and local mats	X			

#### S2.5.1 Household Goods & Assets Identification

M2-page 10

20502 own?	20503 spend?	20504 Exp. code	20505 Expenditure description	=>	20506 Purchase	20507 Rent	20508 Repair	<=	20549 Obs
1	1	2	1,0,1 Beds, mattress, bedroom sets (headboard						
2	2	2	1,0,2 Sofas, lounge chairs, couches, sofa sets						
3	1	2	1,0,3 Tables (dining, coffee, desks, etc.) or						
4	2	2	1,0,4 Floor lamps, fittings, hanging lights						
5	2	2	1,0,5 Other significant indoor furniture (book						
6	2	2	1,0,6 Outdoor furniture, deck furniture, foldi						
7	1	1	1,0,7 Carpets, rugs, mats and local mats	=>	X			<=	

#### S2.5.2 Household Goods & Assets Expenditure

M2-page 11

20552 Exp. code	20553 Detailed description	20554 Exp. type	20555 Benef.	20556 Amount	20557 Loc prov	20558 Prov	20559 Obs	205 COICOP
1	1,0,7 new rug	2	2	1,0,0	2	2		0,5,1,2,1,4,0,0,4
2	2,0,1 new blankets	2	2	5,0	2	2		0,5,2,1,1,4,4,0,4
3	3,0,7 microwave	2	2	3,0	2	2		0,5,3,1,1,4,9,0,4
4	4,0,3 dvd players	2	2	1,5,0	2	2		0,9,1,1,2,1,0,0,3
5	5,0,1 computers	2	2	7,5,0	2	2		0,9,1,3,2,1,5,0,4
6								
7								
8								
9								
10								

205 Total amount 1,0,8,0

[21] Sometimes, the detail section in module 2 or module 3 will contain a bit more added information other than identifying transactions. Looking at illustration 21 below shows a snippet of section 2.6.1 Vehicles and Accessories Details and under column 20602 needs the number of vehicles that was reported by the household.

In other parts of the questionnaire, the detail and expenditure sections have been combined into one section such as S2.6.0. This is because no other expenditure details that are required except from the purchases presented.



**It is a common error for the enumerator to record "1" and "2" for yes and no, respectively, for the number of vehicles owned by the household.**

	20602 How many?	20603 pay?	20604 Exp. code	20605 Expenditure description	21
1	0	2	1,0,1	Car or station wagon	
2	0	2	1,0,2	Pick-up truck or utility vehicle	
3	1	2	1,0,3	Truck, bus, or van	
4	1	2	1,0,4	Motorcycle, quad-cycle, or scooter	
5	0	2	1,0,5	Bicycle or any other pedal powered vehic	
6	1	2	1,0,6	Boat with motor	
7	0	2	1,0,7	Boat without motor (including canoe)	
8	0	2	1,0,8	Any other vehicle not mentioned above	
9	0	2	2,0,1	Outboard motor	

	20902 pay?	20903 Exp code	20904 Expenditure description	20905 Amount	20906 Loc of recip	20999 Obs.
1	1	1,0,1	Cash for Birthday	1,0,0	1	
2	2	1,0,2	Cash for Funeral			
3	2	1,0,3	Cash for Wedding			
4	2	1,0,4	Cash for Graduation			
5	2	1,0,5	Cash for House warmings			
6	1	1,0,6	Cash for Traditional Function	2,0	1	
7	2	1,0,7	Cash for Misinale			
8	2	1,0,8	Cash for other events			
209 Total amount				1,2,0		

### Individual Expenditures and Expenditure Grouping

[22] The education section of module 3 show below is a sample of the individual expenditure details. It is similar to the details sections in module 2 except of showing a list of expenditures on the rows it is replaced by the list of current household members and two extra rows, one for previous member of the current household (line 60) and the other for persons in another household (line 90).

To start entering information in the detail or expenditure sections in module 3 there will be a qualifier field as shown below as "Incur any expenses?" Entering a "1" (for yes) in this field will allow the operator to add subject information in the entry system. Entering a "2" (for no) will automatically skip to the next subject area.

Again the enabled field boxed are linked to the roster/flap page, the "=>" and "<=" symbols will notify the operator which rows are clickable to mark expenditure groupings.



**Remember that we are interested in who benefited from the HOUSEHOLD's purchase. It is a common mistake to record the person that purchased the item.**

### S3.1.1 Education Identification

22

301 Incur any expenses: **1**

Current Person Another household

	30101 HM No.	30102 grant?	=>	30103 Kinder 1	30104 Primary 2	30105 Secondary 3	30106 Tertiary 4	30107 Other 5	30108 Boarding 6	30109 Uniform 7	30110 Books 8	30111 Stationaries 9	30112 Events 10	30113 Other 11	<=	30149 Observation
1	1	2	=>												<=	
2	2	2	=>												<=	
3	3	2	=>			X			X		X				<=	
4	4	2	=>							X					<=	
5	5	2	=>							X					<=	
6																
60	6,0		=>												<=	
90	9,0		=>												<=	

[23] Just like the paper questionnaire, there are areas that need numerical values and there are areas that need marks such as Xs. The illustration below shows how the X-mark is converted to single line expenditures. There should be one or more reported expenditures for every X-mark shown in the details section.

In the expenditure section, record the expenditure code first then record the household member number that benefited from the purchase.



**There is a common mistake to confuse the “Exp. Code” column and the “Benef.” column. Operators often times swap the two values. Be sure that you record the expenditure code first the record the beneficiary next.**

### S3.6.1 Alcohol & Tobacco identification

23 M3-page 12

306 Incur expenses? **1**

Current Person 01:Male Age: 45 John S.

	30601 HM No.	30602 Drink alcohol	30603 Drink kava	30604 Smoke tobacco	30605 Number of cigarettes	=>	30606 Beer 1	30607 Wine 2	30608 Spirits 3	30609 Homebrew 4	30610 Cigarettes 5	30611 Imported tobacco 6	30612 Local tobacco 7	30613 Kava 8	<=	30649 Obs
1	1	1	2	1	5,0	=>	X				X				<=	
2	2	1	2	2		=>		X							<=	
3	3	2	2	2		=>									<=	
4																

### S3.6.2 Alcohol & Tobacco identification

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Current Person 01:Male Age: 45 John S.

	30652 Exp code	30653 Detailed description	30654 Benef	30655 Amount	30656 Prov	30699 Obs	306 COICOP
1	1	beer	1	1,0,0	1		0,2,1,3,0,7,9,0,4
2	2	wine	2	5,0	1		0,2,1,2,0,7,8,0,1
3	5	cigarette	1	2,0	1		0,2,2,1,0,8,2,0,1
4							

306 Total Amount 1,7,0

[24] Sometimes, it is hard for household respondents to remember how much they paid for every item that they have purchased over the year. For example, the illustration below shows a filled questionnaire for education expenditures. On lines five, six and seven, there is a note that states that the household had purchased three sets of school uniforms for the children in the household. The household does not remember how much each set costs but the respondent knows that she has spent \$280 dollars in total. Because the entry does not accept zeroes “0” as valid value we have to

distribute the \$280 dollars evenly between the three children in the household. The first person was assigned \$100 for his uniform and then we split the \$180 dollars, evenly, for the other two uniforms coming out to \$90 apiece. We have to make sure that we distribute the grouped amount almost evenly and make a note about the grouping.

24	EXPENSE CODE	DETAILED DESCRIPTION OF THE EXPENSES	BENEFICIARY	TOTAL AMOUNT PAID	LOCATION OF PROVIDER	NOTE ID
Line no.	1 to 11		[HM] # 60. List S1.6 90. Another HH	TOP\$	1. Within Tonga 2. Outside Tonga	
30151	30152	30153	30154	30155	30156	30199
<b>1. List here all the annual expenses from the list in S3.1.1</b>						
01	03	Secondary school fee	03	\$ 5,000.00	2	
02	06	Boarding fee	03	\$ 5,000.00	2	
03	08	Science text book	03	\$ , 50.00	2	
04	08	Math text book	03	\$ , 50.00	2	
05	07	School uniform	04	\$ , 280.00	2	1
06	07	School uniform	04	\$ together w/ top	2	1
07	07	School uniform	05	\$ together w/ top	2	1
<b>NOTES</b>						
1	Head paid \$280 total for three uniforms. Two for HM 4 and 1 for HM 3. She does not know how much each uniform costs.					

30152 Exp code	30153 Detailed description	30154 Benef.	30155 Amount	30156 Location provider	30199 Obs	301 COICOP
3	secondary school fees	3	5,000	2		102025901
6	boarding fees	3	5,000	2		112026901
8	science text book	3	50	2		095125002
8	math text books	3	50	2		095125002
7	school uniform	4	100	2	1	031209313
7	school uniform	4	90	2	1	031209313
7	school uniform	5	90	2	1	031209313
8						
9						
10						
301 Total amount			10,380			

301b ID	301b Observation note
1	Head paid \$280 total for three uniforms. Two for
2	hm4 and one for hm3. She does not know how much
3	each uniform costs

## Entering Income Information

[25] Many parts of module 4 are the same as the previous modules so we are just going to look at some little things that we should be aware of when entering information in module 4.

Asides from module 1, module 4 section 4.1.1 to 4.1.3 contains interactive coding systems for industry and occupation. We cannot assume that the industry and occupation codes are going to be the same and so we have to reassign new industry and occupation codes each time we enter a description for each.



**Be sure that all the amount/dollar values are annualized in the Wages section. It is common for respondents to report fortnightly or monthly amounts.**

Fortnightly amount x 26 = Annual  
Weekly amount x 52 = Annual  
Monthly amount x 12 = Annual



The wages section is linked to module 1's activity section. You may get an error if a wage job is listed in module 1 but not listed in the wages section or module 4. Here are the two codes in Module 1 that should be recorded in module 4.

03 – Employee, working for wages/salary in public sector (incl. NGOs, UN agencies)

04 – Employee, working for wages/salary in private sector

All amount/dollar values are required unless it has been systematically skipped. If the computer wants a dollar value and none has been provided, enter a zero to prevent error messages from being displayed.

**S4.1.1 Wages & Salary - Characteristics** Currently have a wage & salary job 1 M4-page 25

40102 HH mem	40103 Occupation + Occupation code	40104 Industry + Industry code	40105 Sector	40106 Regular cash pay	40107 Overtime bonus	40108 Housing	40109 Other	40110 Total wages salaries	40111 Obs
a <span style="border: 1px solid yellow; padding: 0 2px;">2</span>	<span style="background-color: yellow;">NURSE</span> <span style="border: 1px solid yellow; padding: 0 2px;">2 2 2</span>	<span style="background-color: yellow;">HOSPITAL</span> <span style="border: 1px solid yellow; padding: 0 2px;">8 6 1</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1 8 0 0 0</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1 0 0 0</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1 2 0 0</span>	<span style="border: 1px solid yellow; padding: 0 2px;">0</span>	<span style="border: 1px solid yellow; padding: 0 2px;">2 0 2 0 0</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1</span>

Make sure all values are filled-in.

**S4.1.2 Wages & Salary - Previous jobs in the last 12 months** Other wage & salary jobs 2

40122 HH mem	40123 Occupation + Occupation Code	40124 Industry + Industry code	40125 Amount	40126 Obs
a <span style="border: 1px solid yellow; padding: 0 2px;">1</span>	<span style="background-color: blue;">Interactive coding</span>			

Auto skipped to next section, if "2" (for No) is entered in similar fields.

**S4.1.3 Wages & Salary - Overseas jobs in the last 12 months** Overseas wage & salary jobs 2

40132 HH mem	40133 Occupation + Occupation code	40134 Industry + Industry code	40135 Country worked	40136 Weeks worked	40137 Amount	40137 Obs
a <span style="border: 1px solid yellow; padding: 0 2px;">1</span>						

[26] Below is a snippet of a filled agriculture activities section. This whole section will be bypassed if the engagement qualifier in the previous page is a "2" (for "no"). This is the same for fishing, livestock and handicraft sections. Keep in mind that red fields are fields that have been recently entered; yellow fields have been skipped and the blue field is the active field.

**S4.2.2 Income from agriculture & forestry activities** 26

	40251 Crop code	40252 Crop description	40253 Harvest	40254 Sell	40255 Amount	40299 Crop description (note)
1	<span style="border: 1px solid blue; padding: 0 2px;">1</span>	Tomatoes	<span style="border: 1px solid red; padding: 0 2px;">2</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1 1 1 1</span>	<span style="background-color: yellow;"></span>
2	<span style="border: 1px solid blue; padding: 0 2px;">2</span>	Cucumber	<span style="border: 1px solid red; padding: 0 2px;">1</span>	<span style="border: 1px solid red; padding: 0 2px;">1</span>	<span style="border: 1px solid red; padding: 0 2px;">2 0</span>	<span style="background-color: red; color: white;">ONLY SOLD ONCE</span>
3	<span style="border: 1px solid blue; padding: 0 2px;">3</span>	Beans	<span style="border: 1px solid red; padding: 0 2px;">2</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1 1 1 1</span>	<span style="background-color: yellow;"></span>
4	<span style="border: 1px solid blue; padding: 0 2px;">4</span>	Pumpkin	<span style="border: 1px solid red; padding: 0 2px;">1</span>	<span style="border: 1px solid red; padding: 0 2px;">2</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1 1 1 1</span>	<span style="background-color: red;"></span>
5	<span style="border: 1px solid blue; padding: 0 2px;">5</span>	Capsicum	<span style="border: 1px solid blue; padding: 0 2px;">2</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1</span>	<span style="border: 1px solid yellow; padding: 0 2px;">1 1 1 1</span>	<span style="background-color: yellow;"></span>

[27] S4.6 Income as Non-subsistence Business Owner is the only section that combines two pages into one entry form. This layout allows the operator to see multiple items related to one business in one continuous line. The benefit of showing all the items in one line is that the operator can easily see related items and allows to spot error or inconsistencies easily.



40601 Business code No.	40602 Business description + Industry	40603 HH mem 1	40604 HH mem 2	40605 HH mem 3	40606 HH mem 4	40607 Loca- tion	40608+40609 Length of operation	40610 No. external workers	40611 Gross revenue	40612 Expenses	40613 Net profit
1	FISH EXPORT	3	1			2	yr3-> .5 mons-> .0	.5	7,000,00	5,500,00	1,500,00

Make sure all amount values are filled-in.

40614 %Household share	40615 Have expenses	40616+40617 Major Exp 1	40618+40619 Major Exp 2	40620+40621 Major Exp 3	40622+40623 Major Exp 4	40624+40625 Major Exp 5
100	1	Code -> .1 Percent -> 55	Code -> .6 Percent -> 25	Code -> 14 Percent -> 5	Code -> 8 Percent -> 5	Code -> 3 Percent -> 10

The sum of all expenditures must equal 100 percent.

## Entering Diary Information

[28] Just like the other modules, the diary will have a cover page. Below is an example of the diary's cover page. Almost every entry page/form should contain "note" section where the enumerator or household can write a note. In this case, the enumerator wrote a note that tells the supervisor that he/she deleted some lines in the diary because they were not real home consumption items such as rice and tin fish.

The first day of the diary should be the same as module 1's interview date and the last day of the diary should be about seven day later. Not every day will have a purchase or transaction, so it is important to confirm from the household that no items were purchased, received or home produced.



**Households normally put items they consume on a daily basis such as cereal, milk, rice, canned beer, etc. in the HOME PRODUCED section. This section is only for items grown, harvested, caught or raised by the household.**

## WEEK 1 - Household Diary

First Day of the Diary

12 8 2015

[ DD ] / [ MM ] / [ YYYY ]

Last Day of the Diary

18 12 2015

[ DD ] / [ MM ] / [ YYYY ]

Date Data Entry Completed

19 12 2015

[ DD ] / [ MM ] / [ YYYY ]

Diary 1 note

I removed some items recorded in the HOME PRODUCED CONSUMED sections because the household recorded items such as rice and tinned tuna.

[29] The first part when entering diary data is to enter the appropriate day that corresponded to the first visit. In our example, the household was first visited on a Saturday. Although the first visit should have been on a Monday or Tuesday, the aim of this example is to show that it is possible for the household to schedule a visit a few days earlier. The dates should be consecutive and should



match the day field. There are no error check enabled in this area so take extra care to enter the correct day and date.

If item were purchased or recorded then leave the “No ...today” field blank and the entry system will automatically move to line one, so that you can record the items purchased.

If you want to stop entering data, enter a blank on the next description field and the entry system will automatically move to the next section.

If no items were purchased then entering any number or letter in the “No ... today” field will replace the content with an “X” and automatically move to the next section.

Week 1 Day 1  
**PAGE 4**

MON TUE WED THU FRI SAT SUN  
☐ ☐ ☐ ☐ ☐ ☒ ☐

DAY MONTH YEAR **29**  
**12 8 15**

**S5.1 - Section 1: Any FOOD items your household bought this day** ☐ No food today

	Description	Type	Qty.	Unit	Amount	Purpose	COICOP
1	BREAD	1	2.0	31	10.00	1	011100301
2	TIN FISH	5	3.0	18	15.00	1	011302510
3	CABIN BISCUIT	5	8.0	15	8.00	1	011100502
4	ONION	2	0.5	2	10.00	1	011704516
5	LOLLIES	7	1.0	33	5.00	1	011805501
6							

Entering a BLANK in this field will stop the list and jump to the next section.  
Entering a blank is simply pressing the enter key on an empty field.

Week 1 Day 1  
**PAGE 5**

Entering an “X” in this box will skip the current section and move to the next section.

**S5.3 - Any items received for free as a gift today (food & non food)** ☒ No gifts today

	Description	Type	Qty.	Unit	Amount	COICOP
1						
2						
3						
4						
5						
6						
7						
8						

**S5.4 - Section 1: Which home produced items did you CONSUME today?** ☐ No consumption today

	Description	Origin	Qty.	Unit	Amount	COICOP
1	A.T.U.	8	10.0	2	30.00	893473643

[30] Some data fields have popup prompts that allow the operator to choose a relevant item. Looking at illustration 30 below shows three fields where this is enabled. We have tried to list all the common food types and sometime there will not be a good description. If this is the case, you can use a blank/non-food as a type code and we can code this later.

For unit we try to get actual dry or liquid weight. If this is not possible then the type of packaging will suffice.

For the origin popup, there are places that the household would normally get their foods or home produced items. There are special codes that are included in the origin popup. These are items

receive from friends, family outside the household, neighbors, stores, markets, government, NGOs, and/or churches. These items should not be included in the home produced section but if you want to add them, you can but make sure to provide the appropriate origin code.

30

1	Description	Type	Qty.	Unit	Amount
1	BREAD	1	2.0	31	10.00

**Type**

- 1 Dry (e.g. rice, flour) ✓
- 2 Fresh (uncooked) ✗
- 3 Frozen (uncooked) C
- 4 Cooked / Fried / Baked (incl. frozen dinners) 👉
- 5 Canned or bottled foods and drinks
- 6 Spices, sugars, salts, oils, condiments
- 7 Snacks, nuts, candies, chips, ice-cream
- 8 Alcohol (e.g. beer, vodka, wine)
- 9 Other foods, vitamins, supplements
- Non-food

**Unit**

- 1 (g) Grams ✓
- 2 (kg) Kilo-grams ✗
- 3 (pt) Pints C
- 4 (ltr) Liters 👉
- 5 (qt) Quarts
- 6 (gal) Gallons
- 7 (oz) Ounces
- 8 (lbs) Pounds
- 9 Bag
- 29 Jugs ...
- 30 Kit
- 31 Loaf
- 32 Lot
- 33 Packs
- 48 Tray ...
- 49 Tube
- n.a.

**S5.4 - Section 1: Which home produced items did you CONSUME today?**

1	Description	Origin	Qty.	Unit	Amount
1	A.T.U.	8	10.0	2	

**Origin**

- 1 Animal pen ✓
- 2 Beach ✗
- 3 Farm C
- 4 Forest / Jungle 👉
- 5 Garden
- 6 Lagoon
- 7 Mangrove
- 8 Ocean
- 9 Orchard
- 10 Own property
- 11 Pond / lake
- 12 Reef
- 13 River / stream
- 80 Family, friend, neighbor (remove)
- 81 Store (remove)
- 82 Government, church, associations and organizations (remove)

## Things to remember



You will need an active Internet connection to send the data to our servers. It is best to send the whole BLOCK first. If any clarifications or corrections are needed, sending corrected SEQ\_NUM level cases will be sufficient.



The restore program will only work with case/household SEQ\_NUM level backups. So do not forget to back up all households level items in the computer on a regular basis.



A reliable Internet connection is required to update the HIES program. If you are unsure if you have an active Internet connection, contact your HIES IT team.



During the update process, the computer's command box will stop and ask for your confirmation to overwrite the files in the computer. It is OK, press "a" to overwrite/update the files.



Do not forget to update the Module and Diary Status codes each time you begin to enter the data. Often times data entry operators, forget to update these fields.



Module data must be entered a day or two after the module has been completed. The computer will flag errors that will need to be corrected. The best way to get good data is to find the errors in the data and quickly correcting those errors while your enumerators are still in the field.



Try to have your enumerators create the household listing recording Head and Spouse on the first two lines, then try to list everyone from oldest to youngest.



Try to enter as much information without using the mouse to navigate to a particular field. The entry program has built in flow control to allow you to enter day efficiently just by using the keyboard.



Do not spend too much time trying to accurately code Industry and Occupation. If you are unsure, coding a MISSING [9999] is better than incorrectly coding an item.



During interactive coding, try searching different words or using a part of a longer word, the smaller the search word the more results will be displayed.



Do not spend too much time trying to find the most accurate COICOP code. It is better for us if you code an item as MISSING [999999999].



You must try your best to correct all the errors before you submit the data to the servers.



It is a common error for the enumerator to record "1" and "2" for yes and no, respectively, for the number of vehicles owned by the household.



Remember that we are interested in who benefited from the HOUSEHOLD's purchase. It is a common mistake to record the person that purchased the item.



There is a common mistake to confuse the "Exp. Code" column and the "Benef." column. Operators often times swap the two values. Be sure that you record the expenditure code first the record the beneficiary next.



Be sure that all the amount/dollar values are annualized in the Wages section. It is common for respondents to report fortnightly or monthly amounts.

Fortnightly amount  $\times 26 =$  Annual

Weekly amount  $\times 52 =$  Annual

Monthly amount  $\times 12 =$  Annual



The wages section is linked to module 1's activity section. You may get an error if a wage job is listed in module 1 but not listed in the wages section or module 4.

- |  |
|--|
| 03. Employee, working for wages/salary in public sector (incl. NGO, UN agencies) |
| 04. Employee, working for wages/salary in private sector                         |



Households normally put items they consume on a daily basis such as cereal, milk, rice, canned beer, etc. in the HOME PRODUCED section. This section is only for items grown, harvested, caught or raised by the household.