Available: <u>Obsolete - Regulations on the Classification of Occupations, Basic Tasks and</u> <u>Qualification Requirements Corresponding to Occupations and the Procedure for Using and</u> <u>Updating the Classification of Occupations (likumi.lv)</u>

Cabinet of Ministers Regulation No.461 Riga, 18 May 2010 (Prot. No 25 § 33) "Regulations on the Classification of Occupations, Basic Tasks and Qualification Requirements Corresponding to an Occupation and the Procedure for Using and Updating the Classification of Occupations"

2.55.1. General questions

1. Occupational title - Utilities construction manager.

2. Professional code - 1323 07.

2.55.2. Description of employment

1. Professional qualification level - fourth professional qualification level.

2. Summary of basic tasks and duties of professional activity:

- utilities construction manager is a construction specialist who plans and manages the construction of specific utility systems based on the project documentation, the conditions of the construction contract and his/her experience; is able to identify and repair defects in utilities; organises and supervises the operation and repair of constructed utilities; identifies and proposes contractors for the construction and scope of individual utilities; staffs and selects equipment for the execution of individual scopes of work; select materials and equipment appropriate to the construction project and plan their delivery to the construction site; coordinate cooperation and arrangements for the execution of the works with all participants involved in the construction of the site; give the necessary orders to subordinates and check that these orders are carried out; ensure that the works are carried out in accordance with the construction design, the requirements of the building regulations and standards and that their costs are included in the approved construction costs; take the necessary measures for quality assurance and labour protection in the relevant section of the building regulations; prepare and submit the necessary reports to the management.

A utilities construction manager may work for companies providing heat, gas, water and sewerage, or for companies producing and marketing construction materials, or may be self-employed or a sole trader.

2.55.3. Professional competences required for the exercise of professional activities

1. Ability to responsibly and independently perform the duties of a utilities construction manager in accordance with the regulatory enactments of the Republic of Latvia and European Union legislation in the field of construction.

2. Ability to evaluate construction design documents.

3. Ability to design, plan and manage the construction of civil engineering works.

4. Ability to take operational control of civil engineering works and operations.

5. Ability to monitor payment for completed utility works.

6. Ability to liaise with construction stakeholders involved in the project.

7. Ability to select the optimal technical and economic solutions for utilities.

8. Ability to organise and carry out inspection and monitoring activities of utility installations, to participate in the organisation of maintenance of installations and systems.

9. Knowledge of the types, technology and implementation of construction works in buildings, in accordance with the principles of sustainable construction.

10. Ability to use utility computer programmes for calculations and drawing up drawings.

11. Ability to prepare cost estimates for the construction, operation, maintenance and repair of utilities.

12. Ability to perform thermal, hydraulic and aerodynamic measurements.

13. Ability to assess and analyse the economic factors of utility construction.

14. Ability to manage and organise the work of a business unit, to work as part of a team, and to work individually.

15. Ability to learn from new experiences and innovative solutions in the utilities sector.

16. Ability to comply with the requirements of the laws and regulations on occupational safety, fire safety and environmental protection.

17. Ability to comply with labour regulations.

18. Ability to take responsibility for the results of your professional activities.

19. Ability to organise and train employees

20. Ability to communicate in the national language and at least two foreign languages.

2.55.4. Skills required for the main tasks of the job

1. To plan, organise and manage the installation and operation of engineering communications in accordance with the laws and regulations of the Republic of Latvia,

Latvian national standards and technical regulations, as well as the norms of the European Union and international law regulating the sector.

2. Know and apply building regulations.

3. Read and understand the documentation for utility projects.

4. Knowledge of the technological processes involved in the construction of utilities and their relationship to general construction work.

5. Cooperate with construction stakeholders on the utilities project.

6. Compile and control the executive documentation for the construction of utilities.

7. Know the basic properties of materials used in utility installation work for their correct application.

8. Find and order the required materials and equipment in catalogues according to the utilities project documentation.

9. Understand the structural design of buildings and structures.

10. Understand the principles of operation and maintenance of engineering systems.

11. Understand the basic principles of surveying and metrology.

12. Select the construction machines, machinery, tools and process equipment systems for a given job.

13. Be familiar with pay systems, work rates and how to apply them.

14. Calculate the cost of the work, assess the economic factors and choose the most costeffective option.

15. Evaluate the quantity and quality of products and work performed in accordance with the quality management procedure.

16. Apply the basic principles of quality control systems and standardisation in construction work.

17. Select the utilities construction specialists according to the content of the work to be carried out.

18. Comply with labour rules.

19. Comply with the requirements of the normative acts on occupational safety, occupational hygiene, fire safety and environmental protection in the field of construction and equip the work site in accordance with these requirements.

20. Use information technology at all stages of work, from information gathering and design to material and cost accounting and documentation.

21. Adhere to basic professional and general ethical principles.

22. Resolve problematic situations.

23. Analyse the information received and the results of your work.

24. Manage the national language.

25. Proficiency in at least two foreign languages at a communicative level.

26. To use professional terminology in the offical state language and in two foreign languages.

2.55.5. Knowledge required for the performance of the main tasks of the professional activity

1. Knowledge required to perform the main tasks of the professional activity at an introductory level:

1.1. political science;

1.2. metrology, standardisation;

1.3. the basic principles of sustainable construction.

2. Knowledge required to perform the main tasks of the professional activity at the level of understanding:

2.1. higher mathematics;

2.2. physics;

2.3. engineering chemistry;

2.4. material learning;

2.5. theoretical mechanics, resistance of materials;

2.6. civil protection;

2.7. soil mechanics, foundations;

2.8. energy efficiency of buildings;

2.9. quality systems on site;

- 2.10. general electrical engineering;
- 2.11. hydrodynamics and aerodynamics;
- 2.12. thermodynamics;
- 2.13. electrical engineering;
- 2.14. flow mechanics;
- 2.15. thermophysics of construction;
- 2.16. structures of buildings and structures;
- 2.17. organisation of construction works;
- 2.18. environmental culture;
- 2.19. use of natural resources;
- 2.20. basics of project management;
- 2.21. economics and business;
- 2.22. document management;
- 2.23. professional terms in the national language and at least two foreign languages.

3. Knowledge required for the performance of the main tasks of the professional activity at application level:

- 3.1. Construction laws and regulations;
- 3.2. technology of civil engineering works;
- 3.3. engineering graphics;
- 3.4. water supply, sewage disposal;
- 3.5. heating supply, heating;
- 3.6. ventilation, air conditioning;
- 3.7. gas supply;
- 3.8. automation and control of engineering systems;
- 3.9. maintenance and operation of engineering systems

- 3.10. construction machinery, technological equipment, tools;
- 3.11. information technology;
- 3.12. engineering geodesy;
- 3.13. a system for the assessment of construction products;
- 3.14. personnel management;
- 3.15. basic principles of professional and general ethics;
- 3.16. economics, costing and analysis;
- 3.17. work norming;
- 3.18. pay systems;
- 3.19. labour protection;
- 3.20. electrical and fire safety;
- 3.21. environmental protection;
- 3.22. employment relations;
- 3.23. official state language;
- 3.24. at least two foreign languages at a communicative level;
- 3.25. communication, engineering psychology.