



International Comparison Program

[07.02]

ICP COUNTRY SOFTWARE

(Household Consumption Items & Compensation)

System Requirement Specifications

Version 1.9

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1. Introduction

1.1 Purpose

This System Requirement Specifications document provides a description of the requirements given by the client and/or sponsors of this project. This document will also show which software modules and features of the ICP Country Software will support these requirements. This document is dynamic in the sense that as new software modules and their requirements are specified by the client, these will be added to this document.

1.2 Scope

The scope of this document at present covers only the modules and features of ICP Country software and then again for the Household Consumption (HHC) items and Compensation only.

1.3 Requirement Numbering and Traceability

Following is the numbering format used in this document. The requirement specifications is organised in the following way

- Modules (CTY_M<nnn>)
 - Features (CTY_F<nnn>)
 - Requirements (CTY_R<nnn>)
- <nnn> - Three digit continuous numbering
Example: **CTY_M001** Data Collection for HHC Items
CTY_F001 Setup
CTY_R001 on Screen

1.4 Definitions and Acronyms

Following are the definitions and abbreviations used in this document:

Term	Description
ICP	International Comparison of Prices
Price quotation	This is the price quoted by a vendor for a product item as specified in the ICP product list. The price quotation is basically the complete database record that includes information on the product, the outlet (shop, where this product is priced, the type of that outlet code) the monthly price, the variety description, the geographic area code, the month the price was collected, and all other attributes such

	as rural/urban, domestic/imported, sale price/regular price, seasonal/non-seasonal, etc.
Location Types	These are attributes that classify the demography of the survey location, for example- Rural/Urban, High/Mid/Low Income etc. The list of attributes would be configurable by the Region for their countries This is used to take multiple logical views on the same physical Location hierarchy. The physical nature of the Location hierarchy, which remains the same across all the logical views, is preserved by the parent child relationship.
Weights	This refers to the purchasing power information that is captured at the elementary product level.
UI	User Interface
UoM / UOM	Unit of Measure
PC	Price Collector
HHC	Household Consumption Items
Basic Heading	In principle, basic heading consists of a group of similar well-defined products, from which sample of products can be selected that are both representative of their types and purchases in participating countries. In practice, a basic heading is defined as the lowest level of final expenditure in the GDP, for which explicit expenditures can be estimated.
IHSN ToolKit	International Household Survey Network's (IHSN) software tools which provide features for storing survey questionnaires, documentation on the surveys as well as survey responses (data). The IHSN Toolkit uses international standards called Data Documentation Initiative (DDI) for documenting the data.
Outlet Types	Set of five or six choices that characterize an outlet where price observations are collected. These can be: Department Store, Market, Street Vendor etc. These types could vary from region to region.

1.5 References

Following are the references (other Word or Excel documents, minutes of meetings (MoMs) etc.) made while preparing this document:

Sr. No.	Reference	Version	Date	Description
1.			<DD – Mon – YYYY>	
2.				

2. Overview

2.1 Objective

Design, develop and test ICP country software that meets the needs specified in this document. The system (s) to be designed will be software modules that address a set of closely aligned functions. For example, a price data entry module will do just that – allow users to enter their price data into the system and save it. The design should ensure that each module works independently. That is, it can be installed and used separately.

2.2 Current Practice

In the last round of the ICP in 2005, countries were free to choose the software that would let them record and validate the prices. Some countries used their CPI software, others used their own-developed software, and some others used the Price Collection Module of the ICP Tool Pack developed by the WB.

2.3 Proposed Solution

2.3.1 HHC

The ICP country model for HHC will have Data Entry, and the Data Validation & Averaging modules. Observations will be either directly entered, or, imported into data entry module via formatted Excel sheets. Price observations will be validated and averages calculated in data validation module. All data Validated observations will be exported from the ICP Country Software and manually imported into IHSN toolkit for transferring data from country to region. At this time only arithmetic or geometric means will be supported. Once the requirements for weighted averages are provided, the option for preparing weighted averages can be included.

2.3.2 Compensation

The ICP country model for Compensation will only Data Entry module. Observations will be directly entered into data entry module using the screens provided in the application. The raw observations will be exported from the ICP Country Software and manually imported into IHSN toolkit for transferring data from country to region.

2.4 Functional Overview

The International Comparison Program is a series of statistical surveys held worldwide to collect price data for a sample of commonly bought goods and services. It is a uniquely complex statistical exercise involving national, regional and international agencies and is overseen by a Global Office located in the World Bank. Surveys are held every three to five years, depending on the region, and the data collected are combined with other economic variables from countries' national accounts to calculate Purchasing Power Parities. PPPs help data users and donor organizations target programs more effectively, and assist international markets by identifying the relative productivity and investment potential of different countries.

2.5 Functional Architecture

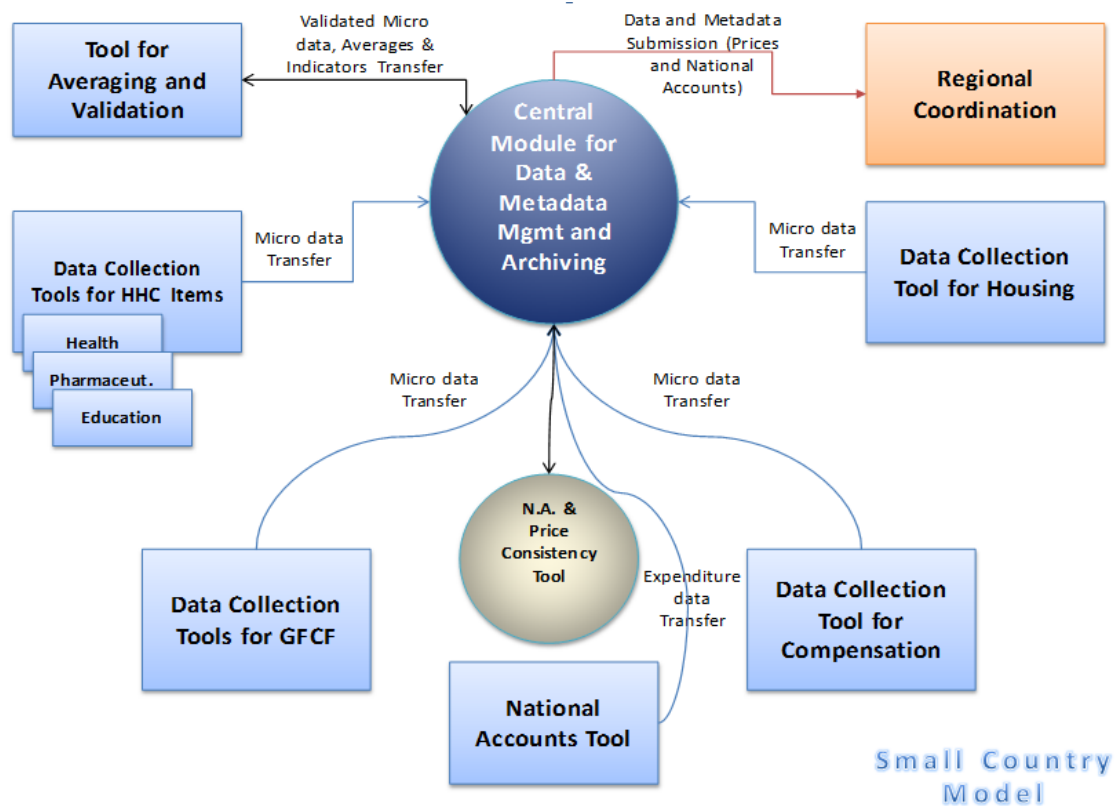


Figure 1: Small Country Model

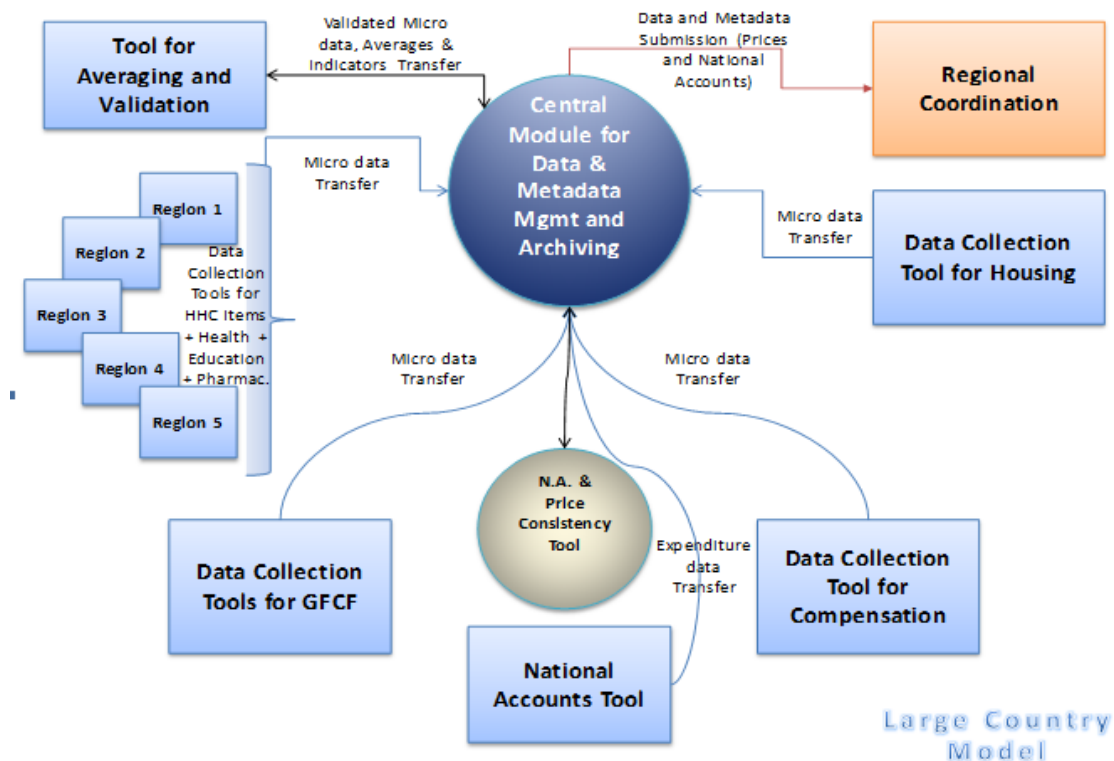


Figure 2: Large Country Model

2.6 Technical Overview of the ICP Country Software

System will be developed with the following environment,

- Visual Basic .Net 2005
- SQLite database
- Excel 2003/2007 components
- DevExpress windows components

User interface will be developed using VB.Net & DevExpress windows components. Database storage handled in SQLite database. Export feature will use the excel components.

Refer to the technical architecture below.

For HHC items Data entry module will have the capability to store/upload the observations and also to export into excel. Data validation module will do the validations and calculate the averaging and export the calculated averages into excel.

2.7 Technical Architecture for HHC items

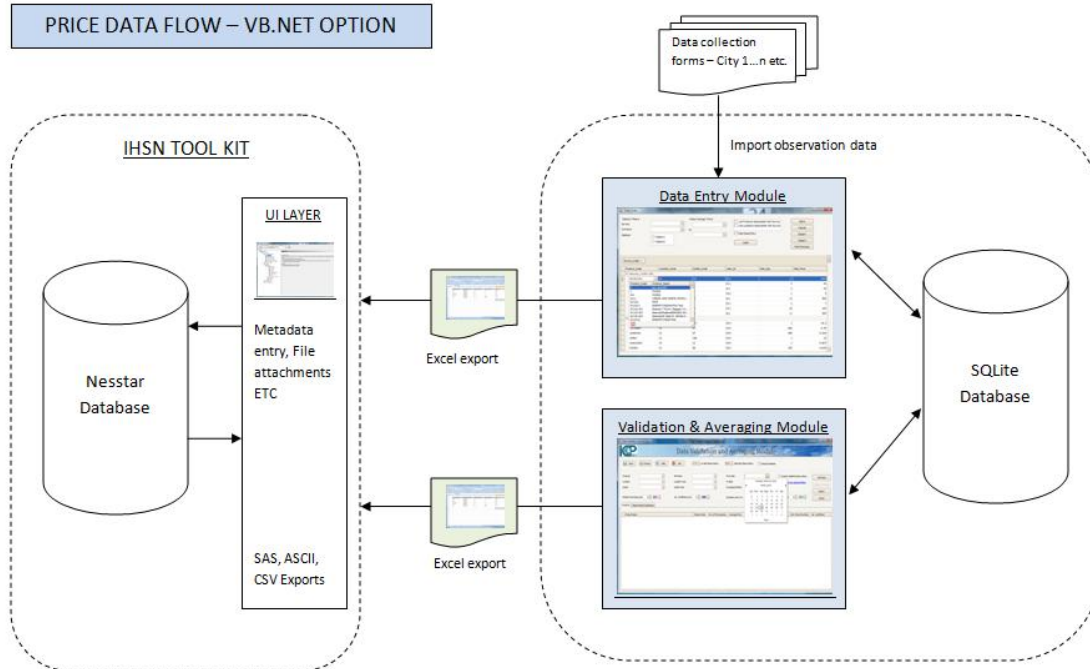


Figure 3: Technical architecture (HHC)

This architecture represents a standalone application for each module and all the modules will be using the same SQLite database.

- **Data Entry Module**
 - Master lists received from the Region will be uploaded into this module and the uploaded data will be stored into SQLite database
 - Observations will be entered / uploaded into the data entry screen and observations will be stored into SQLite database. Already saved master data will be used here to perform the basic validations in the screen like invalid product code, etc, and also user can select the master list lookup to pick an item from the list
 - Observations can be exported into excel sheet and manually imported into IHSN tool kit.
 - This module UI will be developed using VB.Net 2005 and data will be stored into SQLite database. Excel 2003/2007 required to view/modify/upload the excel sheets(master list or observations)
- **Data Validation and Averaging Module**
 - Observations entered/uploaded through the data entry module that are already stored in SQLite database will be used for validation and averaging observations

- This module will validate the observations and system will calculate & display averages in the screen
 - Validated observations can be saved and the data will be stored in SQLite database
 - The average calculated data can be exported into excel in a predefined template
 - Validated and averaged data can be exported into excel sheets and those are manually imported into IHSN toolkit.
 - This module UI will be developed using VB.Net 2005 and data will be stored into SQLite database. Excel 2003/2007 required to view/modify/upload the excel sheets(master list or observations)
- SQLite Database
 - SQLite database will be used to store the data from the data entry and data validation & averaging modules.
 - IHSN Toolkit
 - The exported excel sheet from data entry or data validation & averaging module will be manually imported into IHSN toolkit. IHSN toolkit internally stores the uploaded metadata and micro data into its own format and that data will be transferred into the Region.

2.8 Technical Architecture for Compensation

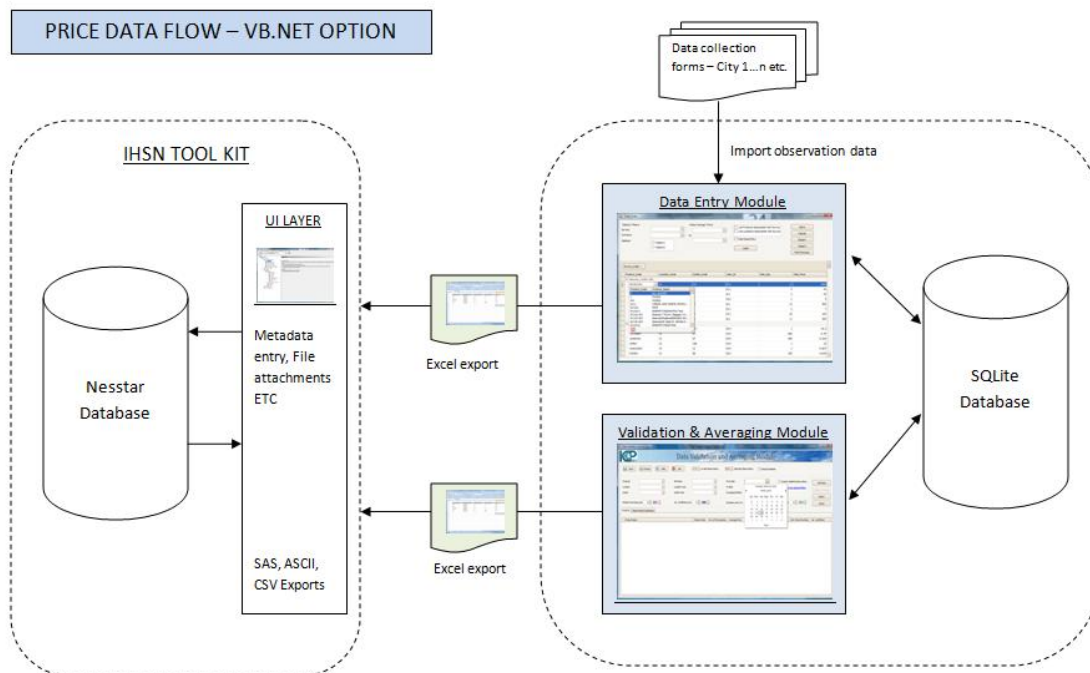


Figure 4: Technical architecture (HHC)

This architecture represents a standalone application for the compensation module. This module will use the same SQLite database which is being used by the HHC module.

- Data Entry Module
 - Reference Data (Master lists) received from the Region will be uploaded into this module and the uploaded data will be stored into SQLite database
 - Observations will be entered / uploaded into the data entry screen and observations will be stored into SQLite database. Already saved master data will be used here to perform the basic validations in the screen like invalid Occupation code, etc, and also user can select the master list lookup to pick an item from the list
 - Observations can be exported into excel sheet and manually imported into IHSN tool kit.
 - The UI for this module will be developed using VB.Net 2005 and data will be stored into SQLite database. Excel 2003/2007 required to view/modify/upload the excel sheets(reference data (master list))
- SQLite Database
 - SQLite database will be used to store the data
- IHSN Toolkit
 - The exported excel sheet from data entry module will be manually imported into IHSN toolkit. IHSN toolkit internally stores the uploaded metadata and micro data into its own format and that data will be transferred into the Region.

2.9 User Characteristics

- End users would be required to have basic knowledge of the following, to use this application,
- Windows Operating System
- Microsoft Excel

2.10 Language Requirements

Following are the language requirements:

- Application basic version to be developed using English
- System supports the following languages,
- Languages need to be specified

2.11 Assumptions and Dependencies

Following are the assumptions and dependencies made for this solution:

- System will export the observations that should be manually imported into IHSN toolkit. System will not support any development or maintenance activities in IHSN toolkit. There is no automatic data transfer from ICP country software to IHSN toolkit.
- The observations for HHC should be imported from pre-defined excel sheet template. Countries using their own data entry system have to convert their data into pre-defined excel sheet template before uploading the observations into the system
- Assuming ICP team will convert the label/text messages used in the application into specific languages.

3. Non-Functional Requirements

3.1 Software Environment

3.1.1 Software

Sr. No.	Software Name	Version Details	Purpose
1.	Microsoft Windows	XP with SP3, Vista Professional edition	Operating System(It contains .Net Framework 2.0 and above versions)
2.	Microsoft Excel	2003, 2007	Excel Export and Import
3.	Adobe acrobat	9.0 and above	PDF export

3.2 Interfaces

3.2.1 Data Entry Module (HHC) - User Interfaces

The screenshot displays the 'Data Entry' application window. The title bar reads 'Data Entry'. The main window has a header 'DATA ENTRY MODULE - HHC ITEMS'. Below this header is a toolbar containing five buttons: 'Import', 'Save', 'Delete', 'Export', and 'Preview'. To the right of the toolbar is a link that says 'Download data entry template'. Below the toolbar are four input fields: 'Products', 'File Name', 'From date', and 'To date', each with a dropdown arrow. To the right of these fields is a 'Load' button. Below the input fields is a section titled 'Observations' which contains a large table. The table has a header row with the following columns: 'Obs. Date', 'Product C...', 'Product Name', 'Product Specificati...', 'Pref. Qty', 'Pref. UoM', 'Obs. Qty', 'Obs. UoM', 'Obs. Price', and '...'. The table body is empty. At the bottom of the window, there is a status bar that displays 'Record 5142 of 7943'.

Figure 5: Data entry screen

Data Entry Module

Country: Oman

Currency: []

Local Currency: OMR

Exchange Rate: 1 Apply

Master List From Region

Import Export

Select Default Database

Save

Create a New Database

Create

Rejected Observations

Obs. ...	Obs. UoM C...	Obs P...	Conv. ...	Price Collector N...	Curre...	Currency ...	Exchange R...	Comm...
0.20	12	0.40	12.00		OMR	1	1	

Figure 6: Data entry screen – Setup master list and currencies

3.2.2 Data Validation and Averaging Module (HHC) - User Interfaces

Data Validation and Averaging

DATA VALIDATION AND AVERAGING MODULE - HHC ITEMS

Save Preview Help Exit

Filters/Products Observations/Quotations

Products [] File Name [] From date [] To date [] Include validated observations []

Location [] Location Type [] Averaging Method [] Click here to view selected filters

Outlet [] Outlet Type []

TValue Limit [] Var. Coefficient Limit [] Tolerance Ratio Limit [] Min/Max Price Ratio Limit []

Get Data Validate / Average Export Cancel

Product	Name	No. of Price Quotations	Average Price	Min. Price	Max. Price	Min / Max Price Ratio	Var. Coefficient
---------	------	-------------------------	---------------	------------	------------	-----------------------	------------------

Figure 7: Validation filters /Product details screen

3.2.3 Software Interface

The following application interfaces would be developed in the ICP country software, to enable export/ import of data.

Sr. No.	Interface Name	Version Details	Purpose
1.	Microsoft Excel	2003, 2007	Excel Export and Import
2.	Adobe acrobat	9.0 and above	PDF export

3.3 Installation and Packaging

This section would describe the requirements for packaging and installation of the system

4. Functional Requirements

CTY_M001 Data Entry/Collection Tool for HHC Items

This module facilitates to import the master lists and captures data entry records for household consumption items

CTY_F001 Setup

Provides facility to import and manage the master list sent by the region in the form of excel sheets, manage currency units, select/change application database file and create a new database.

CTY_R001 Ability to import/upload master list from excel sheet

- Ability to import the following master list,
 - Products List (Read-only sheet)
 - UoM List (Add/Modify allowed)
 - Outlet Types (Add/Modify allowed)
 - UoM Conversion Factors (Add/Modify allowed)
 - Location Types (Add/Modify allowed)
 - Price Types (Read-only sheet). Following Price Type Codes and Names to be used in the application:

Code	Name
R	Regular Price
S	Sale Price
B	Bargained Price

- Country code will also be received through master list sent by region.
- Location Outlets list –
 - Region will send the blank Location Outlets list to country along with other master lists.
 - Country will fill the location, outlet details in the excel sheet and upload it into the system. This provides location/outlet master list and also mapping between location and outlets.
 - These uploaded location and outlet details will be used in data entry screen.
- Validate master list in excel sheet for the following,
 - Duplicate Records
 - Additional validations need to be defined

- Ability to import/upload master list from the exported excel sheet. Excel sheets used for import are password protected read-only sheets and those can be identified by the system using a unique identifier.

CTY_R002	Export Master List
-----------------	---------------------------

- Ability to export the master list into excel sheet

CTY_R003	Setup Currency
-----------------	-----------------------

- Ability to provide two types of currencies and set one of them as default (system will prompt for confirmation when setting the default currency).
E.g. Local Currency - \$ (Default)
Foreign Currency - £
- Once set, the default currency cannot be changed. Since this will affect all the existing observations with already converted price.
- Provide exchange rate from foreign currency to local currency.
- Converted price field for an observation will always be calculated for the default currency.
- Any change in exchange rate later, will affect only the new observations for which the converted price needs to be calculated.

CTY_F002	Data Entry
-----------------	-------------------

Allows price collector to enter/modify/upload the observations into the application

CTY_R004	On Screen data entry
-----------------	-----------------------------

- Ability to show the observations
- Ability to switch to data entry mode which will display only the required fields in the grid for data entry. For ex., list code columns like Product code, Location code, etc.,
- Allows to enter/modify observations with the following fields
 - Observation Date
 - Product Code
 - Product Name(Lookup will display products to choose)
 - Product Specification
 - Preferred Quantity
 - Preferred UoM
 - Observed Quantity
 - Observed UoM
 - Observed Price

- Price Type (e.g. Regular, Bargained etc)
- Converted Price(Formula = Observed Price * (Preferred Qty)/ (Observed Qty) * (UoM conversion factor)) * Conversion rate (to default currency) * currency unit
- Previous Price
- Currency (\$, £ etc)
- Currency Unit – default value is 1 (1/1000, 1/100, 1/10, 1, 10, 100, 1000, 10000, 100000 and also can be entered)
- Outlet Name
- Outlet Code
- Outlet Type
- Location Code
- Location Name
- Location Type
- Price Collector Name
- Comments
- Exchange Rate
- File name (Stored in the application, based on the last two exported file's name against each observation. File name can be partly generated with country code and date. This file name will be included in the exported excel sheet)
- Ability to do pagination for the observations list.
- Ability to filter /sort/group within observations

CTY_R005	Save observations
-----------------	--------------------------

- Ability to save the observations
- Perform basic validations based on the master list from the region
 - Product - Product code is valid based on the master list
 - Observed UoM - Observed UoM code exists in the master list.
 - Price should not be negative or zero or specified generic price range
 - Price Type – Price Type exists in the master list
 - Range of quantity (if min qty and max qty specified for a product specification)
 - Product specifications(Leaf Products) only used for data entry
 - Empty fields for mandatory entries like (product code, observed price etc)
 - Duplicate entries
 - Outlet Type – Outlet Type exists in the master list.
 - Location Type – Location Type exists in the master list.
 - Outlet Code – Outlet code exists in master list

- Location Code – Location code exists in master list
- Additional validations need to be defined.
- Highlight the above mentioned invalid observations. A separate Error column with '*' will be generated on screen to sort the invalid/valid observations.

CTY_R006	Delete observations
-----------------	----------------------------

- Ability to delete the observations record(s), from the database. (Even if the observation is already used in average price calculations)

CTY_R007	Export observations
-----------------	----------------------------

- Ability to export the observations into excel sheet (This exported excel sheet should be manually imported in the IHSN tool kit)
- Ability to export Location Outlets master list along with the exported observations
- Exported file name will be included in the exported excel sheet
- Ability to store the last two exported file names and the recent exported date and time for the exported observations.
- Location Outlets master list will be export along with this.

CTY_R008	Import observations
-----------------	----------------------------

- Ability to download a data entry template with pre defined columns.
- Ability to import using data entry template
- Perform basic validations based on the master list from the region
 - Product - Product code is valid based on the master list
 - Observed UoM - Observed UoM code exists in the master list.
 - Price should not be negative or zero or specified generic price range
 - Price Type – Price type exists in the master list.
 - Range of quantity (if min qty and max qty specified for a product specification)
 - Product specifications(Leaf Products) only used for data entry
 - Empty fields for mandatory entries like (product code, observed price etc)
 - Duplicate entries
 - Outlet Type – Outlet Type exists in the master list.
 - Location Type – Location Type exists in the master list.
 - Outlet Code – Outlet code exists in master list
 - Location Code – Location code exists in master list
 - Additional validations need to be defined.

- List the above mentioned invalid observation rows, with the issue description as a separate excel sheet.
- Ability to save the uploaded data collection records

CTY_M002 Validation and Averaging Tool for HHC Items

This module facilitates validation and calculation of average prices for the selected set of observations for household consumption items

CTY_F003 Validate Observations and calculate average price

Provides facility to validate the observations and part of the validation generates the average price.

CTY_R009 Validate observations and calculate average price

- Ability to filter the observations using the criteria(s) mentioned below,
 - Date Range – From and To dates
 - Product(can select multiple products)
 - Location(can select multiple locations)
 - Location Type (can select multiple)
 - Outlet(can select multiple outlets)
 - Outlet Type(can select multiple)
 - File Name(can select multiple)
 - Averaging Method (Arithmetic Mean ,Geometric Mean & Harmonic Mean)
 - MinMax Price Ratio Limit

Default Value: 0.6

Formula: $\text{MinMax Price Ratio} = (\text{Min Price (Converted Price)} / \text{Max Price (Converted Price)})$
 - Deviation Limit –

Default Value: 0.6

Formula: $\text{Deviation} = ((\text{Converted Price} - \text{Average Price}) / \text{Average price} * 100)$
 - T Ratio

Default Value: 1

Formula: $\text{T Ratio} = ((\text{Converted Price} - \text{Average Price}) / \text{Std. Deviation})$
 - CoV Limit

Default Value: 5

Formula: $((\text{STDEV}(\text{Converted Price}) / \text{AVG}(\text{Converted Price})) * 100)$

- During filtering, option to include already validated observations, to calculate average price for invalid and already validated observations combined.
- Ability to view the selected filter values in a popup screen
- Already validated observations can be modified.
- Ability to calculate and show the following for product specification level grouped by products (basic heading) from the observations, **(Table 1)**
 - Product
 - Name
 - No. Of Price Quotations
 - Average Price
 - Min. Price
 - Max. Price
 - Min / Max Price Ratio
 - Var. Coefficient (should be calculated for products with more than 2 observations)
- When clicked on a product specification , ability to calculate the following for all the quotations under that product specification, **(Table 2)**
 - Product Code
 - Product Name
 - Location Code
 - Location Name
 - Location Type
 - Outlet Code
 - Outlet Name
 - Outlet Type
 - Obs. Date
 - Obs. Qty
 - Obs. UoM
 - Obs. Price
 - Price Type
 - Conv. Price
 - Deviation
 - T Ratio
 - Comments
 - Validated

- Obs. Qty, Obs. UoM, Obs. Price and Comments columns from the Table 2 can be modified.

CTY_R010	Save validated observations
-----------------	------------------------------------

- Ability to save the observations involved in the validation (not the report tables 1 and 2)

CTY_R011	Export validated observations and average price into Excel sheet
-----------------	---

- Ability to export the following into individual excel sheets,
 - Selected filter in the validation screen
 - Table 1
 - Table 2
- Ability to export either Table 1 or Table 2
- System will always export the validated observations only.
- Location Outlets master list will be exported along with this.

CTY_R012	Reject observations (validated/ non validated)
-----------------	---

- Ability to reject an observation (validated/ non-validated).
- Highlight the rejected observation
- Rejected observations should not be included in the calculations. Message to inform the same.

CTY_M003	Data Entry Tool for Compensation Details
-----------------	---

This module facilitates capturing Compensations details

CTY_F004	Reference Data Setup
-----------------	-----------------------------

Provides facility to import and manage the reference data sent by the region in the form of excel sheets.

CTY_R013	Ability to import/upload master list from excel sheet
-----------------	--

- Ability to import the following reference data lists,

- Products List (Read-only sheet): Occupation Types for which compensation data needs to be captured.
- Occupation Details (read-only sheet): Predefined list of attributes associated with each Compensation Observation against which data needs to be captured
- Country Details: Country code, Name, Local Currency, foreign currency if there is any etc.
- Ability to import/upload reference data from the exported excel sheet. Excel sheets used for import are password protected read-only sheets and those can be identified by the system using a unique identifier.

CTY_R014	Export Master List
-----------------	---------------------------

- Ability to export the reference data into excel sheet

CTY_R015	Setup Currency
-----------------	-----------------------

- Ability to provide two types of currencies and set one of them as default (system will prompt for confirmation when setting the default currency).
E.g. Local Currency - \$ (Default)
Foreign Currency - £
- Once set, the default currency cannot be changed. Since this will affect all the existing observations with already converted price.
- Provide exchange rate from foreign currency to local currency.
- Converted price field for an observation will always be calculated for the default currency.
- Any change in exchange rate later, will affect only the new observations for which the converted price needs to be calculated.

CTY_F005	Data Entry
-----------------	-------------------

Allows user to enter/modify the observations into the application

CTY_R016	On Screen data entry
-----------------	-----------------------------

- Ability to show the list of observations
- Ability to show details of an observations
- Ability to switch to data entry mode which will display only the required fields in the grid for data entry. For ex., list code columns like Occupation code, Gross Compensation etc.,
- Allows enter/modify observations with the following fields.
 - Collection Date
 - Occupation Code (Lookup will display Occupation Code to choose)

- Occupation Name (Lookup will display Occupation to choose)
- Annual compensation details of employee of which
 - Gross salary and Wages paid
 - Employer's contribution
- Total Employee compensation – Editable if “Auto Calc” options is not selected, else ready only and calculate automatically
- Number of regular hours worked per week (Exclude overtime)
- Number of days worked per week (Exclude overtime)
- Number of days of annual leave per year
- Number of public holidays per year
- Year for which data is reported
- Currency unit
- Number of Hours worked per day (average)
- Comments
- Ability to do pagination for the observations list.
- Ability to filter /sort/group within observations

CTY_R017	Save observations
-----------------	--------------------------

- Ability to save the observations
- Perform basic validations based on the reference data
 - Occupation Code - Occupation Code is valid based on the master list
 - Empty fields for mandatory entries like (Occupation Code, Gross Wages and Salaries paid, Employer's contribution etc)
 - Numeric data for in the fields like (Gross Wages and Salaries paid, Employer's contribution, Total employee compensation, Number of regular hours etc)
 - Duplicate observations entries – Check if an observation is already exists for the same occupation for the same year
- Highlight the above mentioned invalid observations.

CTY_R018	Delete observations
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- Ability to delete the observations record(s), from the database.

CTY_R019	Export observations
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- Ability to export the observations into excel sheet (This exported excel sheet should be manually imported in the IHSN tool kit)
- Ability to export filtered observations
- Exported file name will be included in the exported excel sheet
- Ability to store the last two exported file names and the recent exported date and time for the exported observations.

This module facilitates capturing Compensations details

CTY_F006 Indicators

Provides the ability to see indicator information related to group of compensations. Please refer to [annexure 5.1.5](#) for more information.

CTY_R020 On Screen data entry

- Ability to auto calculate indicators for the listed indicators
- Ability to enter indicator information for specified compensation groups.

CTY_R021 Export Indicators

- Ability to export the indicators into excel sheet (This exported excel sheet should be manually imported in the IHSN tool kit)
- Exported file name will be included in the exported excel sheet

CTY_M004 Common Functionalities

This section contains features that are common in the HHC modules. This section also contains requirements that were provided after the initial development of HHC modules.

CTY_F007 Database management

Provides facility to select/change application database file and create a new database.

CTY_R022 Ability to import/upload master list from excel sheet

- Ability to select/change the default application database file. This requirement will be part of both data validation and data entry modules.

CTY_R023 Create New Database

- Ability to create a new database at the desired location. Part of data entry module.

5. Annexure

5.1 Supporting files

5.1.1 Region Master List

Following is the template format used to import master data sent by the region.

1. HHC Module



Region_Master_List

2. Compensation Module



Region_Master_List_
Compensation.xls

5.1.2 Data entry template

Following is the template format used to import price observations

1. HHC Module



ICP_Data_Entry_HH
C_Template.xlsx

5.1.3 Validation and Averaging export template

Following is the template format used to export data in validation and averaging module



ICP_ValdAvg_HHC_E
xport_Template

5.1.4 Database design

Following is the database design diagram for ICP country – HHC items.

1. HHC Module



ICP_CTY_HHC.pdf

2. Compensation Module



Compensation DB
diagram.jpg

5.1.5 Compensation support files

File 1 provides the list of indicators we need to collect for government (sheet Aggregate Indicators), and which should be reflected in the software for countries to provide data on these indicators.

File 2 provides the validation rules at the regional level for these indicators.

File 3 provides the draft list of occupations for 2011 and their definitions. An idea would be to include the definition of each occupation on the data entry screen.



FILE_1-Pay &
employment data stru



FILE_2-Pay and
Employment Data Ch



FILE_3-COMPLETE
LIST OF GOVERNMEN