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SYSTEM/PROJECT/PRODUCT: STC UTC SYSTEM

Timetable Preparation Handbook

for an

STC UTC System

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1. INTRODUCTION

1.1 Purpose

This document describes how to use the timetable preparation facility of an STC Urban Traffic Control System (UTC), hereafter referred to as the System, to enter, change and process System data.

1.2 Scope

The document is written for day to day users of a System that is capable of running SCOOT Version 2.4 or later. Users of the handbook should have attended an STC Data Preparation training course.

This document contains example screens. These are intended to be examples only and are correct at the time of document issue.

1.3 Related documents

Note: In the references below, the characters 'xxx' substitute for the 3 digit number which uniquely identifies a particular UTC System i.e. the customer variant for these documents.

- | | | |
|--------|------------------|---|
| 1.3.1 | 666/UH/16940/000 | Systems Requirement Specification for an STC UTC System |
| 1.3.2 | 666/UH/16940/xxx | Customer Requirements Specification |
| 1.3.3 | 666/HE/16940/000 | System Handbook for an STC UTC System |
| 1.3.4 | 666/HB/16940/000 | Operators Handbook for an STC UTC System |
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| 1.3.6 | 666/HG/16940/000 | System Management Handbook for an STC UTC System |
| 1.3.7 | 666/HD/16940/000 | Data Preparation Handbook for an STC UTC System |
| 1.3.8 | 666/HI/16940/000 | Data File Format Guide for an STC UTC System |
| 1.3.9 | 666/HB/16101/002 | SCOOT V2.4 Traffic Handbook |
| 1.3.10 | 666/KE/16066/000 | UTC Glossary of terms |
| 1.3.11 | 666/HP/16940/000 | Plan Preparation Handbook for an STC UTC System |

1.4 Definitions

For all definitions and abbreviations used in this and related UTC documentation see reference 1.3.10.

1.5 Issue state and amendment

Issues 01.00 to 09.00	Not issued.
Issue 10.00	First issue to align with V10 software
Issues 11.00 to 14.00	Not issued
Issue 15.00	Reformatted to Word and updated to reflect version 15 of the UTC system
Issues 16.00	Not issued
Issues 17.00	Updated to reflect version 17 of the UTC system.
Issues 18 to 20	Not issued
Issue 21	Updated to reflect version 21 of the UTC System
Issue 22	Not issued
Issue 23	Updated to reflect version 23 of the UTC System
Issues 24 to 27	Not issued
Issue 28	Updated to reflect version 28 of the UTC System
Issue 29	Not issued
Issue 30	Issue update only – no other changes

2. INTRODUCTION TO TIMETABLE PREPARATION

2.1 General

There are two versions of the timetable preparation program. Windows based (MMI) and non-windows based. The differences between the programs are significant and therefore each version is described separately in this handbook. Section 3 of the handbook refers to the non-windows based application, and the windows based version is described in Section 4.

The Timetable Editor is an application that allows timetable data used by the UTC System to be added, changed and deleted.

The Timetable Editor may also be used to edit CASTs.

2.2 Arrangement of Handbook

This handbook provides a guide to the running of the timetable preparation program in order that data may be entered concerning the configuration of the System and the parameters needed for the successful operation of the System.

The handbook is laid out to follow the menu structure of the timetable preparation program.

2.3 Format of Timetable Entries

Within the STC UTC System there are 2 types of timetable, which are described below:

2.3.1 Daily Timetable

The daily timetable contains those UTC Commands that the user wishes to be executed on a regular, daily basis. Twenty such timetables are available to the user. The entries in the daily timetable have a format that comprises the time at which the command should be executed and the command. For example, to activate SCOOT control on all SCOOT regions at 2 o'clock in the morning the following line would be entered into the timetable:

02:00 SCOO R*

Experience has shown that some users have a particular timetable, which is run on Monday, Tuesday, Wednesday, Thursday and Friday every week. If they have a command which is only to be executed on a particular day of the week the day of week can be specified in the timetable. For example, if the user wishes CAST 100 to be actioned at 14:30 every Wednesday the following command would be entered in to the Timetable:

WED 14:30 ACAS 100

2.3.2 Schedule or Day of Week/Day of Year Timetable

The timetable schedule is used to determine which timetable is to run on each day of the week. For example, to run timetable 1 on Monday, Tuesday, Wednesday and Thursday, timetable 5 on Friday, timetable 6 on Saturday and timetable 7 on Sunday the following entries would be used in the schedule:

MONDAY	1
TUESDAY	1
WEDNESDAY	1
THURSDAY	3
FRIDAY	4
SATURDAY	5
SUNDAY	6

It is possible to schedule a particular timetable to run on only one day of the year by preceding the timetable number with the date. For example, to run timetable 15 on Christmas day, the following Schedule entry would be used:

25:12 15

3. RUNNING TIMETABLE PREPARATION - NON-WINDOWS

3.1 Implementing Changes in the On-line System

When the entry, amendment and processing of the data has been successfully completed it is necessary to issue an update command to the running UTC System before the changes to the data have any effect.

3.2 Temporary Files

The database edit options makes a copy of all files containing UTC and SCOOT data that are to be changed. These copied files are known as temporary files and are the files that are actually changed. When the edit mode of the program is exited you are given the opportunity to delete the temporary files or to retain them for subsequent data preparation.

If no errors are found during data preparation the permanent files become copies of the temporary files and the temporary files are deleted. If errors are found during data preparation the permanent files are unchanged and the temporary files may be retained for subsequent editing to correct the errors contained in them.

3.3 Data Editing Method

The edit part of the program uses the standard DEC text editor, EDT. On-line Help is available which can be accessed by pressing the "Help" (or <PF2>) key from a DEC terminal or by pressing the F2 key on a PC type terminal. A diagram which shows the functions of the numeric keypad keys when using a DEC VTxxx terminal, or terminal emulator, is shown at Appendix A - .

To finish the editing session and return to the menu use the key sequences as follows:

<PF1><X> Any changes made during the editing session are kept.

<PF1><Q> Any changes made during the editing session are discarded.

While the editor is starting and finishing, information is displayed on the terminal regarding the files being read or written.

The EDT editor is used to change the Timetable data.

3.4 Starting the Program

The timetable preparation program is started by typing

- TTBP<RETURN>

at a terminal which has level 16 access.

It should be noted that the System only allows one user to run the timetable preparation program at any one time. In addition, if DBAS or PPRP is being run elsewhere on the System, timetable preparation is not available.

The terminal on which this command is entered is inhibited from receiving any further system messages and is not capable of entering any further system commands until the timetable preparation process is finished or cancelled.

3.5 Welcome Screen and Main Menu

After starting the program the welcome screen is shown; press <RETURN> to continue.

```
*****
*
*      Welcome to ANYTOWN COUNCIL UTC/SCOOT Timetable Preparation.      *
*
*      Session commencing at 17-AUG-1992 15:38:32.29                    *
*
*****
Checking for TIMETABLES temporary files
-----
Press [RETURN] to continue
([HOLD] to hold screen)
```

The temporary files referred to in this display are files which exist if either the latest changes to the "database" have not been prepared or if the "database" was found to contain errors when the "database" files were last prepared. At this point the program decides whether to use existing temporary files for the editing process or whether to make a copy of the permanent "database" files to use as temporary files for editing.

```
-----
TIMETABLE PREPARATION - MAIN MENU
-----
You have the following choices:
L - List Timetables
E - Edit Timetables
P - Process Timetables
F - Finish Timetable Preparation
Please enter your selection, or H for Help:
```

You then see the main menu screen as shown above. In order to select an operation one of the letter keys L, E, P, F or H should be pressed, followed by the <RETURN> key.

3.6 List Timetable Files - Main Menu Option L

```
-----
TIMETABLE PREPARATION - LIST MENU
-----
You have the following choices:
T - select Time of day timetable data [not selected]
W - select day of Week / date of year timetable data [not selected]
A - List all selected files
F - Finish List Menu
Please enter your selection, or H for Help:
```

3.6.1 T - List Time of day timetable data

The list menu (see above) shows the range of menu options. Pressing T <RETURN> causes a further menu to appear allowing you to select from a range of options.

```
Select Timetables to Process
-----
You have the following choices :
A - Select All timetables
R - select a Range of timetables
S - select a Single timetable
F - Finish - select no timetables.
Please enter your selection, or H for Help:
```

The following keys are used to select the timetables to be listed:

- A All valid timetables are selected
- R You are asked to enter the number of the first timetable in the range and then the number of the last timetable in the range.
- S Enter the number of the single timetable to be listed.
- F You are returned to the Timetable List menu with no TOD timetables selected.

3.6.2 W - List Day of Week/Date of Year Timetable data

Pressing the key W followed by <RETURN> causes the "not selected" message alongside to change to "selected". Making the same selection again causes the message to revert to "not selected".

3.6.3 F - Finish Listing Timetables

Pressing F <RETURN> returns you to the timetable preparation main menu.

3.6.4 A - List All Selected Timetables

Pressing A <RETURN> causes the List Screen (see below) to be shown. Any timetables selected for listing are included in the list.

```
LIST TIMETABLE DATA
-----
```

You can list the data to the standard printing device or to your terminal.

Do you wish to list the file(s) to the printer (Enter Y,yes, or N,no) [Y]:

Pressing <RETURN> on its own accepts the default option to list the selected files to the printer. Pressing N <RETURN> causes the selected files to be listed on the terminal.

If you have selected the option to list the files to the terminal the files are displayed on the terminal. At the end of each screen of data you are invited to press <RETURN> to show the next screen's worth of data.

When the printing and/or display of data is finished you are returned to the main menu.

The format of the information output is described in the Data File Format Guide, reference 1.3.8.

3.7 Edit - Main Menu Option E

The various options which allow you to edit the files which make up the UTC "database" are accessed through the Timetable Preparation Edit Menu which is shown below. A description of the various option letters and their effects follows.

```
-----
TIMETABLE PREPARATION - EDIT
-----
```

You have the following choices:

```
T - Time of day timetable data (1-20)
W - day of Week / date of year timetable data
F - Finish Timetable Editing
```

Please enter your selection, or H for Help:

3.7.1 T - Time of day timetable data

You are asked which of the time of day timetables you wish to edit. Enter a number between 1 and 20 and press <RETURN>. The screen shows the timetable details similar to that shown below.

```
<SATURDAY>
#
# 30-JUN-1994 15:20:38 SIEMENS First change with new TTB prep
# 30-JUN-1994 15:27:32 SIEMENS
# 8-JUL-1994 08:40:18 "Offline Edit"
# 8-JUL-1994 08:40:39 "Offline Edit"
#
```

```
S A T U R D A Y   T I M E T A B L E
=====
```

```
TIME 00:00
=====
```

```
00:01      SCOO      R*
00:01      MODL      R* 1
00:01      PLAN      A01000 5
00:01      PLAN      A02000 8
00:01      PLAN      A03000 8
00:01      PLAN      J01441 2
```

When finished the "F" option in this menu takes you back to the main Edit Menu.

3.7.2 W - Edit Day of Week/Date of Year Timetable Data

When the Edit Day of Week/ Date of Year Timetable Data option is selected you are presented with a screen similar to the one shown below. Scroll through the data on screen using the <UP> and <DOWN> arrow keys. Edit the data using the instructions given in section 3.3.

The following shows an example of this timetable data:

```

MONDAY      1
TUESDAY     2
WEDNESDAY   3
THURSDAY    3
FRIDAY      4
SATURDAY    5
SUNDAY      6
;
01:01      12
25:12      13
    
```

3.7.3 F - Finish Timetable Editing

The Finish Timetable Editing Menu option returns you to the Main Menu.

3.8 Process Data - Main Menu Option P

Processing converts the data entered into a form suitable for use by the System. It reformats the data, if necessary, for use by the listing option on the main menu and carries out further data checks to those performed at data entry time.

3.8.1 Selection of Data to be Processed

After selecting the Process Data option you are presented with the Data Process Menu shown below. Selecting options D, W or M changes the "not selected" message shown against the option to "selected" and vice versa. Selecting option T causes the Timetables to Process menu to be shown, which allows single timetables, a range or all timetables to be selected. Alternatively, selecting the Finish option causes no timetables to be selected. After making a selection you are returned to the Data Process Menu shown below with the result of your selection shown alongside the Timetables to process option.

```

-----
TIMETABLE PREPARATION - PROCESS MENU
-----

You have the following choices:

T - select Time of day timetable Data    [not selected]
W - select day of Week / date of year timetable data    [not selected]
A - process all selected files
L - List Error Files from data processing
F - Finish process menu

Please enter your selection, or H for Help:
    
```

3.8.2 Order of Processing

Much of the system data is interdependent. As a result there are certain restrictions on the order in which data may be successfully processed.

The UTC and SCOOT data must be successfully processed first as this declares the SCNs referred to by several other data areas.

The timetable data must be processed after all other data. Timetable command lines are processed in a similar way to operator commands and therefore require all the other system data to be available for reference.

If several data areas are selected for processing at the same time, the System automatically processes them in the correct order.

3.8.3 Processing of Data

Selecting the "process All selected data" option initiates the data processing phase that processes each category of data in turn. In a multi-machine System a further screen appears; this is used to determine which TCC's data is prepared. As the processing of each category of data starts an appropriate message is shown. Any errors or problems found during the processing of data are shown on your terminal, as well as being stored in an error file. You are informed when the processing of a particular category of data is finished. When the processing of all the selected categories of data is complete, you are returned to the Data Process Menu.

3.8.4 Error and Warning Message Listings

At the end of the data processing phase, if error or warning messages have been produced you are asked if you wish to list the error files. Pressing <RETURN> accepts the default answer of Y to list the error files. This is repeated for each error file produced during data processing. You are then asked if you wish to list the error files on the terminal; pressing <RETURN> gives this default whereas pressing N <RETURN> lists the error files on the standard printer. If you have chosen to list the files to your terminal, the file is shown a screen at a time, with prompts to press <RETURN> to continue to the next screen of error listing. When the error listings are complete you are returned to the Data Process Menu.

Error messages may be generated both as individual lines in the data file are read, and after the whole file has been read, and the data processor resolves cross references both within and outside the file. It is possible for one error to generate both types of error message. Some errors cause processing of the current file to be aborted. Others cause consequential errors as otherwise correct data is found in apparently the wrong position.

Many errors are now trapped by the Forms data entry system, and hence the corresponding data processing error should never be seen.

The latest set of error listings can also be obtained by selecting the L option from the Data Process Menu.

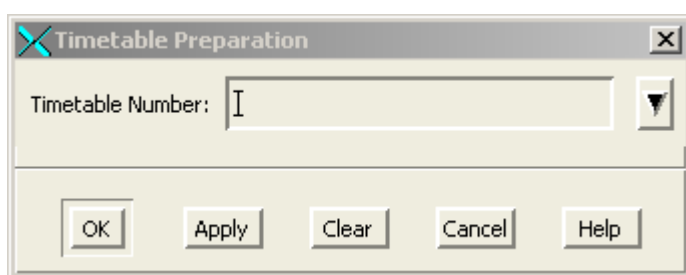
4. RUNNING TIMETABLE PREPARATION - WINDOWS

General details regarding the use of windows-based programs may be obtained from the Operators Handbook, reference 1.3.4.

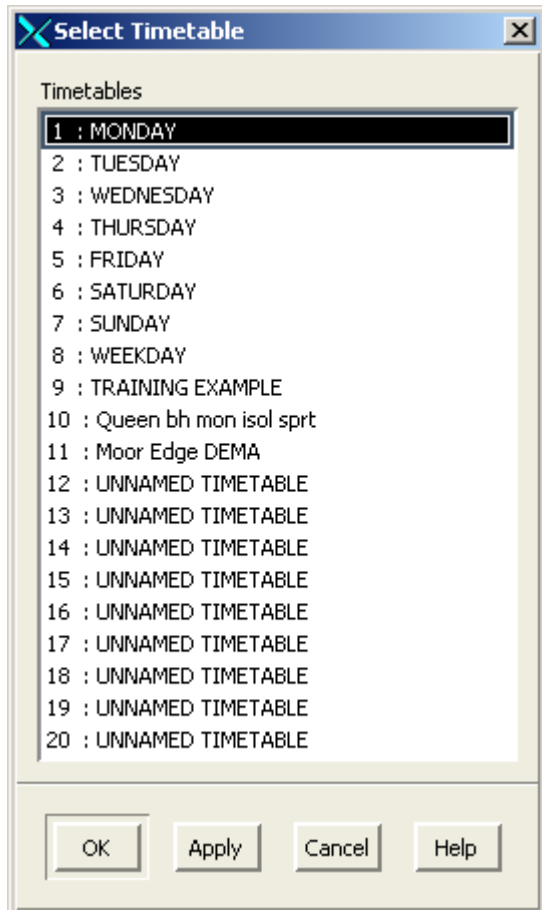
Context sensitive help is also available on-line by clicking on the 'Help' option in the top right hand corner of the window. Select 'On Context' from the options displayed and the cursor changes to a query "?". Position the query over the cursor over the part of the window where you need help and click the left mouse button. To cancel, click on any part of the screen background.

4.1 Starting the Program

From the Manager menu select TTBP - Timetable preparation. The Timetable Listing Window appears with no timetable loaded.



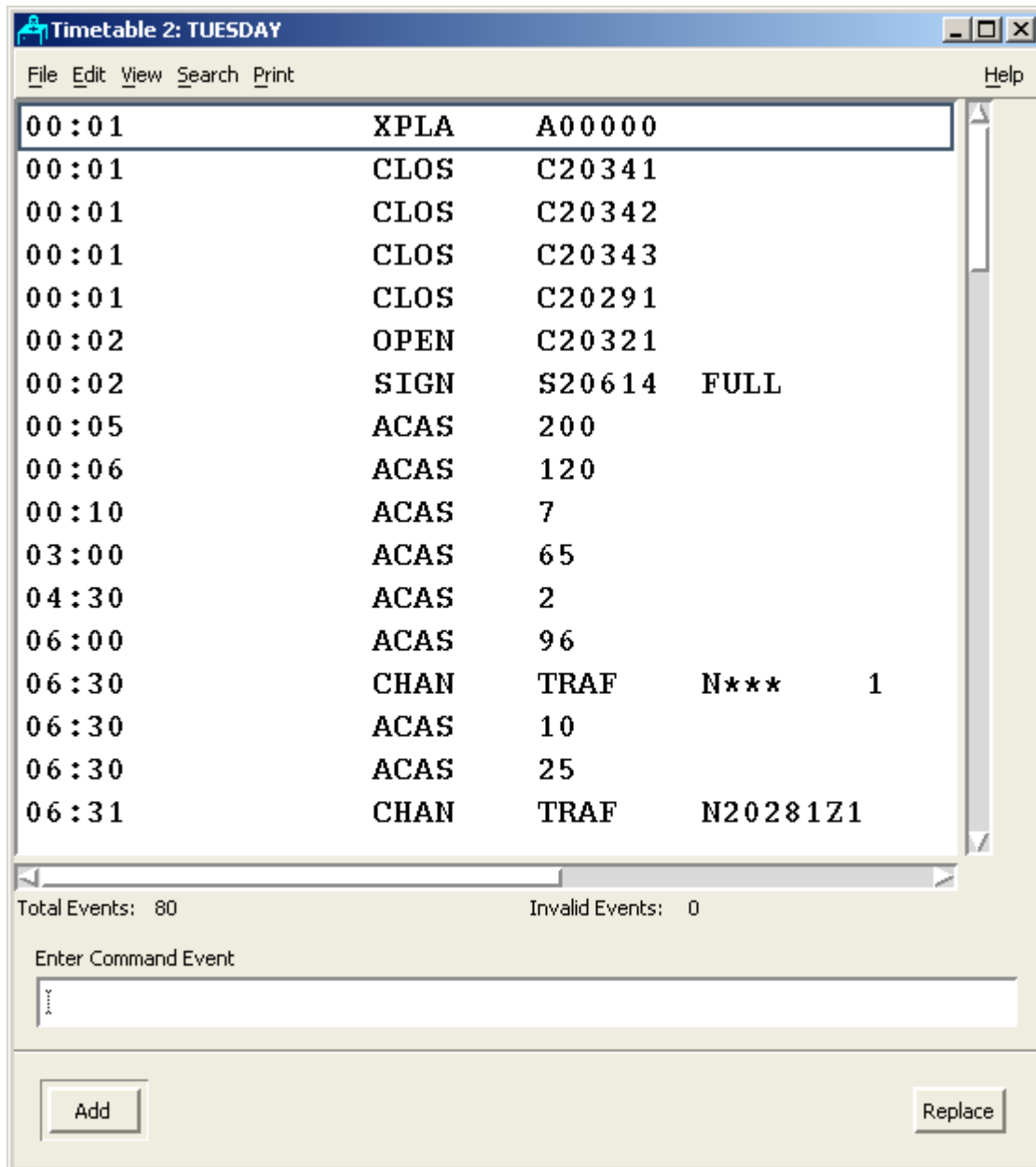
If the number of the timetable which is to be edited is known this should be entered and the OK button clicked; alternatively if no number is entered and OK clicked, the Select Timetable window will appear from which the timetable may be selected.



Select the timetable you wish to edit by using the mouse to point to the required timetable and then either:

- i) double-click to load it into the Timetable Editor window, or
- ii) click on the timetable then click on Apply, or
- iii) click on the timetable then click on OK.

The timetable is loaded into the Timetable Listing Window and becomes available for editing, using the Menu Options at the top of the screen listed below. At the same time the Select Timetable window disappears.



The timetable listing window shows the timetable being edited or viewed. The window is a scrolling window, meaning that any part of the timetable may be viewed by dragging the slider on the scroll bar, or by clicking on the up or down arrows above and below the slider.

Events are displayed in the window, and formatted so that the fields are aligned. Comments are shown in italics.

Events that are invalid have the text "BAD" at the end of the line.

Events may be selected by clicking on them. Selected events are displayed in reverse video.

Many edit operations require one or more events to have been selected. The simplest way to select events is to click on the appropriate line in the timetable listing window.

Multiple events can be selected by pressing the left-hand mouse button on the first event and dragging the pointer over the events to be selected.

Holding down the <SHIFT> key while clicking on an event extends the previous selection by selecting all the events from the previous selection up to the event clicked on.

Discontiguous ranges of events can be selected by holding down the <CTRL> key while clicking on an event.

4.1.1 File

The file menu contains options for opening and saving the timetables to edit, for opening the timetable schedules for editing and for exiting Timetable Editor.

Open Timetable Opens the Select Timetable window. If a timetable is currently loaded which has unsaved changes, a dialog box asks if you want to save the changes. A list of available timetables is displayed. Double click on the timetable you want to edit.

Save Timetable Closes the window saving any changes. See below for further details.

Open Schedules Opens the Timetable Schedules window as described below.

Exit Returns you to the UTC main menu. If any edits have been made during the session you are asked whether you wish to retain the changes or not.

4.1.1(a) Save Timetable

Select this option to save the currently loaded timetable. A dialog box asks for a description of the changes made. Timetable Editor stores the time of change, the user and the descriptions of the last 20 changes made to each timetable. These are printed with the timetable when it is printed.

Once the save description has been entered, the timetable is saved to disk. If the timetable contains no errors, the timetable data is also written into the pending timetable SGA (shared global area). The timetable SGA contains timetable data to be loaded into the Traffic System when you exit the Timetable Editor (or when the UPDA Timetables command is entered). If the timetable contains errors a warning message is displayed, indicating that the timetable has not been written into the Timetable SGA. The changes are nevertheless saved in the timetable source file.

Once a timetable has been saved the <UNDO> option is no longer available to restore changes made before the timetable was saved.

4.1.1(b) Open Timetable Schedules window

This window holds the Day of Week and Date of Year Timetable data.

The first listing shows the day of week timetables. For each day of the week a timetable is specified. The same timetable may be used for more than one day of the week.

The second listing shows the date of year timetables. These are timetables used on particular dates. Date of Year timetables take precedence over day of week timetables.

The day of week timetable schedules may be modified by clicking on the day of the week you wish to change. The Day of Week Selection Dialog box is displayed.

The date of year timetable schedules are modified in three ways. A date of year schedule entry may be deleted by selecting it and pressing <REMOVE>. It may be modified by pressing <MODIFY> or a new entry may be created by pressing <ADD>. The modify and add options open the Date of Year Selection Dialog box.

Note: Double-clicking an entry is the same as selecting it and then pressing the <MODIFY> button.

To save changes and exit press the <OK> button. You are asked to enter a description of the changes made.

To quit without making any changes press the <CANCEL> button.

To restore the original values press the <RESET> button.

4.1.2 Edit

The Edit menu contains options for modifying the loaded timetable in various ways. The most commonly used of these options is cut and paste. Many of the options listed below require you to have selected the event(s) you want to work on.

Undo Last	If the last edit carried out is incorrect then use this command to go back to the previous state.
Undo All	Returns the timetable to its condition before the current changes were carried out.
Redo	Repeats the last action.
Cut	Removes the selected text and places it in the clipboard.
Copy	Copies the selected text. You are prompted to move the cursor to the position the text is to be copied to.
Paste	Places the text from the clipboard into the selected position.
Delete	Removes the selected text.
Copy to Event	Takes the line of the timetable currently selected and copies it to the event entry field at the bottom of the screen.

Move Up	Takes the currently selected line of the timetable and moves it up one line.
Move Down	Takes the currently selected line of the timetable and moves it down one line.
Change Event Time	Displays a sub-window containing the time of the currently selected line. Enter the new time (to the nearest second) and press OK. Press Cancel to leave the time unchanged.
Change Title	Change the title of this timetable. Enter the new title and then press OK, or Cancel to leave the title unchanged.
Select All	Selecting this option selects all the lines of the current timetable.
Note:	The Move Up/Move Down options shown above are only available when the timetable is sorted in the default order. If the order has been changed, these and other options may not operate.

Using the Edit functions described above you can select events in the window and then move, delete or copy them.

4.1.2(a) Event Entry Field

The event entry field consists of a text entry box and the two buttons below <ADD> and <REPLACE>. New events may be typed or existing events can be modified in the text entry box and then the <ADD> button clicked to insert the event into the timetable in the correct position in the time sequence. If the <REPLACE> button is clicked then the event entered in the text entry box replaces the first event selected in the timetable listing window.

The action taken when you press <RETURN> after typing in an event depends on the context. Normally, the default action is for the event to be added to the timetable (as if the <ADD> key has been pressed). This is indicated by a second border around the Add button. If, however, you double-click on an event in the timetable listing window, that event is copied to the text entry box and the default action on pressing <RETURN> becomes Replace. This is indicated by a second border around the Replace button.

Events entered or modified in the text entry box are checked for validity before being entered in the timetable.

A dated command may be entered by prefixing an event with a date.

When an event is added into the timetable and other events occur at the same time, normally the new event is added after all the other events occurring at this time. If, however, the first selected (highlighted) event in the timetable occurs at the same time then the new event is added immediately after the selected event.

4.1.3 View

The View menu contains options for modifying the order in which a timetable is displayed, or displaying a sub-set of the timetable events by selecting one or more filters . This menu also contains the View Timetable option, which allows another

timetable to be viewed in a new window. Events may be copied from the viewed timetable into the timetable being edited.

4.1.3(a) Filter

Enables a selection of timetable data to be viewed. Use one or more of the following criteria to limit the data shown on screen.

SCN	Enter a valid SCN number.
Command	Enter a command here if you wish to view only the events relating to a particular command.
Invalid Events	Check this box if you wish to view only the invalid events. This feature is useful for correcting bad timetable lines.
Normal	Select only normal timetable lines.
Dated	Select only dated timetable lines.
Normal & Dated	Select both normal and dated timetable lines.

Once you have made entries in the required fields

<APPLY>	carries out the filter process.
<OK>	filters the data and closes the window.
<RESET>	returns the filter box entries to their default settings.
<CANCEL>	exits the filter box without changing the entries in the timetable.

4.1.3(b) Sort

Enables the timetable data to be sorted by the following criteria:

Time	The default option. Displays the timetable in time order.
Command	Sorts the timetable commands into alphabetical order. Comments are placed at the top of the timetable.
SCN	Sorts the timetable data into SCN order. Comments are placed at the top of the timetable.

Note: Some edit operations, such as move up/move down are only available in the default display order.

4.1.3(c) View Timetable

This option displays the Select Timetable window. Any timetable may be chosen from this window and displayed alongside the timetable being edited. Any data (including comment lines) from the view window may be used in the editing process. Selecting a line from the sub-window and double-clicking on it copies it to the edit area of the timetable being edited. All the menu options with the exception of the editing functions are available to the user.

4.1.4 Search

The search menu contains options for searching for a particular string of characters in the timetable. Find next and Find previous options repeat the last search requested in downward and upward directions.

- | | |
|---------------|---|
| Find | Searches the timetable data for the text string entered. Enter the text to be found followed by Apply or OK or <CR>. If the string is found the line is highlighted. If nothing is found to match the entry a warning message is displayed. Click on OK or press <CR> to return you to the timetable edit function. |
| Find Next | Use this command to search the timetable to find the next instance of the string entered above. |
| Find Previous | Use this command to search the timetable to find the previous instance of the string entered above. |

4.1.5 Print

- | | |
|---|---|
| Print Timetable | Sends a copy of the timetable selected to the selected printer. If the current timetable has unsaved changes the timetable is printed with these changes. |
| Print Timetable as Viewed | Sends a copy of the current timetable to the selected printer. If the current timetable has unsaved changes the timetable is printed with these changes |
| Print Page | Prints the page on view in the timetable listing window. |
| Print selection | Prints the events that have been selected. Select text by pointing the cursor to the top of the selected area, press the button and, holding it down, drag the cursor to the bottom of the selected area. Release the button. |
| Print Day of Week/
Date of Year
Schedules | All the options which have been entered in the day of week/ date of year timetable schedules are printed |

4.2 Edit timetable data

To edit a line of timetable data you must first enter it into the timetable event window at the foot of the timetable edit screen. This may be accomplished in one of the following ways:

Double click on a line of timetable data, either from the timetable being edited or a timetable being viewed. The data is copied to the event window and may be amended, deleted or copied from there. The data that has been copied remains in its original position.

Clear the timetable event window (using <BACKSPACE> or highlight the line and <DELETE>), and enter your own data.

4.2.1 Entering Comment Lines

Comment lines may contain any combination of alphanumeric characters. They do not form part of the timetable.

A comment line should be prefaced with a ";" (semi-colon). Comments appear in italics in the finished timetable.

4.2.2 Entering Event Lines

Enter the timetable event into the currently selected timetable by pressing either:

Add Enter the line at the highlight and move the following lines down, or

Replace Remove the highlighted line and replace it with the text from the event window.

If the line contains an error a message informs you that the command is unrecognised. Click on OK and then carry out any necessary changes to the entry before incorporating it into the timetable.

4.2.3 Completing the Edit process

Timetable lines are checked for validity before being made available for inclusion in a timetable. Therefore, if any data is invalid a message informs you of the fact and you must change the line(s) before the timetable is accepted by the system. Provided all lines are validated you are then invited to incorporate the new or amended timetable into the UTC System.

The first message you encounter when you try to exit is:

"Changes to the loaded timetable have not been saved. Do you want to save these changes?"

Proceed as follows:

Yes Save the changes to the timetable.

No Discard the changes and revert to the previous version of the loaded timetable.

Cancel Close this window and return to the timetable edit process.

Answering Yes to the above question opens the Change Comment Dialog box. Enter a short description of the changes made and press <OK>. <CANCEL> returns you to the timetable edit window without entering a description of the changes.

When the timetable has been saved successfully you are asked to confirm by clicking on <OK>.

4.2.4 Introduce new Timetable into UTC System

A further message now asks whether you wish to incorporate the new timetable into the UTC System. Answering Yes to this question installs the new timetable into the schedules. If you answer No, the timetable may be loaded later using the UPDA command in the usual way.

4.3 Bad Timetable Lines

If any timetable lines have been adversely affected by changes elsewhere in the system, it is possible that they may no longer be operable. In those circumstances the lines are followed by <BAD>.

You may use the <FILTER> option to select only the bad timetable lines for editing. Change them where necessary and complete the timetable edit process as described previously.

See the Operators Handbook, reference 1.3.4.

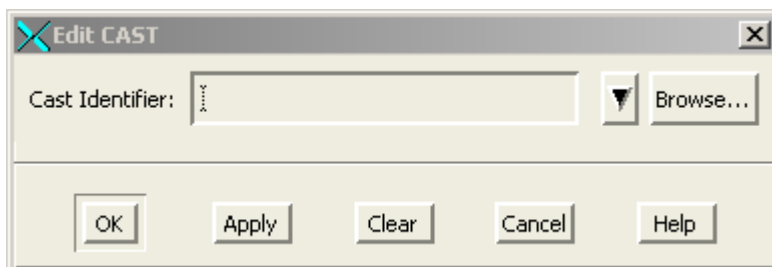
Context sensitive help is also available on-line by clicking on the 'Help' option in the top right hand corner of the window. Select 'On Context' from the options displayed and the cursor changes to a query "?". Position the query over the cursor over the part of the window where you need help and click the left mouse button. To cancel, click on any part of the screen background.

5. EDITING CASTS - WINDOWS

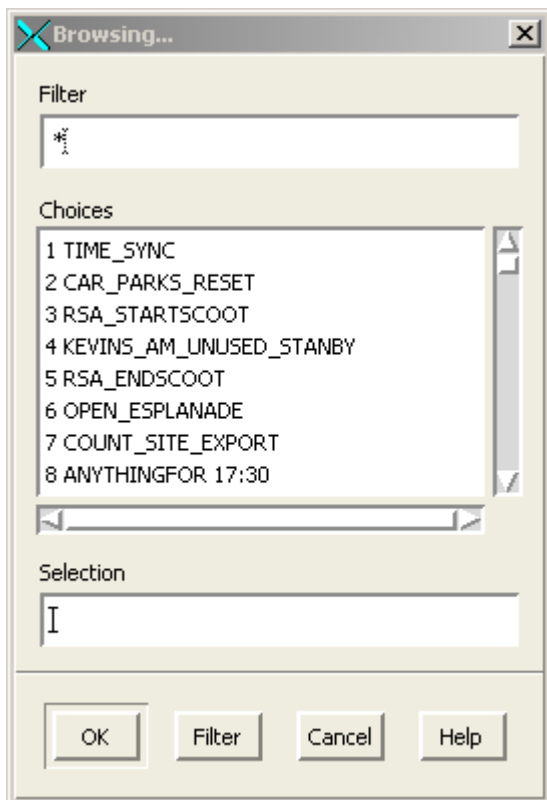
CASTs are edited in the same way as timetables.

5.1 Starting the Program

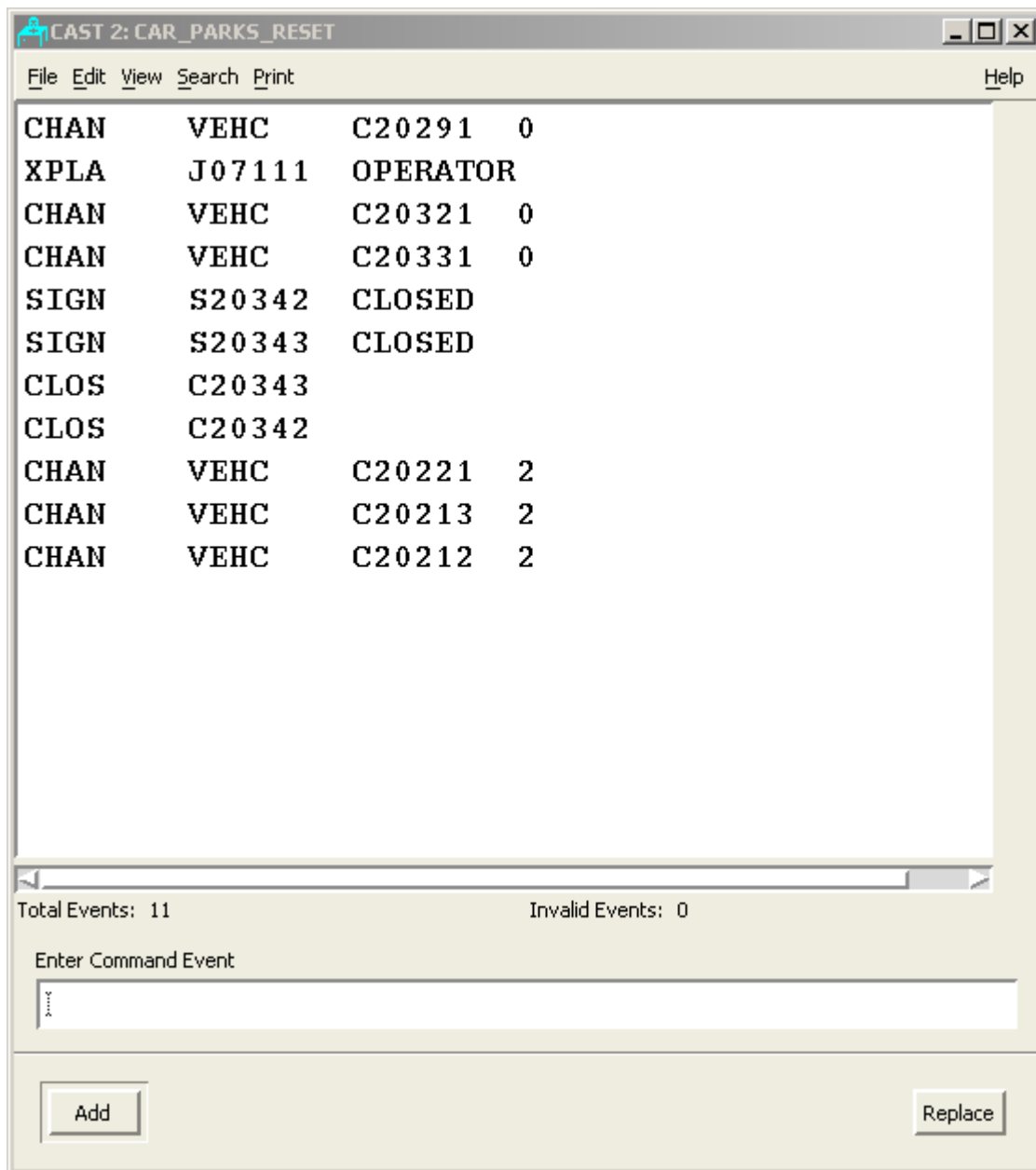
From the Manager menu select ECAS – Edit CAST. The Edit CAST Window appears.



The number of the CAST which is to be edited may be typed into the box or the Browse button clicked to bring up the Browsing window from which the CAST to be edited may be selected



The number of the selected CAST then appears in the Edit CAST window. Clicking on OK will show the existing contents of the CAST in the timetable editor.



The editing of the CAST is performed in exactly the same way as the editing of a timetable.

Appendix A - EDT Keypad for a DEC VTxxx Terminal

Find	Insert Here	Remove
FIND	PASTE	CUT
Select	Prev Screen	Next Screen
SELECT	-SECT	+SECT

PF1 GOLD	PF2 HELP	PF3 FNDNXT FIND	PF4 DEL L UND L
7 PAGE COMMAND	8 SECT FILL	9 APPEND REPLACE	DEL C UND C
4 ADVANCE BOTTOM	5 BACKUP TOP	6 CUT PASTE	
1 PAGE CHNGCASE	2 SECT DEL EOL	3 APPEND SPECINS	ENTER ENTER
0 LINE OPEN LINE		. SELECT RESET	SUBS

OPEN LINE

LINE is obtained by pressing the key on its own

OPEN LINE

is obtained by pressing the Gold key first and then the required key

Appendix B - EDT Keypad for a PC Keyboard

This mapping assumes that the decemuk.kbf has been used in Hummingbird Exceed.

Insert FIND	Home PASTE	Page Up CUT
Delete SELECT	End -SECT	Page Down +SECT

PF1 GOLD	PF2 HELP	PF3 FNDNXT FIND	PF4 DEL L UNDEL
7 PAGE COMMAND	8 SECT FILE	9 APPEND REPLACE	DEL C UNDC
4 ADVANCE BOTTOM	5 BACKUP TOP	6 CUT PASTE	
1 PAGE CHNGCASE	2 SECT DEL EOL	3 APPEND SPECINS	ENTER ENTER SUBS
0 LINE OPEN LINE	. SELECT RESET		

OPEN LINE

LINE is obtained by pressing the key on its own



is obtained by pressing the Gold key first and then the required key

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