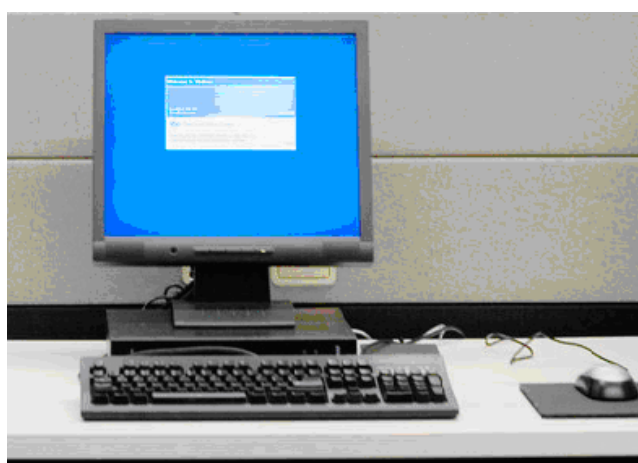


GENERATION OF CONSTRUCTION STATISTICS FROM APPROVED BUILDING PERMITS

Volume 2



BUILDING PERMIT COMPUTER SYSTEM (BPCS)

USER'S MANUAL

Second Edition



Republic of the Philippines
NATIONAL STATISTICS OFFICE

FOREWORD

This Building Permit Computer System (BPCS) User's Manual is intended to guide all those involved, specially NSO field personnel, in the machine processing and tabulation of construction statistics from approved building permits.

The Manual defines the minimum computer configuration necessary to run the system which was revised and written using the features of a window-based application. It discusses procedures for system installation, data entry/update, processing and tabulation of data.

Users of this Manual are instructed to follow carefully the procedures and refer to the screen views to achieve best results. It will be worth exploring or repeating the system so as to improve knowledge of it.


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February 20, 2008

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CHAPTER I - INTRODUCTION

1.1 Building Permit Computer System (BPCS)

This system is a set of programs and procedures designed to capture data from approved building permits, perform checks on data items and generate monthly, quarterly and annual statistical tables. This system employs the Visual Basic Software for its interface and CPro for its main processes.

1.2 System Requirements

To run the system, the minimum system requirements are:

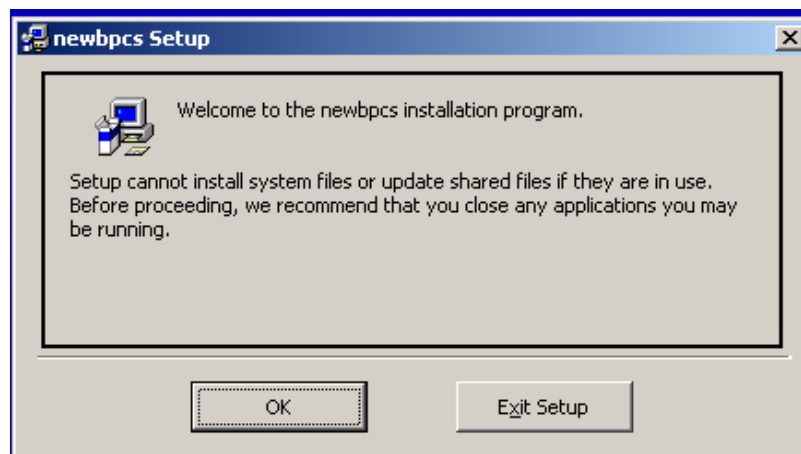
- IBM Compatible PC
- MS Windows 98 or later versions of Windows
- 128 MB RAM
- 1 Gigabyte free disk space

1.3 System Installation

To install the system, follow the on-screen instructions below:

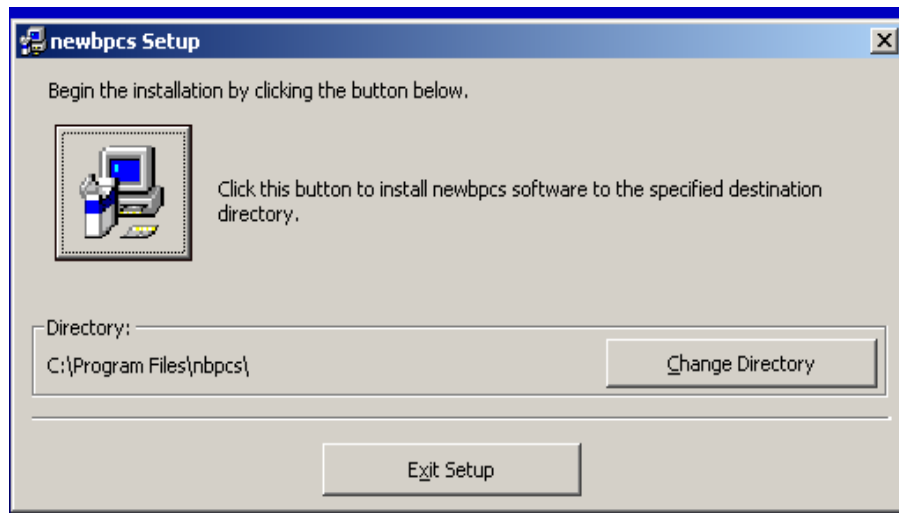
Run Setup.Exe found at the BPCS Installer.

The message below will be displayed.

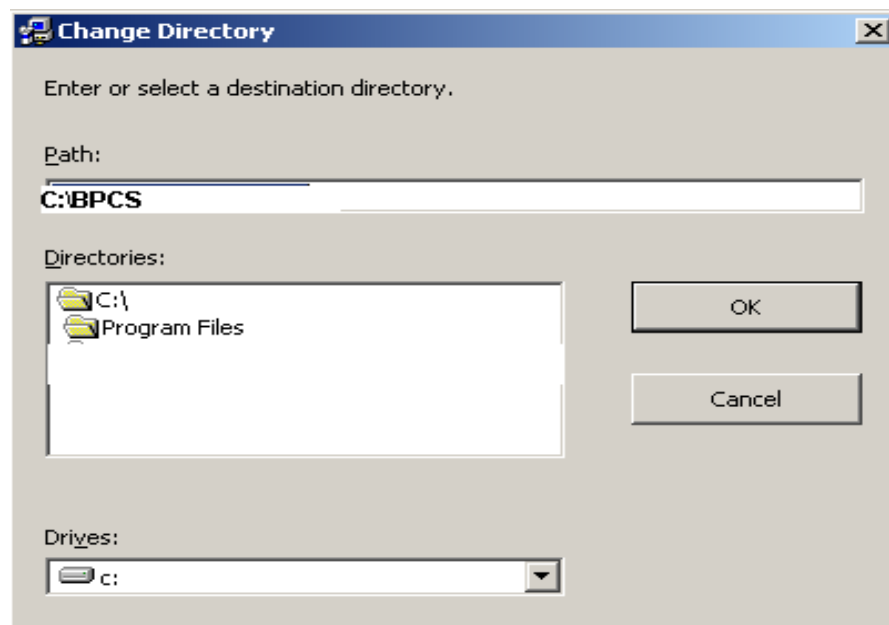


Click **OK** to install the system.

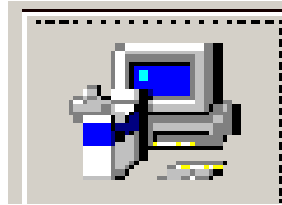
This screen will then appear:



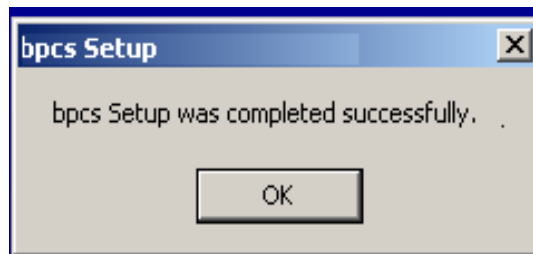
The user should change the destination directory by clicking **Change Directory** button. There should be no space between the characters of the folder name. The recommended name of the system's folder is **C:\BPCS** where **C** is the hard disk drive, e.g. **C** or **D**. This is because the system default folder is [C:\BPCS](#).



Clicking the icon (shown below) will start the installation.



If the system installation is successful, the message below will be displayed. Click **OK**.



1.4 Some Useful Terms

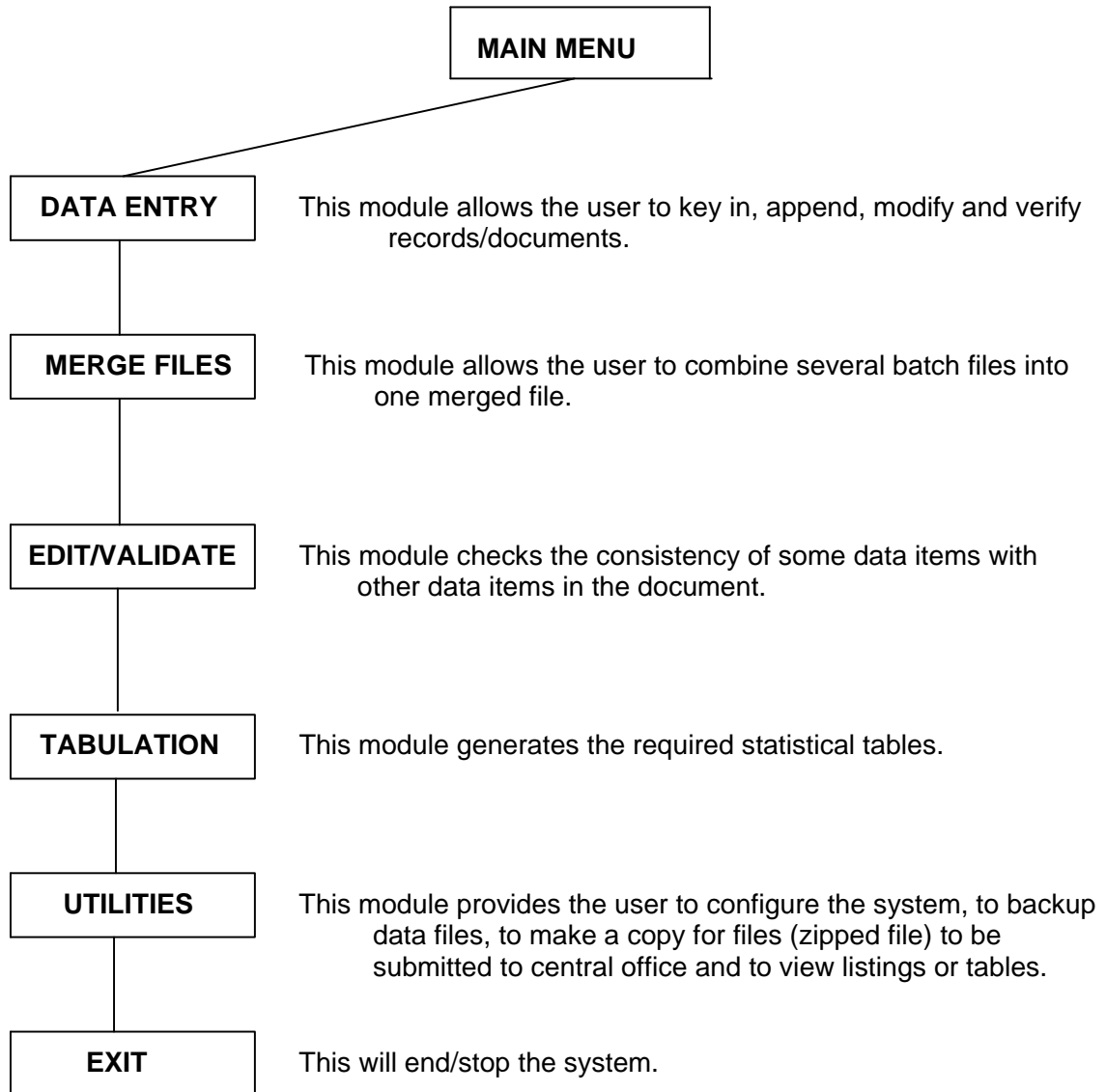
The following terms are commonly used in the data entry operation;

Application	usually has the computer icon, this file contains the link for all the files and formats associated with the data program.
Folio	is a set of documents bound together in the same folder and having common identification.
Batch	is the file created that contains the keyed-in records from the documents and from which verification and modification of the data can be done. For BPCS a batch and a folio are the same. In previous system of BPCS, a batch has the file extension “.bch” while in this version, which uses CPro, a batch has no file extension.
Document	the building permit is the source document. It also refers to the set of records that are keyed from the source documents.
Record	a set of related data items pertaining to a specific area of interest
Key Verification	is the process of re-entering the data after it has been keyed-in. In this process the original value is matched with the re-encoded value and the occurrence of a mismatch is flagged as error.

CHAPTER II – BPCS MODULES

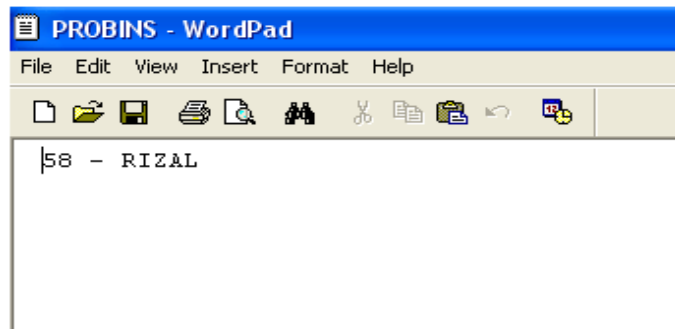
2.1 System Modules

There are six (6) modules in the BPCS.



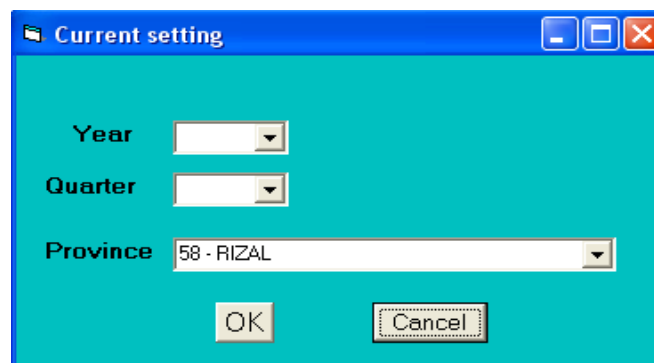
2.2 Initiating the BPCS

Before initiating the program, delete all other provinces leaving only your province from the text file C:\BPCS\PROBINS using Windows WordPad application.



To easily run a program, create a shortcut for the program and place it on the desktop.

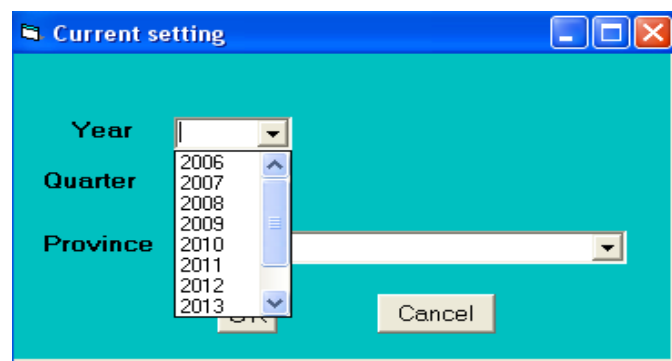
To run BPCS, double-click the icon "BPCS" on the desktop.



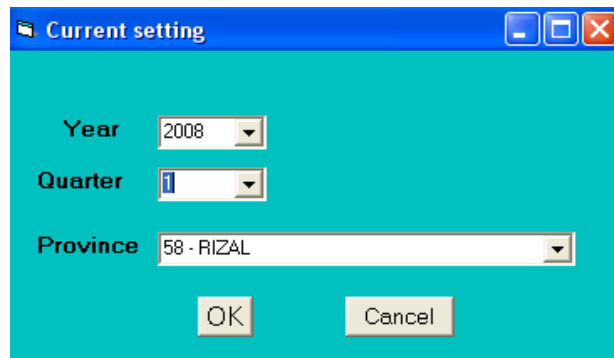
This screen will be displayed upon running the program:

Entries for this screen will be the default configuration or settings.

Select the year to be processed from the drop down menu for the year as shown below:

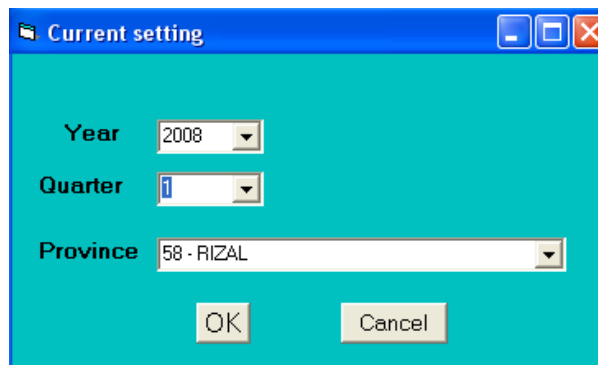


Likewise, select the quarter.



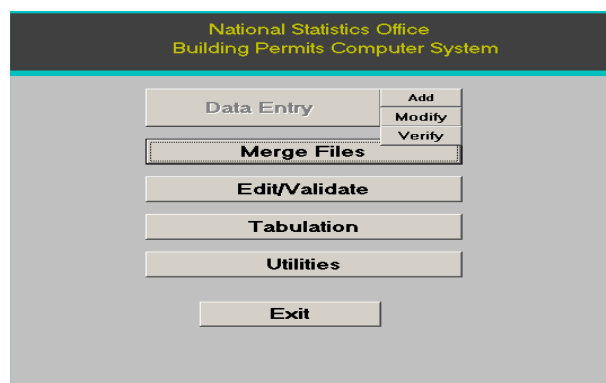
A dialog box titled "Current setting" with a blue title bar and standard Windows window controls. The background is light blue. It contains three dropdown menus: "Year" set to "2008", "Quarter" set to "1", and "Province" set to "58 - RIZAL". At the bottom are "OK" and "Cancel" buttons.

Entry for the province is automatically provided.



A dialog box titled "Current setting" with a blue title bar and standard Windows window controls. The background is light blue. It contains three dropdown menus: "Year" set to "2008", "Quarter" set to "1", and "Province" set to "58 - RIZAL". At the bottom are "OK" and "Cancel" buttons.

Clicking the OK button will take us to the main menu of the program, with this screen appearing

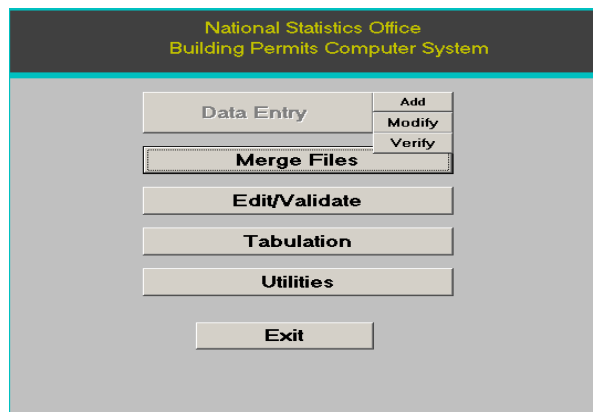


The main menu of the "National Statistics Office Building Permits Computer System". It features a dark grey header with the title in yellow. The menu consists of several buttons: "Data Entry" (with sub-buttons "Add", "Modify", and "Verify"), "Merge Files", "Edit/Validate", "Tabulation", "Utilities", and "Exit".

CHAPTER III - DATA ENTRY/UPDATE MODULE

3.1 Initiating the Data Entry/Update Module

Data entry/update has 3 modes of operation namely: ADD, MODIFY and VERIFY.



Selecting ADD, MODIFY or VERIFY will pop up a window for the folio information as shown:

The 'Folio Info' dialog box contains several input fields: a 'Quarter' field with the value '1', a 'Province' field with the value '58', a 'Fol #' field, and a 'filename' field. At the bottom, there are 'OK' and 'Cancel' buttons.

Folio information for the quarter and province are automatically filled-up as these were supplied from the first screen.

Supply the information for the folio number. A box for the filename is provided just in case a different folio or filename is to be accessed, otherwise it can be ignored.

Click OK if correct folio information has been supplied.

Output files in this module will be saved in C:\BPCS\data folder with filename YYQPPfff.*, where:

YY = reference year
Q = reference quarter
PP = province code
fff = folio number

3.2 Adding Record to a Folio

Select the **add** operation to enter new document.

The screenshot shows the BPCS software interface with the 'Adding Case' form. The form is titled 'BPCS' and includes the following fields:

- FOLIO NO. 158001
- SHEET NO.
- DATE OF ISSUANCE
- PERMIT NUMBER
- FORM OF OWNERSHIP
- ECONOMIC ACTIVITY
- LOCATION
- SCOPE ☐
- NUMBER OF UNITS
- TYPE OF OCCUPANCY
- BUILDING
- ELECTRICAL
- MECHANICAL
- PLUMBING
- OTHERS
- TOTAL COSTS
- NUMBER OF STOREYS
- TOTAL FLOOR AREA
- PROPOSED DATE OF CONSTRUCTION
- EXPECTED DATE OF COMPLETION
- CONSTRUCTION MATERIALS
- Contractr_type
- NAME OF CONTRACTOR

Folio number is automatically filled-up.

Key-in the sheet number.

Key-in the values into their corresponding fields. In the previous version of BPCS where IMPS was used the mouse is not enabled, hence, to go to a specific field, the preceding field must be filled-up first. In this version, we can navigate to any field in the document and key-in the value as the mouse can be used.

CSPPro will automatically ask the operator to save the document when it reaches and key the last field. Press F12 if you want to save the document. A document can also be saved even at the middle of the data entry process.

Repeat the same process until the last sheet/document in the folio has been keyed-in.

Note: In BPCS, Sheet, Document, and Case mean the same thing.

3.3 Modifying a Folio

In Modify Mode, records can be corrected, inserted, or even deleted. Entries in the folio number are what we called persistent fields and thus we cannot modify them. This is because it will be the ID for the case or document. The only way to change it is to delete the case and re-keyin the information.

Generally, the procedure in modifying any of the data previously keyed requires the positioning of the cursor on the specific field where changes are to be made.

3.3.1 Correcting Entries in the Document

- a. access the case or document by double-clicking the case from the case tree view,
- b. position the cursor to the field to be corrected and type the correct value,
- c. press F12 if all corrections has been made.

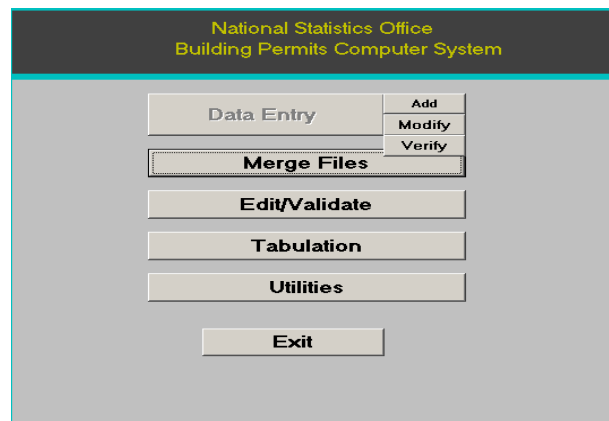
3.3.2 Deleting a Case or Document

To delete a document in a folio, open the case or document to be deleted. Once the document is opened, click the stop button, then select Edit Mode and then select the delete case.

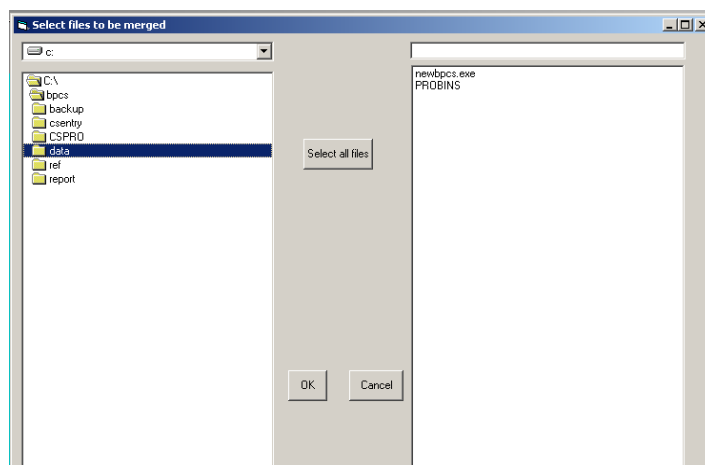
CHAPTER IV – MERGE MODULE

4.1 Initiating the Merge Module

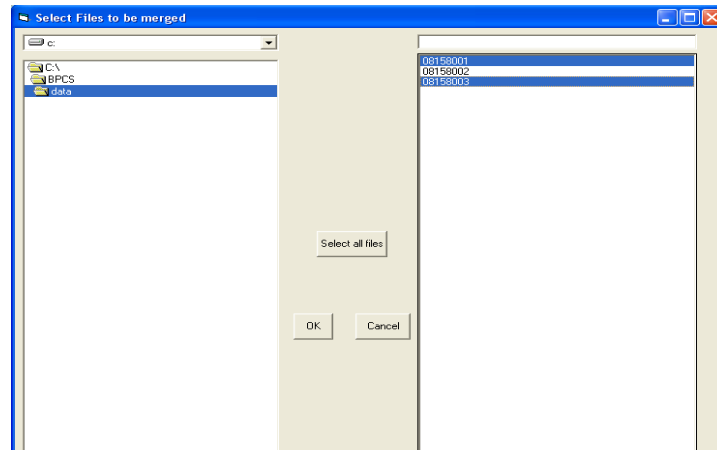
To run the merge module, click on Merge Files button



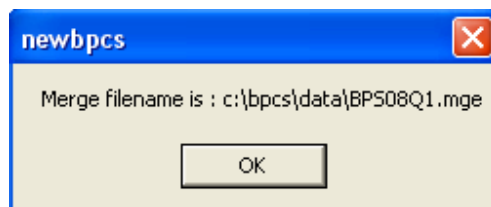
the following screen will appear



double click on the folder where the data to be merged are located, in this case “\bpcps\data” folder. Data files from this folder will be displayed at the box on right side. Select the files to be merged by clicking on it. When multiple files are needed, click on the file/s while ctrl key is pressed, selected files will be highlighted as illustrated below.



Click OK to proceed to merging of files. A message displaying the merge filename to be generated will be displayed



4.2 File Merged by BPCS

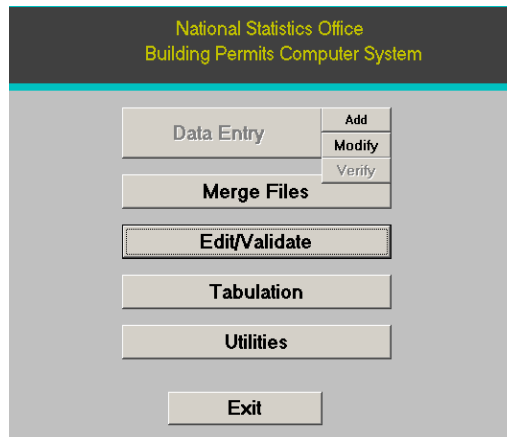
The output file in file merged module will be saved in the directory C:\BPCS\data folder with filename BPSYYQn.mge, where:

BPS = system title
YY = year
Qn = quarter (1 or 2 or 3 or 4)
mge = merged file extension(file type).

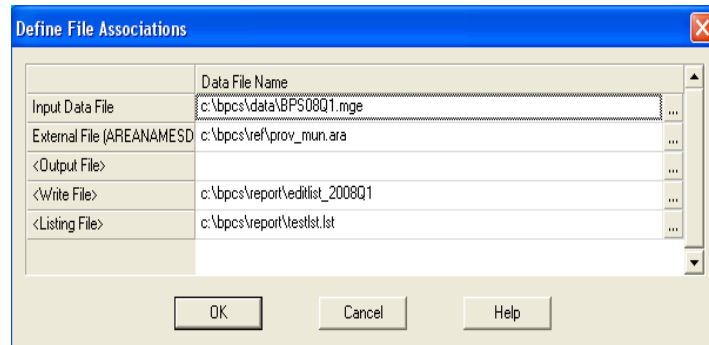
CHAPTER V – EDIT/VALIDATE MODULE

5.1 The Edit/Validate Module

After merging, the data can be subjected to edit/validate routine. To run the edit program, click the edit/validate button:



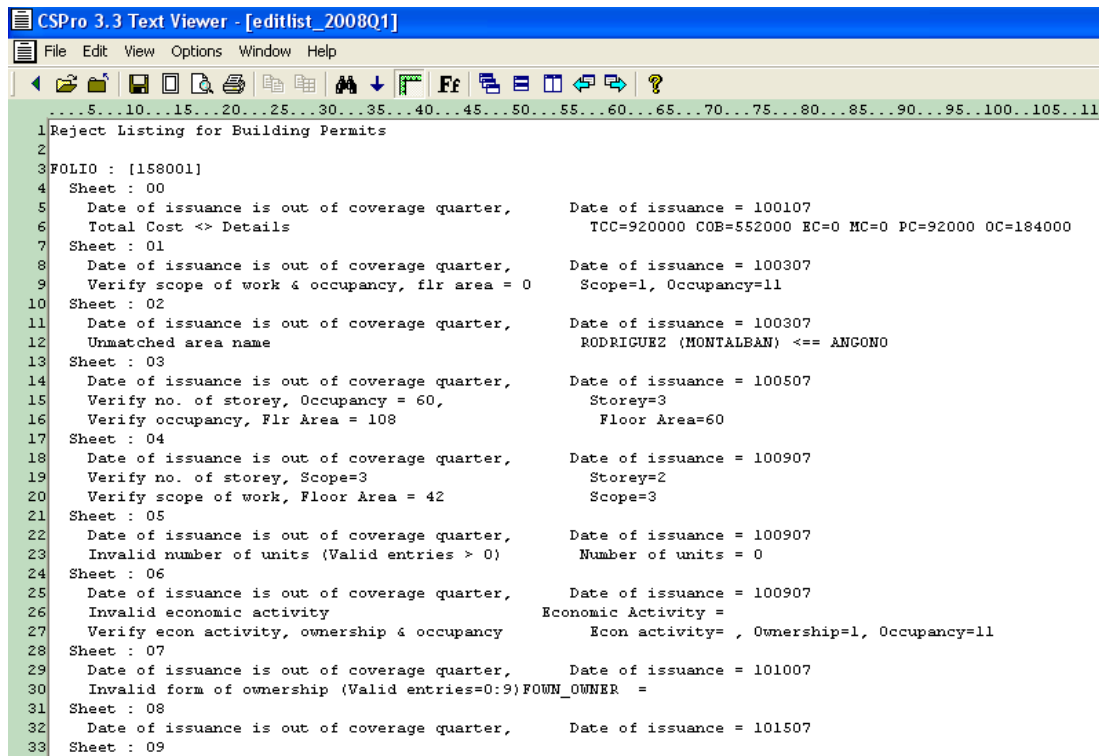
This screen will then appear:



Click the OK button to view the Edit or Reject Listing.

5.2 The Edit Listing.

The screen shows the Edit Listing:



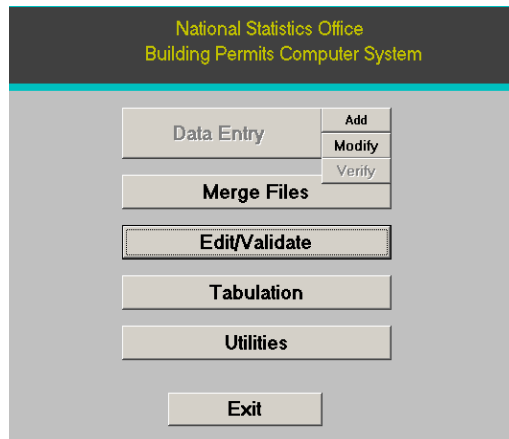
```
1 Reject Listing for Building Permits
2
3 FOLIO : [158001]
4 Sheet : 00
5   Date of issuance is out of coverage quarter,      Date of issuance = 100107
6   Total Cost <> Details                               TCC=920000 COB=552000 EC=0 MC=0 PC=92000 OC=184000
7 Sheet : 01
8   Date of issuance is out of coverage quarter,      Date of issuance = 100307
9   Verify scope of work & occupancy, flr area = 0    Scope=1, Occupancy=11
10 Sheet : 02
11  Date of issuance is out of coverage quarter,      Date of issuance = 100307
12  Unmatched area name                               RODRIGUEZ (MONTALBAN) <= ANGONO
13 Sheet : 03
14  Date of issuance is out of coverage quarter,      Date of issuance = 100507
15  Verify no. of storey, Occupancy = 60,             Storey=3
16  Verify occupancy, Flr Area = 108                  Floor Area=60
17 Sheet : 04
18  Date of issuance is out of coverage quarter,      Date of issuance = 100907
19  Verify no. of storey, Scope=3                      Storey=2
20  Verify scope of work, Floor Area = 42              Scope=3
21 Sheet : 05
22  Date of issuance is out of coverage quarter,      Date of issuance = 100907
23  Invalid number of units (Valid entries > 0)        Number of units = 0
24 Sheet : 06
25  Date of issuance is out of coverage quarter,      Date of issuance = 100907
26  Invalid economic activity                          Economic Activity =
27  Verify econ activity, ownership & occupancy        Econ activity= , Ownership=1, Occupancy=11
28 Sheet : 07
29  Date of issuance is out of coverage quarter,      Date of issuance = 101007
30  Invalid form of ownership (Valid entries=0:9) FOWN_OWNER =
31 Sheet : 08
32  Date of issuance is out of coverage quarter,      Date of issuance = 101507
33 Sheet : 09
```

The Edit Listing will be saved in the C:\BPCS\report folder with filename **editlist_yyyyQq** where yyyy and q refers to year and quarter, respectively. This output file is also displayed in the upper left portion of the screen as enclosed in [] or in this case, "edit_list2008Q1". When modifying a data based on this listing, it is better to print this listing, however, to minimize the use of paper, this output file can be opened on a separate window on the screen and refer to it while modifying the data.

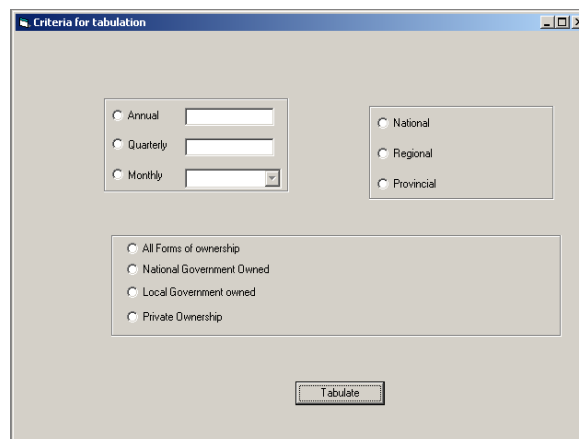
CHAPTER VI – TABULATION MODULE

6.1 The Tabulation Module.

Click on the Tabulation button to run the tabulation program:



There are several options for the generation of statistical tables. Selection of these options is activated by clicking on the option buttons.



6.2 Box for Selection of Period ("Annual", "Quarterly", "Monthly")

Annual and/or **quarterly** options are default as these depend on the settings made (configuration). Year and quarter entries are taken from the configuration. However, only for tabulation module, option for monthly tabulation is always available whatever the system configuration is.

6.3 Box for Selection of Area (“National”, “Regional”, “Provincial”)

Option for National will generate tables for national and regional levels.

Option for Regional will generate tables for national, regional and provincial levels.

Option for Provincial will generate tables for national, regional, provincial and municipal levels.

6.4 Box for Selection Form of Ownership.

Option for “all forms of ownership” will generate tables for all types of buildings constructed,

Option for “National government owned” will generate tables for buildings constructed under the ownership of the national government,

Option for “Local government owned” will generate tables for buildings constructed under the ownership of local government units,

Option for “Private ownership” will generate tables for buildings constructed under the ownership of a private individual or entity.

Click on “**tabulate**” button and this screen will appear,

	Data File Name
Input Data File	c:\bpcs\data\BPS08Q1.mge
External File (POINTERS_DI	c:\bpcs\ref\ptr_ndx.ara
External File (PPMUN_NDX_	c:\bpcs\ref\ppmun_ndx.txt
<Output File>	
<Write File>	c:\bpcs\report\P_2008Q1ALL.tbl
<Listing File>	c:\bpcs\report\test_lst.lst

The default input data file in the Tabulation Module is the output file created in the Merge Files Module. Although entries in the fields can be changed as to the desire of the user, it is recommended that these defaults be used for easy reference/use.

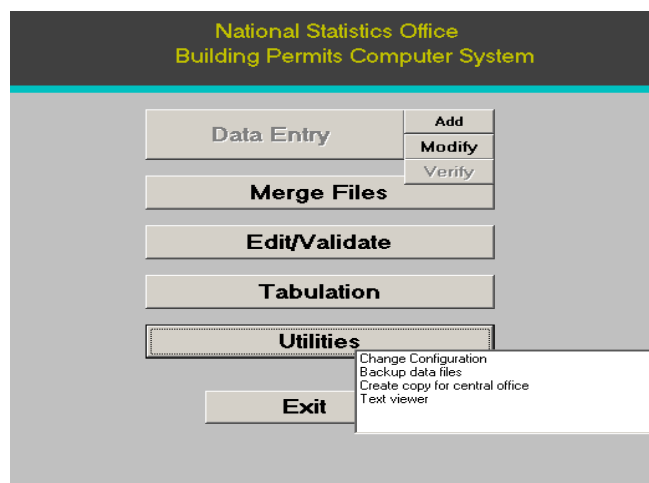
Proceed with tabulation by clicking the OK button.

Output files in this module will be saved in C:\BPCS\report folder.

CHAPTER VII – UTILITIES MODULE

7.1 The Utilities Module

This module provides the “Change Configuration”, “Backup data files”, “Create copy for central office” and “Text viewer”. These are optional as these processes can also be independently done outside the system, that is, backup data files can be done by copying the files from the data folder to backup folder, create copy for central office can be substituted by making zipped file for the data to be sent to central office and text viewer is running the text viewer program to view edit listing, tabulation files, and other text files. However, these utilities are provided for easier access/use.



7.2 Change Configuration

Year and Quarter are configured in this utility. The configuration made is used by the system for naming and accessing the files to be used by the system as well as file name used for the data.

7.3 Backup Data Files

Creation of backup for files or documents which have been encoded is available thru this utility.

7.4 Create Zipped Copy for Central Office

Files to be sent to the central office (batch files and merged files) are zipped thru this utility.

7.5 Text Viewer

This utility triggers the text viewer application. Listings and tables can be viewed by supplying the listing or table file name.

CHAPTER VIII – EXIT MODULE

8.1 The Exit Module

Click the Exit button to end or stop the BP computer system.

