

- Responding to change over following a plan [3, 4];

Agile project management has high potential in uncertainty conditions. As prime framework it implies understanding the fact that changes are an integral part of work over the project and the fact that planning is only expedient for the short period of time. The main role in efficiency of these approaches is played by the team of performers who are capable of taking responsibility for the results of the project.[5]

Conclusions. This methodology establishes certain rules of project management (for example, development or introduction of information technologies), based on the possibility of continuous updating of requirements and introduction of tactical changes. Summing up the results, it should be noted that thanks to the constant analysis of the work done and opportunities to carry out correction of the direction of the project between iterations the chosen methodology allows to achieve better results, to operate projects with higher quality and create high-quality software products.

References

1. Кадикова, И. Н. Стратегічний розвиток складних систем в методологіях управління проектами та програмами [Текст] / І. М. Кадикова, С. А. Ларіна, В. В. Хвостіченко, І. В. Чумаченко // Управління розвитком складних систем. – 2017, № 32. – С. 22–31.

2. Марченко А. В. «Методологія управління проектами Scrum як приклад впровадження методології Agile». – 2016, № 4. – С. 27–30. УДК 378:004

3. Manifesto for Agile Software Development / [Electronic resource]. – URL: <http://agilemanifesto.org> (03.03.2018).

4. Schwaber K., Sutherland J., Scrum Guide. The Definitive Guide to Scrum: The Rules Of the Game: Scrum Guide. – 2017. – P. 1–19.

5. Ганза І.В. «Екстремальне та гнучке управління проектами в умовах невизначеності». – 2015, № 10. – С. 67–30. УДК 338:242.2

ROAD MATERIALS AND PAVEMENT DESIGN: NEW ROAD CONSTRUCTION CONCEPTS

KYRYLO SYROMOLOTOV, student

SVITLANA BUCHKOVSKA, Senior Teacher, Language Adviser

O. M. Beketov National University of Urban Economy in Kharkiv

One of the main problems of road construction is the quality of road surface. Patch repairs, new road damage or badly tracked road coating are the most common reasons of accidents on roads in Ukraine.

The durability of road surface depends on a number of reasons. Materials, technologies, a road bed preparation, the qualification of people who build the roads – all these factors directly influence the quality of a road. When designing, building and repairing the road network, it is necessary to take into account climatic and landscape peculiarities, population density, traffic flow, keeping in

mind the availability of building materials in a particular region. It is estimated that the cost of the building materials account for 60-70% of the total road building. It is the proper selection of all the components that provide the durability of the road surface and traffic safety.

The main task for the road sector of economy in Ukraine is to create the conditions under which the construction of high-quality roads with extended operational lifetime will be beneficial for everybody. Undoubtedly, it can be achieved by using new reliable materials and innovative technologies. It is worth mentioning that innovation in construction can be economically justified, as new materials can significantly extend the road operational lifetime and eliminate the need for frequent repair work.

Many years of experience and scientific research have proved that the durability and strength of the road surface are directly related to the regulation of the water and thermal regime of the roadbed. In this regard, the implementation of new technologies and the use of new materials are really crucial to provide extend road operational lifetime in different climatic conditions. A good example of such a pavement is foam glass gravel. It was used initially as a heat-insulating material in the middle of the last century in the construction of a building in Canada. Due to its excellent physical and mechanical characteristics, the material quickly became widespread in road construction in Europe, especially in the Scandinavian countries and Germany.

The development of infrastructure is one of the priorities in the world. Most of the leading countries invest hugely in safe and durable roads. Among them are quiet roads of rubber, plastic roads, concrete motorways.

Experiments to create a road pavement of rubber have been conducted for a long time. The first was about a hundred years ago in the UK, when rubber was placed on the pavement to reduce noise. It didn't become a usual practice, although the idea was right. A century later, this idea was used in Poland. In 2015, local asphalt manufactures started producing bitumen adding rubber. In other words, they developed and began mass construction of rubber roads.

Another interesting idea is plastic roads. The innovative concept PlasticRoad was offered by VolkerWessels. The developers promise that new roads will be more durable than usual ones. They will resist the temperature from 40°C to 80°C and can be constructed on different grounds. Plastic roads will be less sensitive to corrosion and damages and will have three times longer operational lifetime than usual asphalt roads.

One more solution is concrete roads. The idea has become so popular that it is used all over the world. The process of building concrete roads is quite complicated, but greater expenses are paid off because of road durability.

Therefore, it can be definitely said that road coatings play a significant role in creating reliable road infrastructure which is crucial for road safety. New construction materials and modern innovative technologies are of primary importance to solve a number of problems in road sector of Ukrainian economy.

References

1. Каганов В. О. Технологія влаштування покриття доріг і тротуарів з бетонних дрібноштучних фігурних елементів мостіння.
Retrieved from: <http://ena.lp.edu.ua/bitstream/ntb/8940/1/18.pdf>
2. Заворицький В. Й., Аленич М. Д., Кизима С. С. Транспортно-експлуатаційні якості автомобільних доріг. – Київ : ІСЛЮ, 1995. – 136 с.

BARRIEREFREIES BAUEN

ANNA SYNYTSKA, Studentin

DMYTRO O. YURCHENKO, Lektor

Charkiwer Nationalen O. M. Beketow Universität für Stadtwirtschaft

Barrierefreiheit bezeichnet im deutschen Sprachgebrauch eine Gestaltung der baulichen Umwelt sowie von Informationsangeboten, Kommunikation usw. dergestalt, dass sie auch von Menschen mit Beeinträchtigungen ohne zusätzliche Hilfen genutzt und wahrgenommen werden können. An sich zielt das Prinzip der Barrierefreiheit aber darauf, dass nicht nur Menschen mit Behinderung in die allgemein übliche Nutzung der gestalteten Umwelt einbezogen werden. Dieses weitergehende und eigentliche Verständnis von Barrierefreiheit unterscheidet gar nicht mehr zwischen einzelnen Personengruppen. Die Umwelt soll so gestaltet sein, dass sie die Bedürfnisse aller Menschen berücksichtigt. Keine Personengruppe soll aufgrund einer bestimmten Gestaltung von der Nutzung ausgeschlossen werden. Dieses Verständnis der Barrierefreiheit wird auch "Design für alle" oder "universelles Design" genannt.

Barrierefreies Bauen – vollständig barrierefreies Planen und Bauen – bedeutet, Wohnungen, Gebäude sowie öffentliche Orte so zu planen und zu bauen, dass sie barrierefrei sind, also von allen Menschen ohne fremde Hilfe und ohne jegliche Einschränkung genutzt werden können.

Mit barrierefreiem Bauen ist die rechtzeitige Planung und Ausführung von baulichen Maßnahmen, die die Nutzung eines Gebäudes, einer Einrichtung, eines öffentlichen Ortes etc. durch alle Menschen ermöglicht, gemeint. Statt des Begriffs „barrierefreies Bauen“ werden auch oft die Termini „behindertengerechtes Bauen“, „Bauen für Alle“, „menschengerechtes Bauen“.

Unter dem Begriff „Barrierefreies Bauen“ wird auch häufig noch immer ein „besonderes“ Bauen für „besondere“ Gruppen verstanden. Gemeint sind dabei Rollstuhlfahrerinnen und Rollstuhlfahrer oder in anderer Weise körperlich, geistig oder sinnlich beeinträchtigte Menschen. Tatsächlich aber ist barrierefreie Planung ein weitaus umfassenderes Konzept. Es soll prinzipiell allen Menschen ermöglichen, entsprechend ihrer persönlichen Wünsche und Fähigkeiten zu leben und am gesellschaftlichen Leben teilzuhaben; selbstbestimmt und unabhängig von der Hilfe anderer. Das schließt Alte und Junge, Klein und Groß wüchsige, Menschen mit motorischen, sensorischen und kognitiven Beeinträchtigungen ein.