



**GRAMPIAN SOFTWARE**  
Integrated Solutions *in* Software

## **DUTY ALLOCATION SYSTEM**

### **OVERVIEW**

#### **INTRODUCTION**

With the ever increasing cost of drivers' payroll and the importance of service delivery, Grampian Software has designed its duty allocation system to not only be user friendly but also provide cost effective solutions to the industry.

Extensive use of managerial reports ensures that key performance indicators can be monitored throughout the current operational week as well as retrospectively. These reports can be tailored to match the individual customers requirements.

Sample reports include an analysis of non-productive time including sickness, absence, holidays and unused standby hours detailing the total hours for each heading against the depot and expressing that figure as a percentage of the productive hours, allowing comparisons to be made. Other examples include reports that analyse the total hours spent by activity analysing the total by productive and non-productive hours.

The Duty Allocation system forms part of Grampian's Bus Industry solution providing a comprehensive management facility for the successful running of employee rotas that are operated during the working week.

Multiple rotas may exist at each depot generally grouping together employees, vehicles or duties of a similar type. Each rota comprises multiple lines of duties, typically with one duty per rota line for each working day. Employees are then allocated to each line of the rota, the overall matrix providing a picture of what each employee is scheduled to do on each day of the week.

Behind each duty number lies a detailed definition of work to be done, including the pay values to be applied for the purpose of payroll processing. Using drivers as an example, the duty definition may comprise a number of smaller pieces of work (eg journeys) each with its own start and finish time and, where applicable, its own pay values. Similarly, engineers would typically have a much more simplistic duty definition perhaps with only one start and stop time and a standard pay value.

The rota provides a master template of scheduled work. From the rota, a worksheet is generated for each operational week (or for weeks in advance) so that temporary changes can be recorded as they become known. For example, swapped duties, holidays, lateness and sickness can be applied to the worksheet so that duties that become unallocated as a result can be reallocated to other employees in advance. This saves a lot of time and also reduces the risk of lost duties.

Sometimes, it is not possible to reallocate an entire duty when, for example, the first start time has already passed. In such circumstances, the system provides the facility to split and reallocate the remainder of the duty. Similarly, where additional duties or pieces of work arise, these too can be added to the worksheet, allowing the appropriate pay values to be assigned.

Scheduled absences (eg holidays and scheduled sick leave) can be applied to the rota automatically at the point of worksheet creation, once again, reducing the volume of manual change required prior to the operational day.

At the end of the week, once the duties have been operated and all of the changes applied to the worksheet, the employee hours report is produced. This details, for each employee, the hours worked and the pay value to be applied. Once checked, this information can be passed to the payroll department for manual processing or, alternatively, processed automatically by means of an automatic file transfer.

## **INTERFACES TO THIRD PARTY SCHEDULING SYSTEM**

The definition of each duty and the collation of duties into logical rotas can either be set up within the application or imported electronically from using a file transfer from a third party scheduling package.

## **ALLOCATION OF DRIVERS**

Once the duties and rotas have been defined, employees are allocated to each line of the rota. Where Grampian's OpenPeople payroll or personnel modules are in use, employee identification can be automatically validated. The rota to which employees are allocated may be fixed (ie employees have the same duties week in week out) or rotating (ie employees rotate through the rota one line per week).

## **WORKSHEET CREATION**

Rotas generally comprise duties that have something in common. Either they require a similar type of employee, they relate to a specific geographic area of the operation or they contain duties that require a similar type of vehicle. Consequently multiple rotas may exist within each depot, in total defining all of the work to be serviced by the company on a weekly basis.

Each worksheet starts life as an exact copy of the rota from which it was generated, taking into account scheduled absence. When a scheduled absence is detected by the system the employee's duty is automatically replaced with the reason for absence and the original duty marked as unallocated. In this way, the unallocated work can be managed and reallocated prior to the working week.

As temporary changes or variations occur during the operational week these are processed against the worksheet, resulting in a record of actual event that has not overwritten the original plan. The system then uses a set of company specific payroll rules to interpret the hours recorded, the outcome of which is a timesheet containing the gross hours that are passed to the payroll system for subsequent payment. Where Grampian's payroll system is being operated this interface is fully automated.

## **WORKSHEET MANIPULATION**

Variations to the plan of activity can be entered prior to the start of the operational week. In this way, duties that become unallocated (ie uncovered) as a result of a change can be reallocated to another member of staff in advance.

Managing change in advance not only reduces the number of lost duties, but also improves the movement of staff during the sign-on period. Once all known changes have been processed and the associated uncovered duties reallocated, the operator can then create the sign-on screen ready for the operational day. Creation of the electronic sign-on screen does not prevent further variations being processed through the worksheet maintenance function. All changes will be automatically reflected on the sign-on screen.

## **SIGN-ON SCREEN**

A sign-on screen is generated daily for each sign-on location showing those members of staff due to report for duty and what their duty is for the day. Employees can sign-on using either a keyboard or an electronic sign-on device. During the sign-on period, the control clerk can view exactly who has reported for duty and who has failed to appear, enabling an appropriate action to be taken as quickly as possible.

Employees are displayed in order of their report time, with the system highlighting employees nearing or reaching their sign-on time but who have, as yet, failed to show. Employees who turn up late can be signed on after their sign-on time. Depending on the time that the employee reports for duty, they will either retake their own duty or be signed on as a report employee for the day (ie given work from the unallocated file as and when it occurs). Duties that become unallocated as a result of someone failing to show will automatically be moved to the unallocated duties file for subsequent reallocation to an available employee.

## **EMPLOYEE MESSAGES**

Electronic messages can be recorded either for an individual or globally for display during the electronic sign-on process. Messages can be recorded for display on a specific date for a range of dates and once displayed the message is marked as read. A history of messages is maintained by employee and can be cleared down as part of the general housekeeping facilities.

## **BUS ALLOCATION**

The bus allocation module has been designed to assist with the routing out of the fleet and a means of easily monitoring vehicle types assigned to bus services. It allows different types of work to be held against each vehicle (eg contact compliant, single deck and route branding) and includes a facility for marking vehicles as out of service, making them unavailable for routing.

## **THE OPERATIONAL DAY**

Generally, every effort is made by the desk clerk to reduce the volume of amendments required during the operational day by processing them in advance. However, circumstances inevitably arise that require further changes to be made to the worksheet on the day of operation. The system provides the facility to fully manipulate each worksheet ensuring that, where possible, no duties are left uncovered. Such amendments include:

- swapping duties between employees
- marking an employee as absent for full or part days
- assigning a relief employee where an employee has been stood down for part of his duty
- splitting existing duties and reallocate the work to one or more employees
- adding unscheduled work to a duty or driver, including cover for other depots
- deleting duties in total or in part from a worksheet
- transferring a duty to a different worksheet

## **POST OPERATIONAL DAY**

Once the operational day is complete, the worksheet can still be amended with changes that were not processed during the day. In order to check the input, an employee hours report is produced showing the information that will be passed to the payroll system for subsequent processing at the end of the operational week. Typically, the transfer to payroll is automated by means of a computerised file, however if required, the driver's hours report can be passed to the payroll department for manual input.

## **COMPANY SPECIFIC PAYROLL RULES**

Generally employees within a company will work to a set of payroll terms and conditions, used to interpret the actual hours worked and calculate the correct number of hours to be paid at the correct grade. The application of these rules in many cases is manual, subject to local interpretation within the organisation and often subject to human error.

The Duty Allocation system facilitates the parameterisation of these rules and, with the aid of a company specific payroll rules program, automates the interpretation of the hours recorded in order to derive the correct number of hours to pay. By automating the application of payroll rules the system standardises the application of the rules therefore removing local interpretation and also removing the potential for human error in the base calculation. The level of parameterisation gives the company control over future changes that may occur as the result of pay negotiations (eg the length of the guaranteed working day).

## REPORTS AND ENQUIRIES

The Duty Allocation system provides a range of comprehensive reports including:

- Reports of all masterfile contents including depots, locations, employees, absence reasons, duties and rotas.
- RTA exceptions
- Day Off List
- Spares List
- Weekly summary of traffic activity
- Weekly summary of paid traffic hours
- Worksheet print
- Holiday cycle print
- Unallocated work
- Employee hours print
- Transaction log

In addition to the above, the design of the database lends itself to the application of a third party report writer, providing a flexible means of analysing the data held within the Duty allocation system.

## DUTY ALLOCATION - FOUR MAIN PHASES of OPERATION

