

Volume

2

DISTRICT LEVEL HOUSEHOLD AND FACILITY SURVEY-3
UNDER
REPRODUCTIVE AND CHILD HEALTH PROJECT

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DATA ENTRY SUPERVISOR GUIDE



International Institute for Population Sciences
(Deemed University), Mumbai-400 088



Ministry of Health and Family Welfare
Government of India, New Delhi-110 011

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Introduction

The data processing activities of the DLHS-3 survey involve manual and automatic processes that have a direct impact on the quality of the data. For this reason, all of the staff dealing with these processes should have a clear understanding of their duties as well as the procedures and methods to be used in order to run the data processing smoothly.

The entire DLHS-3 data processing system was developed using the CSPro (Census and Survey Processing) software package. For this reason, CSPro has to be installed in all machines participating in the data processing operation.

The data processing can be compared to an assembly line where the **unit of work** is a PSU (primary sampling unit). This means that once questionnaire of a PSU arrives in the central office, the PSU must be kept intact. One office editor will be responsible for editing and coding of questionnaire of a complete PSU, one data entry operator will enter all the questionnaires for initial keying of the PSU, a second keyer will enter the questionnaires for verification, and so on.

Main coordinator of data processing activity at the agency level is data processing supervisor. Every process of data processing either needs input from him as well as gives output to him. Supervisor coordinates three type of people- (1) Questionnaire Administrator (2) Editor (3) Data Entry Operator (4) Supervisor Assistant. Role of people involve in data processing may be divided as follows:

Supervisor: Supervisor is a coordinator of data processing work. His main duties are as follows:

1. Set data entry operator machine for Adding or Verifying a questionnaire of particular PSU (Primary Sampling Unit). Data entry operator can process that particular PSU for that very purpose which is fixed on machine. Change in setting will be needed whenever work assigned for particular PSU is finished
2. Maintain PSU wise log of data entry work (see Annexure 1).
3. Assign data of PSU to other operator on other machine for verification.
4. Generate validation report on verified data for a PSU
5. Generate Field Check Table after completion of validation
6. Send validated data to IIPS.
7. Generate weekly coverage report of data processing.
8. Keeping backup of data

Questionnaire Administrator: Receives questionnaires from the field and archives PSUs once they are fully processed. He checks correctness of IDs on coversheet and maintain a log for schedule

tracking. He also creates district wise fortnightly report of schedule arrival. Arrange the questionnaire in ascending order of PSU number for each of the District.

1. Household, Ever Married women and Unmarried Women questionnaire
2. Village Questionnaire
3. District Hospital, CHC, PHC and Sub-center.

Editor: Editor checks consistency of data according to PATH (skip pattern). He scrutinizes the validation report; make his comments on report so that data may be modified (if needed). If validation report demands correction in questionnaire then questionnaire may be corrected in separate ink color.

Data Entry Operator: Add or verify data of questionnaire of PSU.

Supervisor Assistant: is basically a data entry operator who is attached with supervisor. His main role is to modify the data after verification report or validation report (with supervisor comments). He should be well acquainted with computer fundamental, specially working on file and folder. **He will also enter the village questionnaire and facility survey data.**

Since supervisor is coordinator of whole data processing work, this manual is addressed to supervisor. Following are capabilities, expected from supervisor.

Responsibilities	Weights
Knowledge of Complete Process Cycle of Data Processing	15
Understanding of Computer Fundamental	15
Understanding of Sampling Design	5
Understanding of Skip Pattern in Questionnaire	15
Capability to Handle Missing Information in Questionnaire	10
Properly Making a Log For Data Processing Work	10
Understanding of the Coverage Report	10
Maintenance of Data Backup	10

As mentioned earlier data processing can be compared to an assembly line where the unit of work is a PSU. A PSU will visit from assembly line in order of **Receiving Questionnaire from the Field, Office Editing, Data Entry, Verification, Validation, Backup, and Field Check Table Generation**. Only three works related with data processing- (1) Generation of coverage report (2) Filed Check Table (3) District Fact Book generation are out of PSU based cycle. Field Check Table and Coverage Report will be generated as soon as IIPS approve the PSU data while District Fact Book will be generated after receiving all PSU of district approved by IIPS. Now we will look into components of data processing one by one.

Type of Activities in Data Process Cycle

Activities in PSU Cycle

Receiving a Questionnaire from Field: When filled questionnaires for a PSU arrives in the office, it will be received by the questionnaire administrator who will check all questionnaires and all the forms along with the bunch and will record the number of completed and incomplete questionnaires on the data processing control form for each PSU (see Annexure 2 3a, 3b for this form). Form given in Annexure 3, along with any other field documents belonging to the PSU that will arrive from the field, should be kept together throughout the entire processing cycle of the PSU. Thereafter, the questionnaire administrator will give the PSU to the office editor for editing the questionnaires.

Office Editing: Because data entry will be carried out using an intelligent data entry program, detailed editing is recommended. As a general rule, when a question requires a value and a response was not recorded on the questionnaire for that question, a MISSING code should be assigned to that question. The MISSING codes for numeric responses are 9, 99, 999, and 9999, depending on the number of digits of the question. However, on the following items you should press without entry any number that mean CSpPro will understand you have put blank(non-virgin) item and made its color yellow instead of white (virgin blank filled).

Questionnaire	Questions
Household Ever-married Woman Unmarried Woman	All Questions of all five rosters Q117, Q129A, Q129B, Q130, Q518 Q130
Village	Q166F, Q120
CHC	All items of IIIA, Items of IIIB, 5.58
District Hospital	All items 6.5 to 6.15

However, if there is enough evidence to support the assignment of a valid code, then the MISSING value should not be used, instead the valid code should be assigned.

Data Entry: After questionnaires have been manually edited in the office, they are ready for data processing. Before data processing begins the bunch of questionnaires for the PSU should be registered by the data processing supervisor in the data processing CONTROL Form (see Annexure 1) and the PSU should be assigned for main data entry to a data entry operator. Do not register or assign a PSU to a data entry operator if the reception of the questionnaires has not been certified by questionnaire administrator for that PSU, or if the operator is not yet ready for a new assignment.

Once a PSU is assigned for main entry in the control form, its questionnaires are passed to a data entry operator for initial entry. **After supplying the questionnaires, supervisor would set a machine for the entry of a particular PSU.** It is the responsibility of that data entry operator to enter all questionnaires for that PSU. Once entry commences for a particular PSU on a particular computer, it must be completed on the same computer. Under no circumstances should a PSU be entered to different computers unless any hardware eventuality. After entering all questionnaires for the PSU, the data entry operator will return the questionnaires to the data processing supervisor.

Verification: It is DLHS-3 policy to verify 100% of the data. The verification process must be done by a different data entry operator and ON A DIFFERENT COMPUTER than the one used for main data entry. Hence it is necessary to copy original data of PSU in folder C:\DLHS3DP\DATA\VERIFY. **For entering data for verification, the supervisor should set the machine for data verification. Supervisor must update the CONTROL FORM before assigning data file and questionnaire to an operator for verification.**

Comparison: After the data entry operator completes the verification, a report with discrepancies in both data file will be generated. The can be done after comparing both the files and correction must be made in verified data, which will be used for further process cycle.

Validation: After the verification is cleared by supervisor assistant, the supervisor will then use option “V” (Generate error listing (secondary editing)) to run the secondary editing application. The data entry application has been designed in such a way that it will be able to identify any inconsistency at the time of entering the data. However, there are some inconsistencies that require the attention of subject matter specialists or senior staff to resolve them. The result of executing this option is a report listing these types of inconsistencies. The report should be printed out and passed along with the package of PSU questionnaires to an editor. The second level editor will analyze the messages and decides whether data need to be changed or not. The second level editor will use the “Error Manual” to identify and properly resolve the inconsistencies.

If changes are required the supervisor assistant will modify the data of that PSU in WORKVERIFY folder according to comments of editor. After making the corrections the supervisor will use again option “V” to run the secondary editing and will pass once more the results to the editor until no more errors are identified.

If the editor decides that no more changes are required or if after running the secondary editing no more messages are displayed. The software will automatically copy the data from WORHVERIFY

folder to FINAL folder every time. It means if the data of a PSU already exists the DLHS3DP will update the earlier data and Kept on corresponding FTP folder and as backup in his Machine.

Backup: Backup should be taken as soon as PSU passes from the validation phase.

Activities Out of PSU Cycle

Coverage Report: This report should be generated regularly. It gives two levels information on coverage, one at PSU level and other is at Questionnaire level. However, it also aggregates district figures at Questionnaire level. Before generating the report, Supervisor should collect M###.dat from CONTROL folder of different machines of data entry operator and copy it to CONTROL folder of supervisor machine. M###.dat files are created when supervisor run data entry program from supervisor mode at data entry machine while setting the machine for a PSU. A PSU's entry in M###.dat gets updated automatically as soon he sets machine for that PSU.

Field Check Table Generation: This option will generate a list of 10 tables from all the data entered in the field. Field check tabulations should be generated as and when it requires by supervisor level staff in the field, monitoring agencies and IIPS RO and by the IIPS. These tables allow a review of the progress of fieldwork and help to identify problems with interviewers and teams. Corrective actions can then be taken. The option will concatenate single PSU data files on the supervisor's computer into a single data file, and will produce a set of tabulations. For executing field check table program, supervisor should use option "F" from supervisor menu. As with the status report, this option can be used at any time regardless of the PSU being selected when accessing the supervisor menu.

Sending Data to IIPS: Supervisor should send data to the IIPS as soon as all the processes on a PSU data get over. He should update the log after uploading the data on IIPS FTP site.

Fact Book/sheet Generation: Some fact sheets will be created after completion the PSU of a district on the final data which will be kept in Factbook folder. For this multiplier and programs will be included in data processing software later on.

Data processing software prepared by the IIPS works on data processing engine prepared by CPro. Programs given by CPro 2.6 are generalized in nature and are customized according to need of DLHS-3 by code written at IIPS. That is why two sets of program will be needed for running the processes used in process cycle of DLHS-3 data processing.

DLHS-3 system does not require network-based system. It expects frequent transfer of files from one machine (computer) to another machine. Manual transfer of file from one source to another source is major source of virus infection. A virus may corrupt the program or even destroy the data. Attempt should be made to keep the data processing environment virus free till the end of project. Do following for smooth processing of DLHS-3 system

1. Machine should be fully devoted to DLHS-3 project till the completion of project
2. Give a unique machine number to all machines which will be used in project
3. Machine should have at least P4 processor with 256 RAM and windows XP operating system
4. Better to format Hard disk before start of project
5. Install latest virus protection on the machine
6. If any Pen drive is used for transferring files from one machine to another machine, it should not be used for any machine outside the project. Format the Pen drive before using it for the project.
7. Identify which machine will be used by Data Entry operator and which machine will be used by Supervisor and Supervisor Assistant.

There are three sets of programs – (1) CPro (2) Customization code (written at IIPS) for data entry operator machine (3) Customization code for supervisor and supervisor assistant machine. The following are the steps for the installation of these programs:

Installation

Installation of CSPro (version 2.6): CSPro will be installed in all machines on which any type of DLHS-3 related work will be performed. Although all components of CSPro are not required for all machines, it is better to install all components on all machines in following the steps:

- Close all running programs.
- Place the CD in your CD-ROM/DVD drive.
- Wait for few seconds, the installation program will automatically launch. If program does not automatically launch, open CD drive through My Computer or Windows Explorer and double click on **cspro2.6.exe**.
- Proceed through the setup process. This will take you through a series of dialog boxes, which will prompt you for setup information. You should proceed by default selection made by installation wizard. **Ensure that CSPro is being installed at “c:\program files” (default location).**

Installation of DLHS-3 program: For customization of CSPro program, it is necessary to install DLHS-3 program. There are two sets of programs – (1) For Supervisor and Supervisor Assistant machine (2) Data Entry Operator machine. Basic steps for installing both type of software are same except the name of installation program for both type of machine. After putting the CD in the CD-ROM drive, the autoplay menu will invoke. Click on “Supervisor Installation Menu” to install software on supervisor status machine. After completing the process you can use the CD to install the Data Entry Software in Data Entry operator machine by clicking on “Data Software Tab”. You can also do the same through Windows Explorer or My Computer click on **sup.exe** for installing the Supervisor and Supervisor Assistant machine and **operator.exe** for installing Data Entry Software on Data Entry Operator machine. **In any case both the programs should not be installed on SAME machine.**

Main difference in program for Data Entry Operator and Supervisor are as follows:

1. Data Entry Operator can access only those files for adding or verification of data which are set by supervisor while Supervisor can access any data file for any type of processing
2. All process related with facility will be processed on supervisor status machine.
3. All work assigned to Supervisor like coverage check, Field check tables generation etc. may be executed from supervisor machine

There may be more than one machine with supervisor status but it is advisable to assign only one of them as main machine. From this machine only coverage check, field check tables, fact book/sheet should be generated. This machine should be used for main backup. Other supervisor status machine may be used for entry of facility survey and modification suggested by Supervisor after comparison of verification report or after validation report.

During the installation of customization software, you may be prompted for the “install directory” i.e., the drive & the directory wherein this application will get installed. If the folder/directory displayed as “install directory” doesn’t exist, the setup procedure will create the same – however, the user can choose to change the Drive where the application will be installed. But, it is suggested not to change the default directory i.e. “C:\DLHS3DP”.

Overview of Software

After successful installation of DLHS-3 program you will see a new icon with name **DLHS3START** on your desktop on Data Entry Operator Machine and RCH3SUP on supervisor status machine. A new folder **DLHS3DP** will be created in root directory of **C** drive. There are sub folders in this folder. Folder organization for Supervisor is slightly different from folder organization for Data Entry Operator. Following is the folder organization with nature of file they will contain.

Folder Organization

\CONTROL	Data processing system control files like sample list and M#.dat
\MAIN	Main data files. Contains only SSDDPPa.dat files
\VERIFY	Verified data files Contains only SSDDPPv.dat files
\DOC	Storage of documents and manuals related to the country’s data processing operation
\APPS	All type applications
\FINAL	Storage of final data files after verification (option ...)—these files are now "final" and will be used for producing.
\REPORTS	Storage of all reports (like field check tables, coverage report) produced by the data processing system. Contains .txt files
\FACT BOOKS	Storage of PSU data file approve by the IIPS will be kept in this folder. These data files will used to generate fact books. Contains SSDDPPV.rch
\WORKMAIN	Storage of data files after a PSU is verified by data entry operator for Modification by Supervisor. This is main folder for all Supervisor activity. Contains only SSDDPPa.dat files
\WORKVERIFY	Used for generating report by comparing main and verified data file. Contains only SSDDPPv.dat files.
\BACKUP	Mirror files of \FINAL folder. Updated weekly from FINAL folder.
\FACILITY	Application for facility survey (only at supervisor machine).
\VILLAGE	Application for village questionnaire (only at supervisor machine)

Like operator machine, FACILITY and VILLAGE folder on **Supervisor machine** will also contain two folders- MAIN and VERIFY for purpose of keeping main and verified data of village and facility questionnaires. All folders of supervisor will be contained under **SUP folder**. For details, see Annexure4.

In DLHS-3 data processing system, following convention has been adopted for naming the file.

File Name Convention (Data Files)

SSDDPPa.dat: Data file created for a PSU in Add mode. File name denote that this file contains unverified data of PP PSU of DD district of SS state.

SSDDPPv.dat: Data file created for a PSU in verified mode. File name denote that this file contains verified data of **PP** PSU of **DD** district of **SS** state.

M##.dat: This file will be created in \CONTROL folder of Data Entry Operator. It contains information regarding PSU which are processed on that machine. These files will be used to generate coverage report.

dhSSDDa.dat: Main data file of District Hospital (DH) of state SS and District DD

chcSSDDa.dat: Main data file of CHC of state SS and District DD

phcSSDDa.dat: Main data file of PHC of state SS and District DD

subSSDDa.dat: Main data file of Sub Center of state SS and District DD

dhSSDDv.dat: Verified data file of District Hospital (DH) of state SS and District DD

chcSSDDv.dat: Verified data file of CHC of state SS and District DD

phcSSDDv.dat: Verified data file of PHC of state SS and District DD

subSSDDv.dat: Verified data file of Sub Center of state SS and District DD

vilSSDDPPa.dat: Main Data of Village file

vilSSDDPPv.dat: Verified Data of Village file

File Name Convention (Report Files)

??Diff.lst: This file will be created when compare the VERIFY and MAIN data if any differences between those two files gets generate. **?? DOES NOT mean here any STATE but type of questionnaire e.g. HH, DH, CHC,PHC, SC,Vil etc.** After opening the file you can see the variables where difference occurred. It also gives location and the name of the file (... \SSDDPPv.dat) on which you have run the Compare process "C", to avoid the confusion you may check before starting the modification in the file in the WORKVERIFY folder.

CoverageSSDD.txt: This file will be created in \CONTROL folder of Supervisor machine. It contains information regarding coverage report of PSU.

QuescovSSDD.txt: This file will be created in \CONTROL folder of Supervisor machine. It contains information regarding coverage report for questionnaires and district level aggregate coverage report of questionnaires.

ValidRCH.lst: This file keep all the errors generated after running the Validation process “V”. After opening the file you can see the errors by CASE NO. and error no. It also gives location and the name of the file (... \SSDDPPv.dat) on which you have run process, to avoid the confusion you may check before starting the modification. This process will be run on WORKVERIFY file (which has been update/corrected (if needed) after Compare process). In this version of software, a file after running validation will reach to FINAL folder there is no need to copy manually to FINAL folder.

CheckFLDSSDD.txt: It contains information regarding Field Check tables which get generated as soon as all the process . SS-- means state code and --DD means dist code.

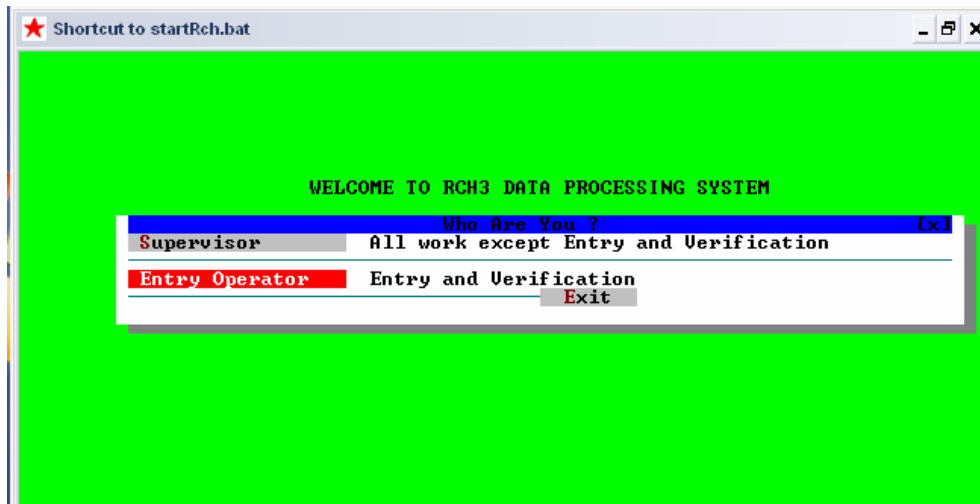
Process List

Following is the list of program which will be used for their respective purposes

DLHSEENTRY.ent	Program to allow data entry and verification of questionnaires
FirstMenu.ent	Menuing system for the supervisor
MachineEntry.ent	Setting a machine for processing
DH/PHC/CHC/SC.ent	Entry program for respective facility
Completion .bch	For coverage check for PSU
Completion2.bch	For coverage check for Questionnaire coverage
ValidRCH.bch	Application used for secondary editing
Compare.cmp	Utility to compare the main and verification files
CkList.bch	Application to produce the check field tables
DH/PHC/CHC/SC.ent	Validation program for respective facility
DLHS3START.bat	Program for starting DLHS-3 data processing
RCHSUP.bat	Program for starting DLHS-3 data processing On Supervisor Machine

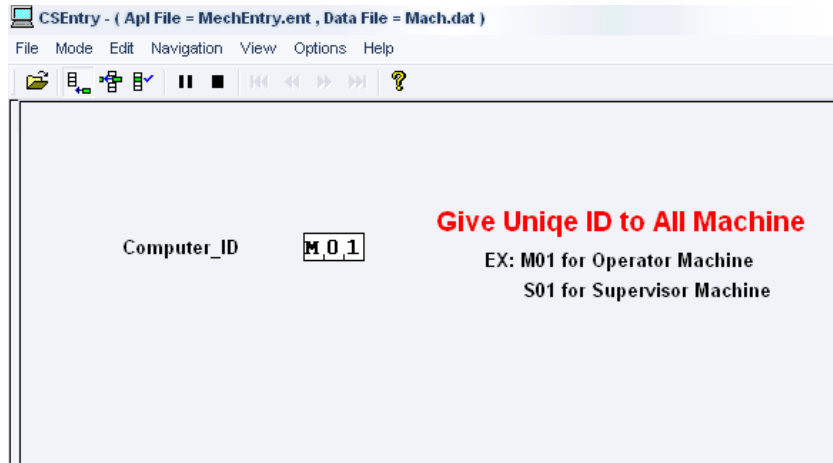
Setting the Machine for Operator

It is not expected from operator to know file and folder organization in DLHS-3 entry system. For Adding/Verification operator depends upon Supervisor to set his machine for particular PSU for specific operation Add/Verification. **In any case no PSU should be set on two machines for same purpose (Add or Verify).**

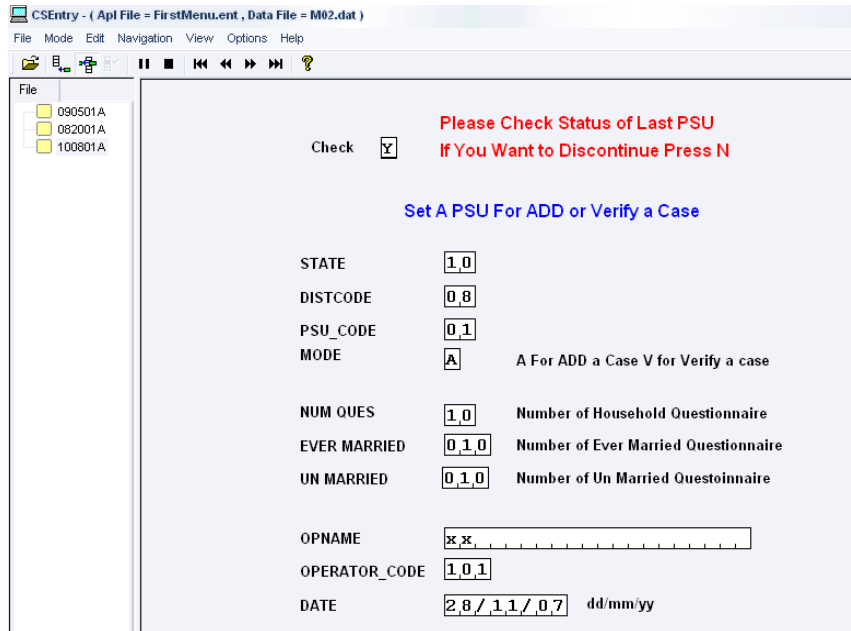


When supervisor enters from supervisor mode, he may encounter two type of situation:

1. Supervisor is setting the machine (assigning particular ID to machine). DLHS-3 system automatically decides whether machine is set or not and is asked first time when supervisor enters in **particular machine**. At this time system ask machine ID. Operator machine should be given M## ID while supervisor machine should be given S## ID. Here ## contains two digit number assigned for particular machine (like 01).



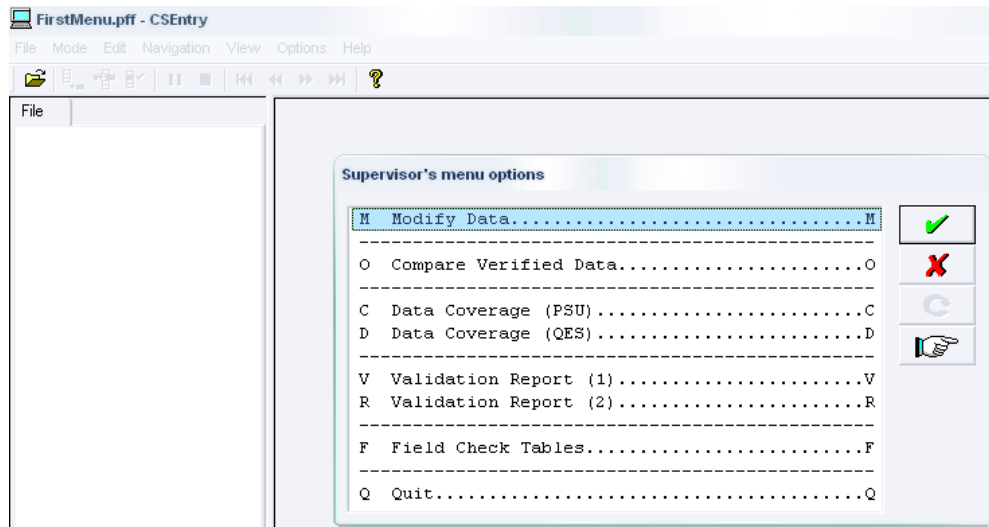
2. After successful execution of this program system create M(S)##.dat file. This file contains information about all PSUs processed on that machine.
3. Supervisor is assigning a particular PSU to operator for Add/Verification. This time system will ask State, District and PSU code along with type of work (Mode) Add/Verify, number of different type of questionnaires, operator details etc. This information will be stored in M##.dat file.



4. **Before setting a machine for verification, copy main data (SSDDPPa.dat) of PSU in VERIFY folder of machine on which verification work is intended. If such data does not exist, system will give an error message. If such file exists, system will automatically convert SSDDPPa.dat file to SSDDPPv.dat before verification.**

Execution of Processes

For executing different processes (like Modification, Compare, Coverage, Validation, Field Checks Tables) for which supervisor (or supervisor assistant) is authorized, one should click on **DLS3SUP** icon and should select the Supervisor mode from menu. Following menu will be appearing.



Five types of processes – (1) Modify data (2) Comparison of verified data (3) Coverage check (4) Validation (5) Field checks can be executed **from** this menu. For executing any process one should click on menu. Clicking on Quit will close the processes.

If any process (comparison of verified data or validation) for particular PSU is going to be executed first time then process should be executed in ADD mode. After execution system will ask whether this ID should be saved. If processes may be executed on this PSU in future then this PSU ID should be saved. ID will be shown in left pan of screen. If ID exists in left pan, then process should be executed in modification mode.

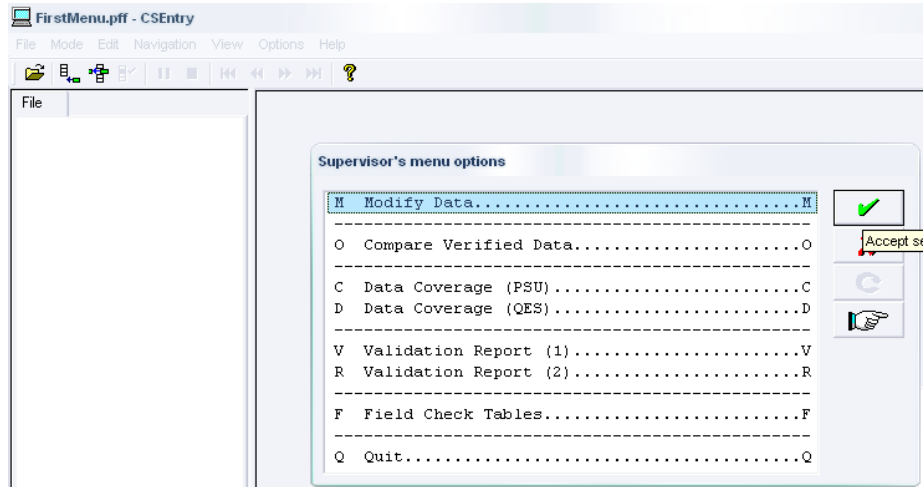
If unit of process is not a PSU and is district (like in Coverage and Field Check Tables) then PSU id should be 00. Similarly if unit of process is state (like in Coverage), then district and PSU id should be 00. Such ID may also be saved for future use.

If any ID is not required in future then it can be deleted. ID can be sorted and may be searched by using Find Case or **Ctrl+F** (for detail see Data Entry Guide).

Modify Data

This program may be executed from machine of supervisor status. Use option M from supervisor menu to execute this program. In a rare case supervisor sometimes require to modify the entry on certain items. To do so DLHS3DP program has an option to modify data in supervisor machine, it bring supervisor to “Modify” mode to set the supervisor machine for a particular PSU and then closes

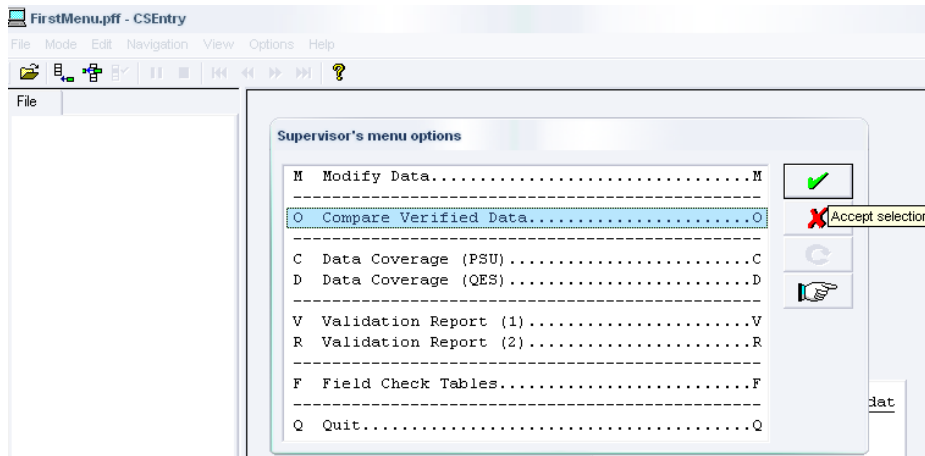
the menu. Thereafter, supervisor is supposed to go Entry Supervisor icon and select the HOUSEHOLD and start modifying the data.



Modification for facility and village data can be made by choosing a file through Entry Supervisor because all three options (Add, Modify and Verify) are available for these data file at supervisor machine.

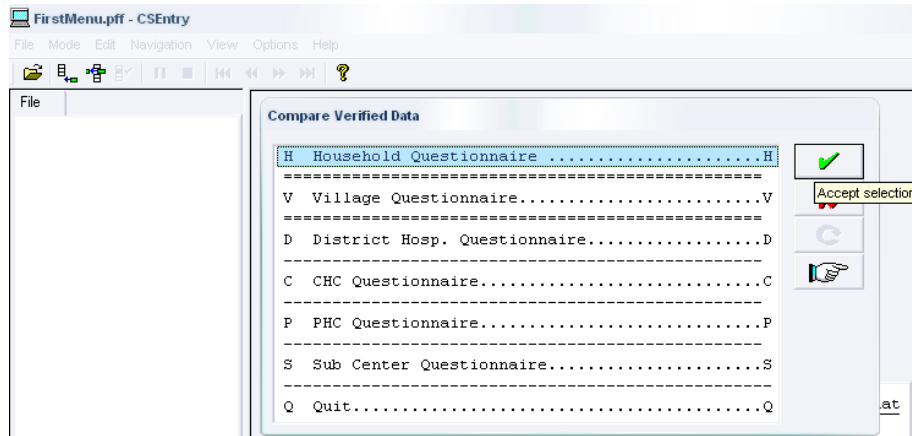
Compare Verified Data

These reports may be generated by using “O” option from supervisor menu in add mode for a new PSU.



Once click on “O”, another menu will popup which have all the options (for comparing Household press “H”; comparing Village Press “V”; comparing DH press “D”; comparing CHC press “C”; comparing PHC “P”; comparing SC “S” and QUIT pressing “Q”). For comparing household data supervisor will press “H” and give proper information regarding State, District and PSU code. Program compares main data SSDDPPa.dat particular PSU in WORKMAIN folder and verified data

SSDDPPv.dat of same PSU in WORKVERIFY folder. If any file does not exist in any of the folder, DLHS3DP will give you an error message. If the file is truly verified, DLHS3DP will give an error message stop the whole process.



The result of this task is a report showing the differences identified between those two files. The report is then printed and using the actual questionnaires the problems are identified and resolved by Supervisor. The differences are the result of keying errors by either or both the main or the verification data entry operators. In either case the PSU along with the report is returned to the Supervisor Assistant to change the data according to comments of Supervisor. Supervisor assistant will do following work before sending data for validation. Steps to follow for comparing files

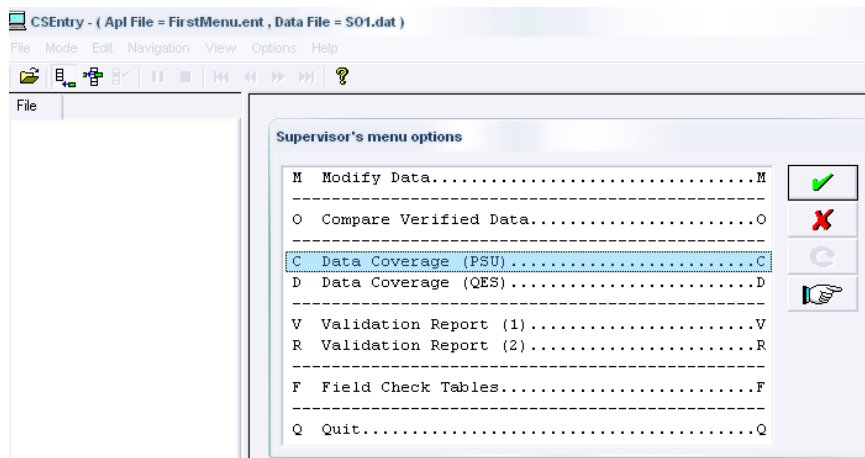
1. After putting the verified data file in C:\DLHS3DP\SUP\WORKVERIFY and original data in C:\DLHS3DP\DATA\WORKMAIN, he will use option "O" (Compare verified Data "O") of the supervisor's menu to compare the main with the verified data files.
2. If the result of report showing the differences are identified between those two files, then it is printed
3. The differences are the result of keying errors by either or both the main or the verification data entry operators. Supervisor Assistant will write value of correct data on hard copy after it confirming from questionnaire.
4. Data in WORKVERIFY directory is supposed to be more corrected in comparison of data in WORKMAIN directory. If any modification is needed then it should be made in data of WORKVERIFY directory.
5. If data of WORKVERIFY directory has been modified then comparison report should be again generated by running Compare Verified Data program from Supervisor menu again to prevent unwanted change. This time occurrence number should be changed.

If there is no difference between the main and verified data files, the data is supposed to be ready for validation.

For village and facility comparison: the file for any data you need to have files in both the folders main file in MAIN Folder and verified file in VERIFY Folder of the respective entry (Village/DH/CHC/PHC/SC). To compare facility village data one has to give input main data file and verify data file by selecting from the menu appeared on screen.

Coverage Report

For coverage report one should choose “C” and “D” options for PSU coverage and Questionnaire coverage respectively.

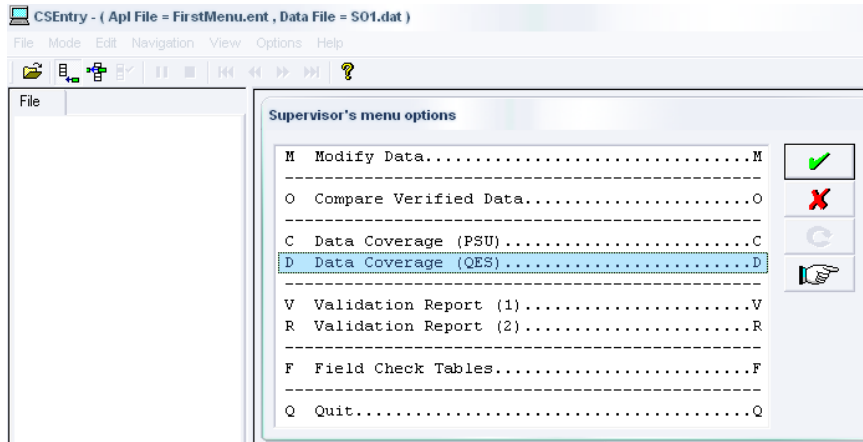


STATE	09
DISTCODE	00
PSU_CODE	00

Coverage report will be generated regularly. Before running the coverage check program, supervisor should collect M###. dat files in CONTROL folder of his machine from CONTROL folder of all operator’s machines. Then use option C or D from supervisor menu. There are two types of coverage report –

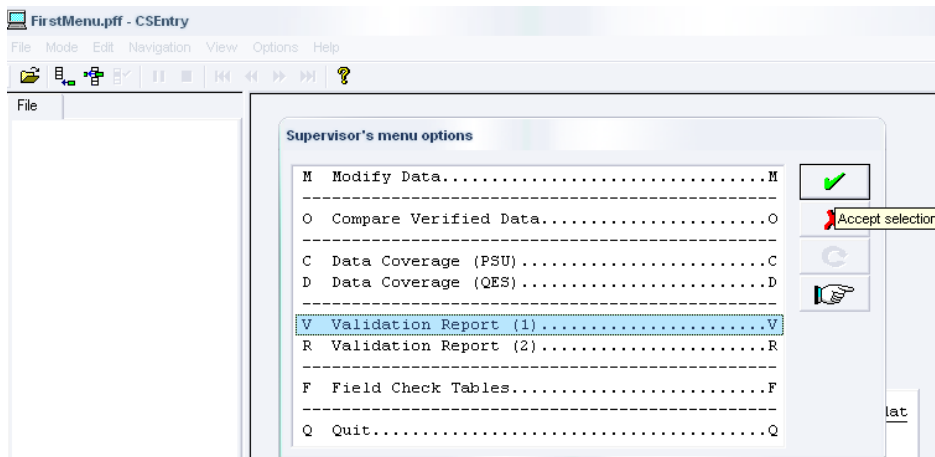
- (1) Coverage report of PSU
- (2) Coverage report for questionnaires (QUE).

Coverage report of PSU can be generated for a particular district or state as whole. If district code is 0 then report will be generated by name of **CoverageSS.txt** in Report folder otherwise report will be generated for particular district with name **CoverageSSDD.txt**. These reports based on machine setting by supervisor for Add or Verify on different operator machines. This does not consider Last PSU on operator machine has been completed or not.



Second type of coverage report may be generated for a particular district only. This gives you actual number of questionnaire processed (verified) for PSUs in particular district. It will display the number of household, ever-married woman and unmarried questionnaires supposed to be verified and how many have been wrongly verified in each category. This report also give district summary by summing the number questionnaire in supposed to be verified in respective categories. The report will be generated with the **QuesCovSSDD.txt**

Validation



This program may be executed from machine of supervisor status. Use option **V** or **R** from supervisor menu to execute this program. Option V gives validation report based on backward linkages while R gives based report on inconsistencies based on forward linkages and range check. Supervisor should put information regarding State, district and PSU code. If SSDDPPv.dat file does not exist in WORKVERY folder then system will give a message for non-existing file. Another information that will be needed is sequence of validation. Maximum 99 validation may be executed for a particular PSU. After successful execution an error report will be presented. This is a text file with name ValidRCH.lst Error messages have been written according to 80-column printer.

Validation report contains two sections – (1) Header section (2) Message section. Header section contain data file name, time of validation report, total number of errors etc. Message section contain

after line **Process message**. All messages of questionnaire are placed at one place in sequence. Messages for a particular questionnaire start with *****[Case ID]**. Each error has an error number which helps editor to understand nature of error in more detail by using **Error Manual**.

There are three type of errors- (1) Fatal (2) Error (3) Warning. Except warning, all errors denote some problems in reporting in questionnaire by investigator. In error report, all related items, which may be source of error, would be shown. Editor should clearly write which value(s) should be modified. He should also write (in error report), in view of error which question(s) in questionnaire has (have) been updated.

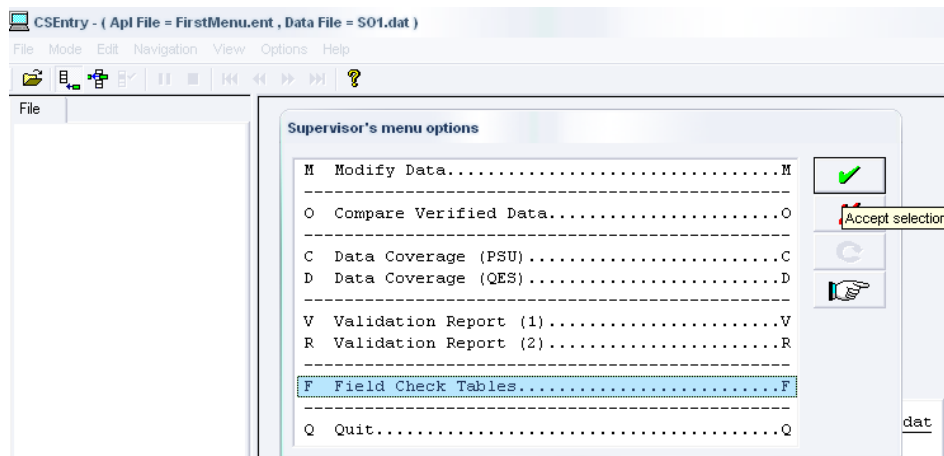
If complete source of error is not clear from message and (error manual) then editor should sit with supervisor assistant. He may show other data, which may be needed to get clear picture. Such situation will be few. Editor should mark such error on error report and check them in-group. This will save time.

Processes of validation should continue till validation report generated with no error or error of warning nature. Data file of such PSU should be copied to FINAL folder.

For village and facility data will be validated at IIPS. The IIPS will send the validation report as a txt file to the agency to modify the data. The validation will be continued unless the data will be error free.

Field Check Tables

Field Check Tables will be generated as soon as all the process done on the PSUs of a district. For generating this report, use “F” option from supervisor menu in Add or modify mode. Report will be based on validated data in FINAL folder of supervisor machine.



10 tables will be generated in the process. Each table will be having PSU level estimates. The expected level estimates are given in the last column of each table. One should read these table in regional context as the expected level may vary over regions or districts. However, if the calculated value of any

indicator vary in a large amount for a particular PSU then senior staff must find out why it so and document the reason behind it.

Data Dispatching Rule

As soon as the data is put in final folder keep it on FTP. The following files should be kept on FTP

1. SSDDPPv.dat,
2. Validation report of the PSU,
3. SSDDPPv.dat.idx,
4. SSDDPPv.dat.log,
- 5.SSDDPPv.dat.not,
6. SSDDPPv.dat.sts

In case of village and facility except validation report file i.e. file no. 2 above, all files with proper file conventions should be kept on FTP.

Read every day the notice which will be pastes on the common folder on FTP.

Fact Book/Sheet Generation

Execution process for generation of fact sheet will be discussed later on. However, the final file sent by IIPS with *.rch extension must be kept in Factbook folder.

What Supervisor Should Do and Should Not Do

Supervisor Should DO

- Set a Machine name in the fashion given in supervisor guide
- Assign a PSU as per your log book/register, however check the report status of earlier PSU if any household/woman questionnaire is left instruct the operator to make the entry of the same.
- Before setting the Next PSU, please run the INTERACTIVE EDIT in Both Mode (Logic and Range), it will help to guide you about the consistency of the data. This will be done only for MAIN DATA ENTRY.
- It is important to note that the Back up for a Machine control file (M01.dat, M02.datetc.) is equally important as it will be used while you run coverage check on your supervisor machine. If you have your machine in networking, we advise you to write a batch programme and copy all Machine Control Files on supervisor status machine every day.
- Minimize the time gap between setting a PSU and Making its entry in the Control Form. We suggest you to do it as soon as you set the PSU.
- Make two separate groups of operators, one is for Main data entry and other is for verification entry.
- Modify the data as per the questionnaire if difference appeared on comparing the data. If a supervisor is unable to resolve the certain differences consult it with head of the organization or demographer available with the organizer.
- All the validation report should be saved properly on the computer by PSU. These can be asked by monitoring agency or IIPS at any time to match with the questionnaire whether correction have been made in them.
- Physical log and DUPCHECK.xls should be compared regularly. So that you would have a track on the duplication of PSUs.

KEEP IN MIND

- As soon as the data is put in final folder keep it on FTP in the To Be Validated folder.
- Read every day the notice which will be pastes on the common folder on FTP
- Which file you need to keep on FTP
 1. ??????V.dat
 2. Validation report of the PSU
 3. ??????V.dat.idx
 4. ??????V.dat.log
 5. ??????V.dat.not
 6. ??????V.dat.sts

Supervisor Should Not Do

- No PSU will be processed on the two machines for the same type of activity (Main entry/Verify entry)
- It is must not to use the same operator for MAIN DATA ENTRY AND VERIFY DATA ENTRY

Frequently Asked Questions

What type of people would be involved in DLHS-3 data processing?

There are total 5 persons suppose to be involved in this entire data entry processing. 1) Data entry coordinator (Data processing supervisor). Under the Data processing supervisor there are four persons 1) Questionnaire administrator 2) Editor 3) Data Entry Operator 4) Supervisor Assistant.

What type of work involve in DLHS-3 data processing?

In DLHS-3 data processing mainly involves following work with the help of authorized persons who mainly does **1) Questionnaire administration 2) Editing of the questionnaire at office level 3) Data entry at two level 4) data verification and validation of the data.** This whole work will be done under the supervision of the data processing supervisor.

Along with this field **check table generation, coverage report, sending data to IIPS (for RA) and fact sheet generation.**

Why two types of machines, one for Data Entry Operator and other for Supervisor and Supervisor Assistant is needed?

Two types of machines are needed due to following reasons:

1. Data Entry Operator can access only those file for adding (Data Entry) or verification (Secondary Data Entry) of data set by supervisor while Supervisor can access any data file for any type of processing
2. All process related with facility survey will be carried in the machine of supervisor status.
3. All work assigned to Supervisor like **coverage check, Field check tables generation** etc. may be executed from supervisor machine.

How Assistant of Supervisor has different role than Data Entry Operator?

Supervisor assistant is basically data entry operator who is assisting the supervisor at certain level in the data processing. His main work is to modify the data after the verification report or validation report with prior permission of the supervisor. Data entry operator work is bounded up to certain level in the data processing, he can only enter the data after getting the edited questionnaire in add mode or verify mode for the given PSU questionnaires. While Supervisor assistant have an additional work i.e. data entry of the village questionnaire as well as of the facility survey data.

What are the qualifications of Supervisor Assistant?

Supervisor Assistant basically should have adequate efficiency with computer fundamental, specially working on file and folder.

What are the processes that are out of PSU cycle?

The process that are out of PSU cycle are (1) Generation of coverage report (2) Filed Check Table (3) Fact sheet generation. Field Check Table and Coverage Report will be generated weekly while Fact Sheet will be generated after completion of the survey in the district.

What is Data Processing line for a PSU ?

Receiving Questionnaire from the Field, Office Editing, Data Entry, Verification, Validation, Backup, and Field Check Table Generation. Only three works related with data processing- **(1) Generation of coverage report (2) Filed Check Table (3) Fact sheet generation** are out of PSU based cycle.

Field Check Table and **Coverage Report** will be generated weekly while Fact Sheet will be generated after completion of the survey. Now we will look into components of data processing one by one.

What is the name of installation program for CSPro 2.6, DLHS-3 supervisor program, and DLHS-3 data entry operator program?

The name of the installation program for CSPro 2.6, DLHS-3 is “**sup.exe**” for supervisor and supervisor assistant machine and for data entry operator machine it is “**Operator.exe**”.

How you can ensure that installation program is successful?

While installation of DLHS-3 program you will see a new icon with name **DLHS3START**. A new folder **DLHS3DP** will be created in root directory of ‘C’ drive.

What is root folder for DLHS-3 data processing?

After successful installation of DLHS-3 program you will see it will show the DLHS3START. A new folder DLHS3DP will be created in root directory of “C” drive. This is the main folder in this DLHS-3 data processing it contain certain main folder under the root directory of “C” drive.

What you can infer from file name 012202v.dat, DH1202a.dat, M04.dat

012202v. dat : 01 is the State code, 22 is for District code and 02 is for PSU code and v.dat for verified mode.

DH1202a: DH means District Hospital, 12 is the state code, 02 is the district code and a.dat means add mode.

What are the main points, which should be always remembered by supervisor?

Supervisor is a coordinator of data processing work. He is supposed to always keep in mind following points:

Set data entry operator machine for Adding or Verifying a questionnaire of particular PSU (Primary Sampling Unit). Data entry operator can process that particular PSU for that very purpose which is fixed on machine. Change in setting will be needed whenever work assigned for particular PSU is finished

- ❖ Maintain PSU wise log of data entry work.
- ❖ Assign data of PSU to other operator on other machine for verification.
- ❖ Generate validation report on verified data for a PSU
- ❖ Generate Field Check Table after completion of validation
- ❖ Send validated data to IIPS.
- ❖ Generate weekly coverage report of data processing.
- ❖ Keeping backup of data

What should be done when Hard Disk of a computer got crashed?

For Data Entry Operator Computer (Say the Machine M06 got Crashed)

Inform your supervisor immediately about it.

What supervisor supposed to do while a Machine M06 got crashed

Explore the possibility to retrieve Main and Verify Data as well as M06.dat file from the Disk and take the backup of the same.

One has to replace the hard disk and load the Microsoft Office and the CSPro 2.6. programme, which is available in the DLHS-3 software CD.

Load the latest antivirus software such as McAfee or Norton

Load the DLHS3DP software (for Data Entry Operator Machine) on the computer

Follow the steps given below

Assign the same OLD MACHINE NAME (M06) to the computer

Copy the files M06.dat the Backup file to the control folder

Set the PSU on the Machine M06. For setting PSU first look at your left Pan of the screen and match it with the Control Register. If latest PSUs are not available in the left Pan, first assign them through CONTROL FORM on this computer. If all PSUs matches, modify the latest PSU. To do so, one has to choose last PSU and click on MODIFY option.

Copy the last backup data into the folder available in DATA folder according to the folders for MAIN ENTRY and VRIFY ENTRY.

After adopting the above steps, you may continue the data entry from the last household/PSU before your computer got crashed.

To steps to change the machine

Agency must send

Last machine control file (M06)

How many entry from the Physical log (send the file in the word doc). Mark the last/Incomplete PSU to which you would like to shift to other machine

Steps to be done from IIPS side

- Match the Physical log with M06.dat(after opening in note pad)
- If the last PSU number is appeared in the M06.dat delete it
- Send this file to Supervisor to put it in Supervisor control folder
- Instruct the supervisor to set the last PSU on NEW/DESTINATION Machine and copy the DATA file as per the entry(Main/Verify)

Control Form for Data Processing

District Name:

District Code:

State Name:

State Code

PSU NO	Number of Schedule	Data Entry			Data Verification			Data Validation			Dispatched to IIPS (Date)
		Op Code (Machine Code)	Start Date	Date of Complete	Op Code (Machine Code)	Date of Start	Date of Complete	No. of Errors	Date Receive	Date Complete	
	(.) (.) (.)	(...) (..)			(...) (..)						
	(.) (.) (.)	(...) (..)			(...) (..)						

Control Form for Questionnaire Administrator

District Name:

District Code:

State Name:

State Code

PSU No	Schedule Type	Complete	Incomplete	Status			

Schedule Type: Household-1; Ever-married-2; Unmarried-3

Status: Added-1; Verified-2; Validated-3; Returned-4

PSU CONTROL FORM

PSU Name:			
PSU Code:			
Dist. Code:			
State Code:			
Team Code			

	Total	Complete	Incomplete
Household	_____	_____	_____
Ever-married	_____	_____	_____
Unmarried	_____	_____	_____

Supervisor's Name _____ Signature: _____

Date of PSU Completion : _____ Date of Dispatch to Headquarter: _____

{===== FOR OFFICE USE ONLY =====}

Receiver's Name _____ Signature: _____

Date of Receiving (PSU Bunch): _____

Main entry	Code		Verification	Code.
Operator	_____	___	_____	___
Computer	_____		_____	
Date	_____		_____	
Validation	_____	_____	_____	_____ (Date)
Final backup	_____			

Date: _____
 Jobs: Main Verification Validated Data Dispatched

Facility/Village CONTROL FORM

Dist. Name:			
Dist. Code:			
State Code:			
Team Code			

	Total	Complete	Incomplete
Village Questionnaire _____	_____	_____	_____
Dist Hospital _____	_____	_____	_____
CHC _____	_____	_____	_____
PHC _____	_____	_____	_____
Sub-Centre _____	_____	_____	_____

Supervisor's Name _____ Signature: _____

Date of PSU Completion : _____ Date of Dispatch to Headquarter: _____

{===== FOR OFFICE USE ONLY =====}

Receiver's Name _____ Signature: _____

Date of Receiving (PSU Bunch): _____

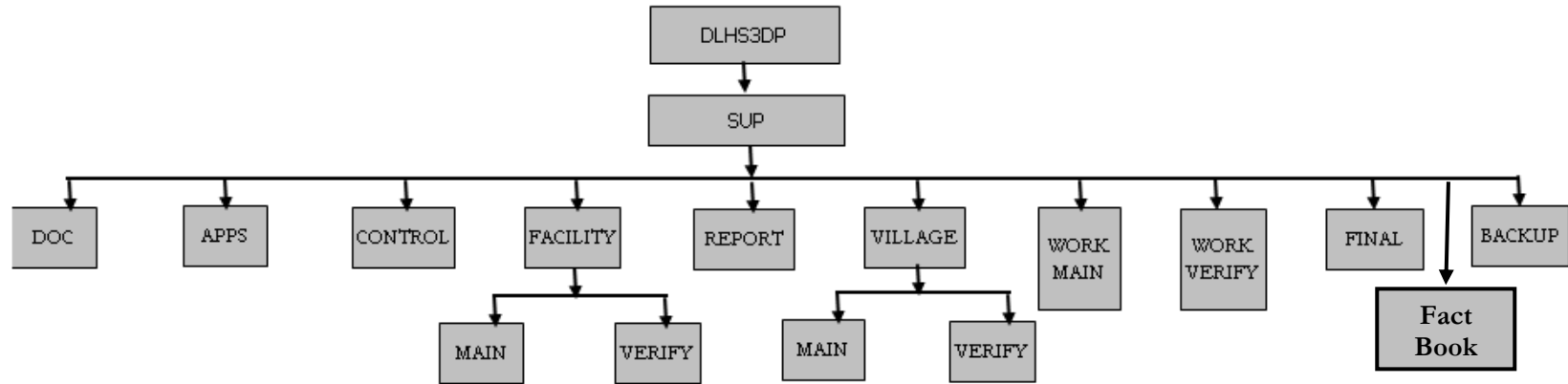
Main entry	Code		Verification	Code.
Operator	_____	_____	_____	_____
Computer	_____	_____	_____	_____
Date	_____	_____	_____	_____
Validation	_____	_____	_____	_____ (Date)
Final backup	_____	_____	_____	_____

Date: _____

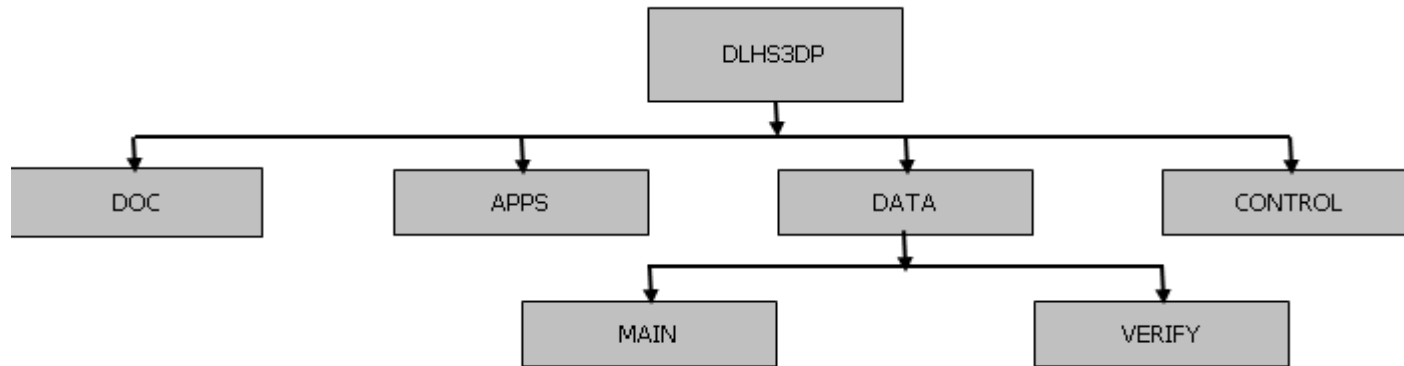
Jobs: Main Verification Validated Data

Dispatched

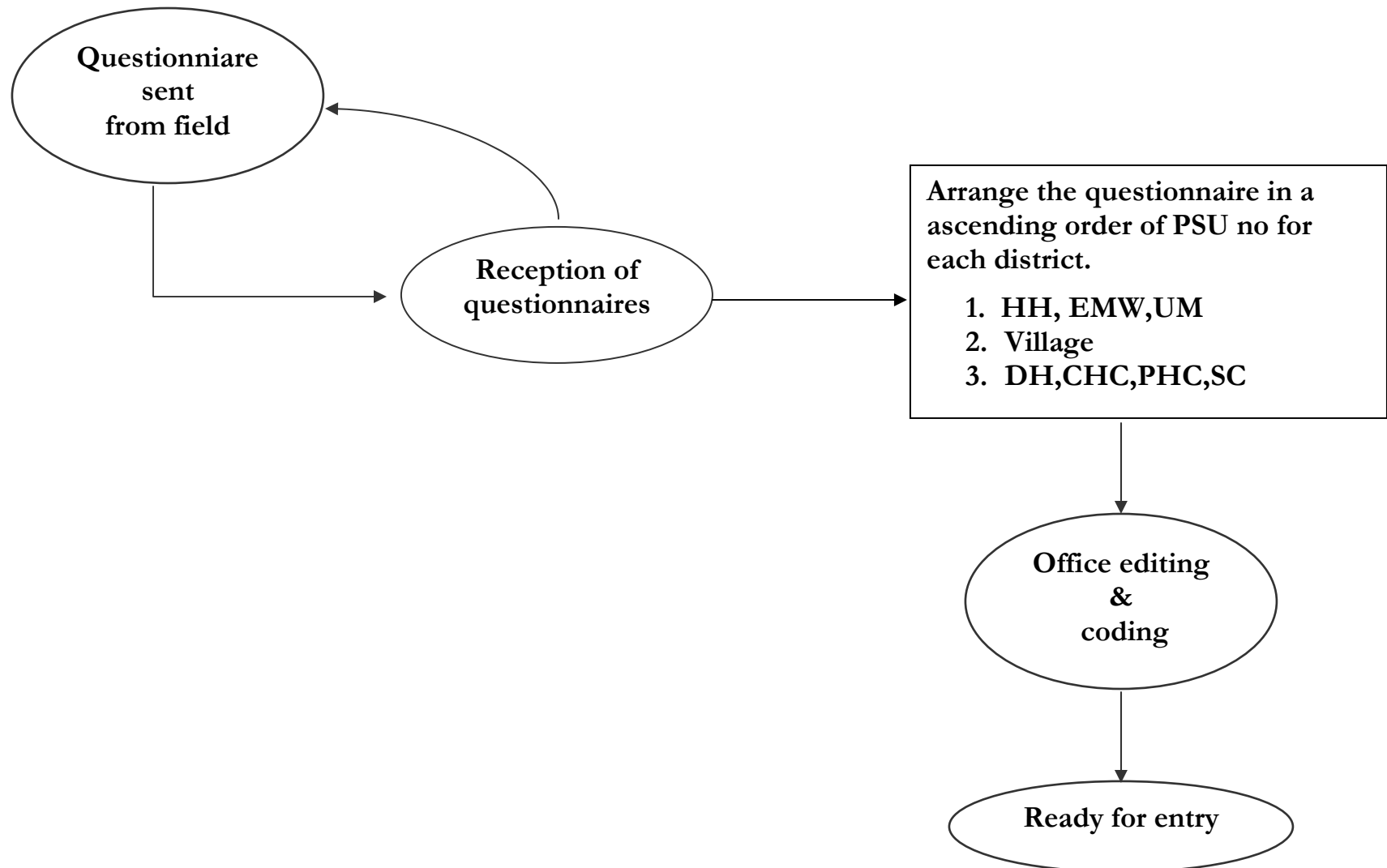
Folder Organization on Supervisor Machine



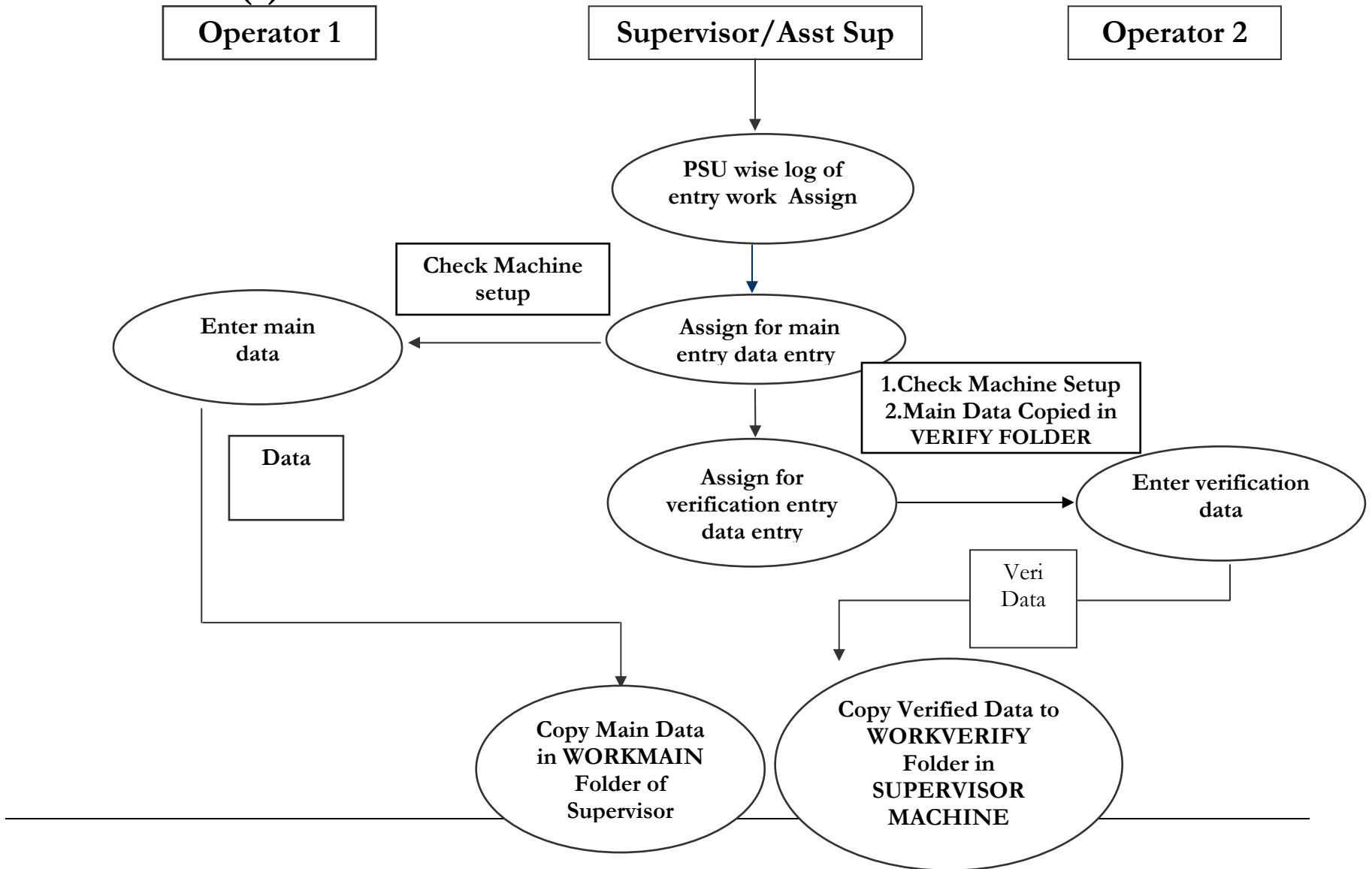
Folder Organization on Operator Machine



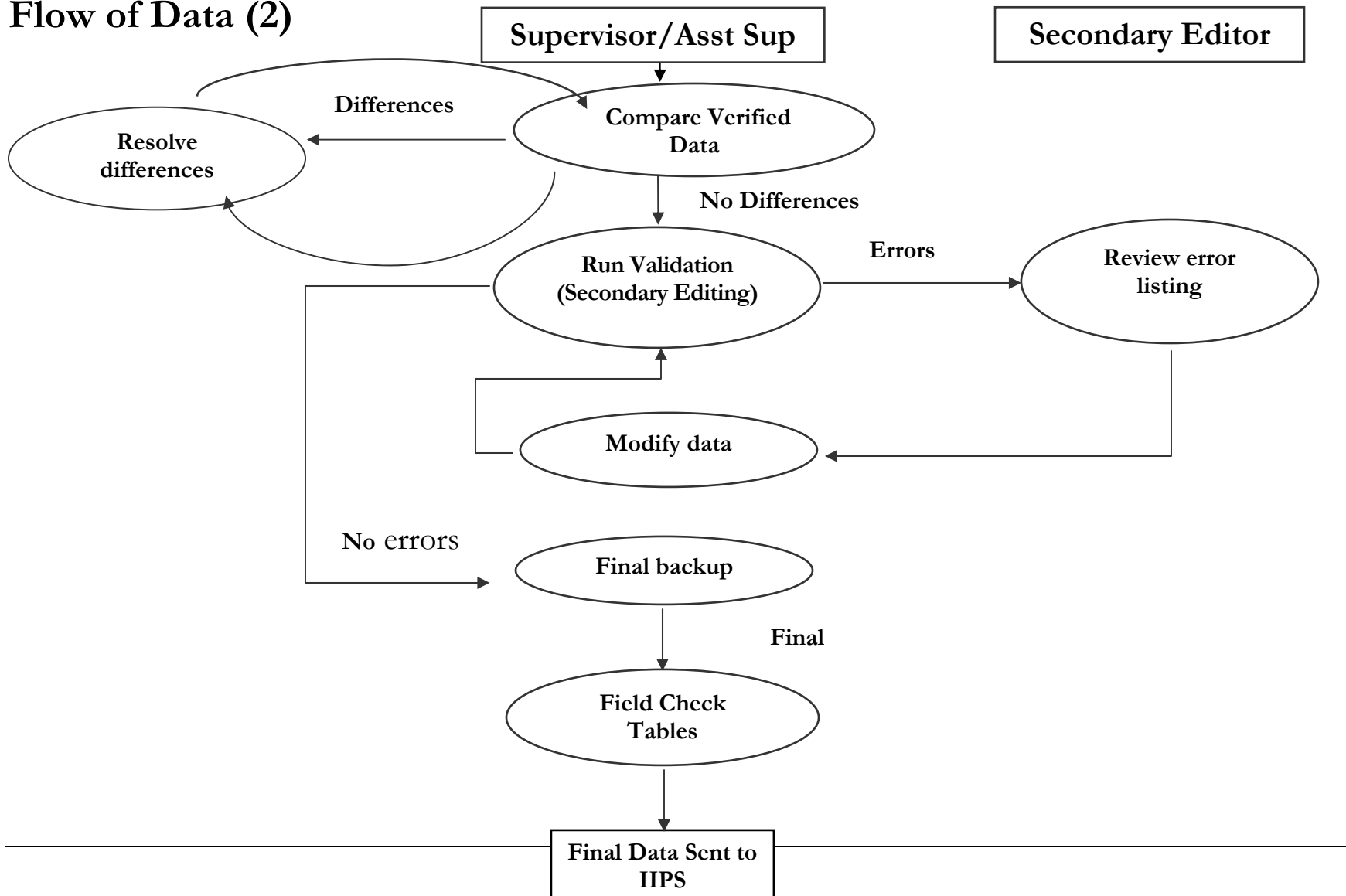
Questionnaire Administrator



Flow of Data (1)



Flow of Data (2)



Layout Of Data Entry Area

