

Annex FP93

Resource planning and rostering

Ver 1.1.

1. Are related to the requirements specified for extended functions (business processes) and services.
2. To provide qualitative, optimal, operational, cost-effective and automated scheduling for combination of vehicles and their drivers per the requirements of route geography, time schedule and other parameters (due to the defined parameters for availability).
3. Planning of shift shall include at least the following provisions for drivers and vehicle work with management and controlling function:
 - 3.1. rest period between the shifts (for example, 12h), considering predefined exceptions;
 - 3.2. the same numbers of days in reserve mode for all drivers;
 - 3.3. not more than planned volume of work hours defined by parameter – may not exceed the number of monthly normative hours and maximum monthly working days – in case of extra employees, not more than X continuous working days, not more than Y hours per week (7 days period), in case of the lack of employees, working days must be changed for the rolling schedule;
 - 3.4. definition for vehicle limits in each shift, required amount of guaranteed reserve (efficiency assumed as 1.25 in average);
 - 3.5. any limitation as sets of mandatory provisions, for example, appropriate driver license category, related types of vehicles, etc.;
 - 3.6. Not more than 3 shifts;
 - 3.7. scheduling sequences will base on hierarchies: I – vacation days, II – days-off (holidays) for the active drivers generated by system, III – special demanded days-off (holidays);
 - 3.8. scheduled number of drivers (shifts) for each day are corresponds to the timetables and the efficiency parameters (considering illnesses, vacations);
 - 3.9. rostering result visualization and adjustment by the values of the classifiers and displayable symbols of “employment” (for visual reports).
4. The following shall be ensured in relation to the account and control of the hours of work:
 - 4.1. any operative automatic or manual changes that are made in the roster (work schedule) should be represented in report of monthly hour balance;
 - 4.2. provided all necessary data regarding fixed actual time of work for the online data exchange to the other information systems;
 - 4.3. special reporting tool for the use in case of the violation of working hours or any other restriction has been identified after the actual data reception;
 - 4.4. ability to plan and combine several tasks in the same day per person, for example, be in reserve and to go referred mandatory health examination (include displaying of representative symbols in report or list).
5. Use and manage not less metadata for each driver than:
 - 5.1. unique identifier – ID;
 - 5.2. name and surname;
 - 5.3. default scheduled shift – 1st, 2nd, 3rd, uninterrupted two days, combinations;
 - 5.4. default day-off (holiday) mode – 4/2, 5/2, weekend, fixed weekdays;
 - 5.5. Default routes;
 - 5.6. preferred range of working hours that based by the place of residence or status of health;
 - 5.7. indication of the possibility to change the place of departure – depots/parks;
 - 5.8. driving permissions and their terms;
 - 5.9. types of vehicle allowed;

- 5.10. contact information;
- 5.11. type of workload – full day, half-time,...;
- 5.12. date of signing the employment contract;
- 5.13. work experience time;
- 5.14. number of unused days of vacation.
6. For management reasons sets of the drivers can be joined in brigades without affecting the available vehicles.
7. reports of planned tasks and schedules customized by:
 - 7.1. Represented period – month, quarter, year;
 - 7.2. number of operational calls (calls in the day-off);
 - 7.3. number of the extra days-off;
 - 7.4. number of shifts – 1., 2., reserve, 2xD;
 - 7.5. Worked time during the period, overtime in relation to the balance of particular period;
 - 7.6. accumulated days of vacation;
 - 7.7. analysis of deviations – scheduled versus actual.
8. All reports and lists can be exported for using in Business Intelligence software.
9. Printable rostering result for each driver and assigned vehicle – in PDF printout and as a data set for the importin into the other software.
10. At least 3 (three) levels of user role: administrator, operator and viewer:
 - 10.1. the administrator accesses all functional rights, including the user administration with password change, adding new users, granting and suspending user access rights;
 - 10.2. the operator accesses all functional capabilities, except for administration. Applicable groups for planning can be granted to the operators with limited access for the other operators – in the vehicle parks or depots;
 - 10.3. the viewer is prevented from operating the vehicle control and adjustments. Viewers can be divided into groups with different roles, where the list of roles and associated functionality is editable.
11. The planning includes the functionality that allows to define significance of various parameters and to change them flexibly, as well as to set the permitted derogation limits by simulating the outcome of each scenario and afterwards comparing them in different aspects: the number of vehicles required, the number of vehicle drivers, the need for downtime, compliance with the workload and the tolerances allowed.