

Press release: with the advent of the program MLIS/MNIS PTPDO 1.2 there is no longer a problem of choosing urban transport for the speedy delivery of a passenger to the destination point.

Michael Burlakov - founder of the new information technology of automation of control of discrete technological and information processes (IT AC DTIP), that has a variety of uses, has created on its basis a new *multilingual* software product of version 1.2 under the name "**Public transport passenger delivery optimization (PTPDO 1.2)**". This program, that has conventional (MLIS) and network (MNIS) performances, allows to solve tasks of finding optimal strategies for the delivery of a passenger by urban transport to the required by him destination point.

The program PTPDO 1.2 is designed to find optimal strategies of transporting a passenger by existing urban transport of the following five types: bus, fixed-route taxi, trolleybus, tram and metro. At that is minimized the travel time of a passenger between the given initial and final points, taking into account the possible restriction on the allowable number of passenger boardings onto different transport vehicles (they may be absent altogether).

To solve these tasks, you need the availability of the databases of routes networks (DBRN2) and the databases of roads networks (DBRN1) for corresponding cities. The creation of the first ones is provided in this program and of the second ones - in the program "Transportation optimization, version 1.6 (TO 1.6)" of the same author.

The program PTPDO 1.2 is *multilingual*, the alternative languages of which interface are stored in separate files, called *language shells*. It includes two such shells: Russian and English, as well as a special program for their generation by users themselves. Two variants of PTPDO 1.2 have been developed: *conventional* (Multilingual local instrumental system of public transport passenger delivery optimization - **MLIS PTPDO 1.2**) and *network* (Multilanguage network instrumental system public transport passenger delivery optimization - **MNIS PTPDO 1.2/upc**). MLIS PTPDO 1.2 is offline program, designed for a particular user (lite version of this program is free). MNIS PTPDO 1.2/upc is purposed to provide network services to many users. This system consists of two parts: one remote module of optimization (MO), wherein occurs synthesis of optimal strategies for the transportation of cargo or people, and numerous automated work places (AWPs), that are targeted to specific users of MNIS.

On the basis of MNIS PTPDO 1.2/upc, it is proposed to create in the Internet a mass network service in order to find the best variant of delivering a passenger by public transport. The advantages of the *new* service in comparing to the *existing* ones (call them the analogues), which are implemented in particular on the websites <http://maps.google.ru> and <http://www.uklon.com.ua/transport>, are the following:

- accounting of a large number of initial parameters of the task, including in particular the following new parameters, which are absent in analogues:
 - position on the road network of pedestrian crossings and their parameters;
 - arrival periods at stops of transport vehicles, belonging to different routes and types of urban transport;
 - walking speed of a passenger;
- obtaining a more accurate, detailed and better result in connection with the following:
 - presence of a larger number of initial parameters of the task being solved (see above);
 - presence of more detailed output information, presented in tabular form;
 - absence of any heuristics, that is typical for analogues (in our case takes place a pure optimization, which provides the best result).

A set of lite version of MLIS PTPDO 1.2 you can download from any of two websites of the author: "Promotion center of IT AC DTIP" (<http://promo.dtip-optim.com/en>) and "Implement. center of IT AC DTIP" (<http://dtip-optim.com/en/main>). There you can solve your tasks in a test mode in full-scale network program MNIS PTPDO 1.2/upc.

The author and creator of MLIS/MNIS PTPDO 1.2 - Michael Burlakov, Doctor of Engineering (Kiev, Ukraine). The term of its entry into operation - April 2018 (the term of MNIS update to version 1.2/upc - 2018). The areas of its possible use are **transport and sphere of public services**.

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