OCCUPATIONAL QUALIFICATION STANDARD

Railway Signalling Area Engineer, EstQF Level 4

An occupational qualification standard is a document which describes the set of skills, knowledge and attitudes, i.e. competence requirements, needed to successfully accomplish duties. Occupational qualification standards are used for compiling curricula and awarding qualifications.

Occupational title	Level of Estonian Qualifications Framework (EstQF)
Railway Signalling Area Engineer, EstQF Level 4	4

Part A
DESCRIPTION OF WORK

A.1 Description of work

Railway Signalling Area Engineer, Level 4 conducts maintenance and repairs on railway safety and communications equipment.
They work independently in situations that are generally foreseeable but may vary. They supervise the routine work of less qualified railway signalling area engineers and take some responsibility for their development.
Railway Signalling Area Engineer, Level 4 works independently and in a team, their work requiring communication with co-workers and workers in other units.
Railway Signalling Area Engineer, Level 4 is responsible for the safety and quality of their work and the work they supervise, as well as hazardous situations resulting from breaches of safety during maintenance (e.g. improper tools, techniques and methods).

There are four occupations in the field of maintenance and repairs of railway safety equipment.
Railway Signalling Area Assistant, Level 2 conducts uncomplicated maintenance and repairs on railway safety and communications equipment.
Railway Signalling Area Engineer, Level 4 conducts maintenance and repairs on railway safety and communications equipment.
Railway Signalling Area Engineer, Level 5 plans and organises maintenance and repairs of railway security and communications equipment and carries out such work in their area.
Railway Signalling Area Engineer, Level 6 plans and organises maintenance and repairs of railway safety and communications equipment in several regions or throughout an organisation.

A.2 Tasks

A.2.1 Maintenance of safety equipment
Light signal maintenance
1. Checking the visibility and adjusting the settings of light signals
2. Replacing the lamps in light signals and journey displays
3. Electrical measurements of light signals on main power
4. Electrical measurements of light signals on reserve power
5. Maintenance of light signals without disturbing their normal operation
6. Maintenance of light signals with partial or total shutdown of devices
7. Measuring signal relay deceleration
Turnout safety equipment maintenance
8. Maintenance of turnout motors and fittings that does not require the disassembly of parts or the disruption of electrical connections and does not disturb the normal operation of the device
9. Maintenance which involves adjusting the point or which requires disassembly and shutdown of the motor, fittings or their parts, disruption of electrical connections and/or disturbs the normal operation of the device
10. Taking electrical and other measurements at turnouts and conducting electrical and mechanical adjustment
11. Checking the close fit of switch blades with safety locks and dismantling or reassembling turnout locks
Track circuit and axle counter maintenance

12. Maintenance without disturbing the normal operation of the devices or changing set parameters 13. Maintenance which disrupts the normal operation of the devices, results in the partial or total shutdown of the devices and/or changes the set parameters 14. Checking the shunt resistance of track circuits 15. Taking and adjusting electrical measurements 16. Checking the polar alternation of track circuits 17. Axle counter maintenance without shutdown 18. Axle counter maintenance with shutdown 19. Maintenance of throttle transformers without shutdown 20. Maintenance of throttle transformers with partial shutdown without disrupting the traction current circuit Maintenance of automatic train signalling (ALSN) track equipment 21. Measuring and adjusting the code current 22. Maintenance of electromechanical controls 23. Maintenance of consoles, signboards, shunting cabinets and turnout centralisers Maintenance of computer-based controls 24. Maintenance of traffic manager workstation hardware without disturbing the normal functionality of the devices 25. Replacing controls and changing their configuration 26. Replacing, updating and restarting software and hardware for the traffic manager workstation 27. Updating and restarting dispatcher centralisation software 28. Updating and replacing dispatcher centralisation hardware Maintenance of internal hardware, equipment cabinets and containers 29. Maintenance of equipment cabinets without device shutdown 30. Maintenance of the internal hardware of safety equipment without device shutdown 31. Replacing, updating and restarting software 32. Replacing and maintaining control modules 33. Replacing relays and other hardware 34. Checking the condition of wiring and cable connections Maintenance of safety equipment at crossings 35. Maintenance of automatic signalling equipment at crossings without device shutdown or changing set parameters 36. Maintaining barrier light signals and automatic signalling equipment at crossings with device shutdown and changing set parameters Cable network maintenance 37. Maintenance of cable routes, couplings, racks and panels and taking electrical measurements without the physical disconnection of cables from terminals 38. Measuring electrical circuits from a measuring point Maintenance of safety equipment power supply 39. General maintenance of power supplies, taking electrical measurements and checking protective devices 40. Checking the feed changeover of power supplies and diesel generator start-up 41. Battery maintenance without interruption to operation 42. Battery maintenance including switching off the charging voltage 43. UPS device maintenance without interruption to operation 44. Switching between power sources and feeders while ensuring the retention of light signal function Maintenance of protective devices and earthing of safety equipment 45. Inspection and maintenance of fuses and surge protectors 46. Inspection and maintenance of protective earthing conductors and measuring soil resistivity A.2.2 Managing safety equipment documentation 1. Checking the conformity of circuit diagrams and technical documentation with working equipment and updating them 2. Completing inspection documentation for safety equipment A.2.3 Management and supervision 1. Supervising less qualified workers 2. Resource management
Elective areas of work
A.2.4 Maintenance of marshalling yard safety equipment 1. Maintenance of marshalling yard retarders and controls without interruption to operation

2. Maintenance of section vacancy detection sensors without interruption to operation A.2.5 ERTMS /ETCS equipment maintenance 1. Maintenance, software management, updating and restarting of ERTMS/ETCS internal hardware 2. Maintenance, software management and updating of ERTMS/ETCS external hardware
A.3 Work environment and specific nature of work
A railway signalling area engineer works both indoors and outdoors. A railway signalling area engineer's working hours are fixed, but in the event of major equipment breakdowns or brief technological windows, they must work outside regular business hours, including on weekends and holidays. The workload may be unevenly distributed. The working environment is associated with an increased risk of injury and often requires working in a forced position and at heights. Exposure to chemicals and toxic agents, tick-borne infectious diseases, heat, humidity and temperature fluctuations can cause damage to health and therefore requires the use of personal protective equipment and preferably vaccination. Due to the above-average level of dangerous work, a railway signalling area engineer must strictly observe the rules of work, health and safety. Breach of safety requirements can result in illness, trauma, disability or a rail traffic accident. The occupation of Railway Signalling Area Engineer requires regular medical check-ups.
A.4 Tools
The main tools are locksmith tools (e.g. wrench, hammer and screwdriver), hand tools (e.g. shovel and electric tools), indicator instruments, aids (e.g. shunt and stencils), precision measuring instruments (e.g. multimeter) and communication devices (e.g. telephone and radio).
A.5 Personal qualities required for work: abilities and characteristics
The work of a railway signalling area engineer requires cognitive abilities (fluency of thought, logical thinking, visual memory, spatial imagination and concentration) and mathematical abilities. In addition, stress tolerance, physical strength, accuracy of movement, speed, coordination, vigour, dexterity, odour sensitivity, good vision and good hearing are required. Stress tolerance, environmental tolerance, cooperative skills, learning ability, accountability, reliability, emotional stability, accuracy, self-discipline, communication readiness, decision-making skills and independence are also important in the work of Railway Signalling Area Engineer, Level 4. A railway signalling area engineer is expected to commit to their work, accept the goals of the organisation and be prepared for change.
A.6 Professional preparation
Railway Signalling Area Engineer, Level 4 is usually someone who has general secondary or vocational education and who has acquired professional skills under the supervision of a railway signalling area engineer with at least Level 4 qualifications.
A.7 Most common occupational titles
Railway signalling area engineer, railway technician, communications mechanic
A.8 Regulations governing profession
The work of a railway signalling area assistant is regulated by the Railways Act and the regulation of the Government of the Republic of Estonia 'List of Work Environment Hazards and Work for Which the Employment of Minors is Prohibited'.

Part B
COMPETENCY REQUIREMENTS

B.1 Structure of occupation
Competences B.2.1-B.2.3 and B.2.6 must be certified when applying for the qualification of Railway Signalling Area Engineer, Level 4.

Certification of optional competences B.2.4 and B.2.5 is not mandatory.

B.2 Competences

MANDATORY COMPETENCES

B.2.1 Maintenance of safety equipment	EstQF Level 4

Performance indicators:
Light signal maintenance
1. checks visibility and adjusts light signals in accordance with the requirements of the rules for the technical use of railways and the internal normative documents of the organisation using appropriate tools;
2. replaces lamps in light signals and journey displays in accordance with the internal normative documents of the organisation using appropriate tools;
3. takes electrical measurements of light signals on mains power and adjusts supply voltage in light signals in accordance with the internal normative documents of the organisation using appropriate tools;
4. takes electrical measurements of light signals on reserve power in accordance with the internal normative documents of the organisation using appropriate tools;
5. conducts maintenance of light signals (e.g. cleans, paints and checks visibility) without disruption in accordance with the rules for the technical use of railways and the internal normative documents of the organisation using appropriate tools;
6. conducts maintenance of light signals (e.g. replaces signal transformers, disconnects cables and verifies the correctness of light signal indications) by partially or completely switching off the device and verifies the correctness of light signal indications after maintenance in accordance with the requirements of the rules for the technical use of railways and the internal normative documents of the organisation using appropriate tools;
7. measures signal relay deceleration and sets parameters in accordance with the internal normative documents of the organisation using appropriate tools.
Turnout safety equipment maintenance
8. conducts maintenance of turnout motors and fittings (e.g. cleans, paints, performs visual inspections, tightens bolts and replaces insulation) in accordance with the internal normative documents of the organisation using appropriate tools;
9. conducts maintenance (e.g. replaces motors and cleans automatic switches) that involves adjusting a point or that requires disassembly and shutdown of a motor, fittings or their parts, disruption of electrical connections and/or disturbs the normal operation of the equipment in accordance with the internal normative documents of the organisation using appropriate tools;
10. takes electrical and other measurements at turnouts (e.g. checks the fitting of switch blades, clutch current, motor operating voltage and phase sequence) and conducts electrical and mechanical adjustment in accordance with the internal normative documents of the organisation using appropriate tools;
11. checks the close fit of switch blades with safety locks, conducts maintenance on turnout locks, sets and assembles them and conducts mechanical adjustment in accordance with the internal normative documents of the organisation using appropriate tools.
Track circuit and axle counter maintenance
12. conducts maintenance of equipment (e.g. checks, cleans and paints connecting cables and signal boxes and changes lock combinations) without disruption or changing set parameters in accordance with the internal normative documents of the organisation using appropriate tools;
13. conducts maintenance (e.g. replaces signal box cables, transformers, variable resistors, track relays, filters and other devices) that disturbs the normal operation of the equipment and involves the partial or complete shutdown of devices and/or changing set parameters, ensures the retention of frequency structure during tonal track circuit maintenance and performs these tasks in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
14. checks the shunt resistance of track circuits with the traffic manager in accordance with the internal normative documents of the organisation using appropriate tools;
15. takes electrical measurements and makes adjustments (measures and adjusts current, voltage and frequency and sets audio frequency track circuits) in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;

16. checks the polar alternation of track circuits in accordance with the internal normative documents of the organisation using appropriate tools;
17. conducts maintenance on axle counters without switching them off in accordance with the internal normative documents of the organisation using appropriate tools;
18. conducts maintenance on axle counters that requires switching them off, coordinates maintenance with the traffic manager, replaces sensors, maintains transmission links and replaces transmission devices in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
19. conducts throttle transformer maintenance without shutdown in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
20. conducts maintenance on throttle transformers that requires partially switching them off without interrupting the electrical circuit in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
Maintenance of automatic train signalling (ALSN) track equipment
21. measures and adjusts code current in accordance with the internal normative documents of the organisation using appropriate tools;
Maintenance of electromechanical controls
22. maintains controls, signboards, shunting cabinets and turnout centralisers (e.g. cleans and adjusts contacts, checks and adjusts the operation of counters and handles and checks, removes and lubricates mechanical backlashes) in accordance with the internal normative documents of the organisation using appropriate tools;
Maintenance of computer-based controls
23. conducts maintenance of traffic manager work station hardware without disturbing the normal functionality of the devices in accordance with the internal normative documents of the organisation using appropriate tools;
24. replaces control devices, verifies the version of the update when restarting software, uses pre-configured devices where possible, launches necessary automatic test procedures and monitors their results in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
25. replaces hardware and software, verifies the version of the update, uses pre-configured hardware where possible, launches automatic tests and monitors the process in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
26. replaces and restarts dispatcher centralisation software, verifies the version of the update, launches automatic test procedures and monitors the process and configures the required user permissions in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
27. replaces dispatcher centralisation hardware, verifies the version of the update, uses pre-configured hardware where possible and configures the required user permissions in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
Maintenance of internal hardware, equipment cabinets and containers
28. conducts maintenance of equipment cabinets (e.g. inspects, cleans and paints cabinets) without device shutdown in accordance with the internal normative documents of the organisation using appropriate tools;
29. maintains the internal hardware of safety equipment (e.g. performs visual inspections and general cleaning and tightens attachments) without shutdown, checks the condition of alarm interfaces, notifies their line manager in the event of alarms and eliminates them within the limits of their competence in accordance with the internal normative documents of the organisation and using appropriate tools;
30. replaces, updates and restarts software and verifies the version of the update in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
31. replaces and maintains control modules in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
32. replaces relays and other hardware in accordance with the internal normative documents of the organisation using appropriate tools;
33. checks the condition of wiring and cable connections in accordance with the internal normative documents of the organisation using appropriate tools;
Maintenance of safety equipment at crossings
34. maintains automatic signalling equipment at crossings (e.g. checks, cleans, paints and checks visibility and audibility) without disruption or changing set parameters in accordance with the internal normative documents of the organisation using appropriate tools;
35. maintains automatic signalling equipment that requires shutdown and changing set parameters and maintains barrier light signals in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
Cable network maintenance

36. maintains cable routes, couplings, racks and panels (e.g. inspects, cleans, checks connection quality and secures connections) and takes electrical measurements without detaching cables (e.g. measures insulation resistance and cable circuit resistance) in accordance with the internal normative documents of the organisation and using appropriate tools; 37. measures electrical circuits at measuring points (e.g. measures the insulation resistance of turnout and track circuit signal circuits) in accordance with the internal normative documents of the organisation using appropriate tools; Maintenance of safety equipment power supply 38. conducts general maintenance and takes electrical measurements of power supplies and checks protective devices (e.g. inspects, checks and secures connections, checks feed availability and measures power and voltage) in accordance with the internal normative documents of the organisation using appropriate tools; 39. checks feed changeover and diesel generator start-up and normal operation under load in accordance with the internal normative documents of the organisation using appropriate tools; 40. conducts maintenance of batteries (e.g. measures electrolyte density, cleans the case and parts and measures battery jars using cell testers) without interruption to operation in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools; 41. conducts battery maintenance that requires the disruption of charging voltage (e.g. checks battery capacity and replaces individual battery jars) in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools; 42. conducts UPS device maintenance without interruption to operation in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools; 43. switches between power supplies and feeds while ensuring the retention of light signal function in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools; Maintenance of protective devices and earthing of safety equipment 44. conducts inspections and maintenance of fuses and surge protectors (e.g. checks their condition and replaces expired fuses) in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools; 45. conducts inspections and maintenance of protective earthing (e.g. checks the condition of earthing conductors and the quality of connections) and measures soil resistivity in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools;
Knowledge: 1) types and construction of light signals, principles of operation and maintenance; 2) signalling systems of light signals and journey displays; 3) types and construction of turnouts, principles of operation and maintenance; 4) types and construction of track circuits, principles of operation and maintenance; 5) types of axle counters and their construction, principles of operation and maintenance; 6) principles of operation and maintenance of throttle transformers; 7) types of continuous automatic train signalling (ALSN) track equipment and their construction, principles of operation and maintenance; 8) types and construction of electromechanical controls, principles of operation and maintenance; 9) types and construction of computer-based controls, principles of operation and maintenance; 10) types and construction of internal hardware, equipment cabinets and containers, principles of operation and maintenance; 11) types and construction of automatic signalling equipment at crossings, principles of operation and maintenance; 12) cable network construction, principles of operation and maintenance; 13) types and construction of batteries, principles of operation and maintenance; 14) types and construction of protective devices and earthing, principles of operation and maintenance;
B.2.2 Managing safety equipment documentation **EstQF Level 4**
Performance indicators: 1. checks the conformity of circuit diagrams and technical documentation with working equipment, informs the line manager of the results and proposes corrections in accordance with the internal normative documents of the organisation; 2. completes inspection documentation within the limits of their competence in accordance with the internal normative documents of the organisation.
Knowledge:

1) principles of the design and preparation of circuit diagrams; 2) meanings of symbols on circuit diagrams; 3) principles of the functionality of standard nodes on circuit diagrams; 4) principles of completing and managing inspection documentation for safety equipment.

B.2.3 Management and supervision	**EstQF Level 4**
Performance indicators: 1. Supervises a less qualified employee and introduces technical documentation and the requirements of the internal normative documents of the organisation; observes supervised work and, if necessary, explains and corrects techniques by demonstrating and instructing the supervised employee to repeat the action until the correct result is achieved; analyses and evaluates the supervised employee's ability to fulfil their tasks and their attitude towards their work; advises the supervised employee in analysing errors that occur and in choosing remedial measures to be taken in accordance with the provided task, the selection of proper tools and techniques and the quality requirements specified. 2. Manages resources (e.g. monitors the availability of spare parts, consumables and tools and notifies the line manager of the need to replenish stocks) and monitors their cost-effective and targeted use in accordance with the internal normative documents of the organisation.	
Knowledge: 1) basics of communication psychology, including assertiveness; 2) basics of motivation; 3) basics of planning and organisation.	

OPTIONAL COMPETENCES

Certification of optional competences B.2.4 and B.2.5 is not mandatory.

B.2.4 Maintenance of marshalling yard safety equipment	**EstQF Level 4**
Performance indicators: 1. Maintains marshalling yard retarders and controls without interruption to operation in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools. 2. Maintains section vacancy detection sensors (electromagnetic, photoelectric, radiotechnical and track circuits) without interruption to operation in accordance with the internal normative documents of the organisation and the manufacturer's instructions using appropriate tools.	
Knowledge: 1) types and construction of marshalling yard retarders and controls, principles of operation and maintenance; 2) types and construction of section vacancy detection sensors, principles of operation and maintenance.	

B.2.5 Maintenance of ERTMS /ETCS devices	**EstQF Level 4**
Performance indicators: 1. Maintains ERTMS/ETCS internal hardware and manages, updates and restarts software in accordance with the internal normative documents of the organisation and the manufacturer's instructions; 2. maintains ERTMS/ETCS external hardware (e.g. replaces and updates software) in accordance with the internal normative documents of the organisation and the manufacturer's instructions.	
Knowledge: 1) types and construction of ERTMS/ETCS internal hardware, principles of operation and maintenance; 2) types and construction of ERTMS/ETCS external hardware, principles of operation and maintenance.	
ERTMS - European Rail Traffic Management System - Euroopa raudteeliikluse juhtimissüsteem ETCS - European Train Control System - Euroopa signalisatsioonisüsteem	

RECURRING COMPETENCES

B.2.6 Recurring competences of Railway Signalling Area Engineer, Level 4	**EstQF Level 4**
Performance indicators:	

within the limits of their occupational qualification level: 1. independently eliminates malfunctions in safety equipment, immediately informs their line manager of any issues and seals devices; 2. eliminates malfunctions in safety equipment independently as part of assistive work; 3. immediately informs traffic control and other units of traffic-related malfunctions and coordinates other activities with other units; 4. maintains the traffic manager work station (telephone and radio equipment, eliminating minor faults, replacing panel lamps, etc.); 5. analyses the causes of repeated malfunctions in safety equipment and seeks solutions; 6. immediately informs their line manager of any issues that fall outside the limits of their competence and of any assistance needed to solve the issue; 7. pays heed to the instructions of safety equipment manufacturers; 8. checks the proper functioning of the equipment after carrying out the work independently or with the traffic manager; 9. documents work and makes necessary record entries; 10. pays heed to work instructions, technologies and quality requirements as well as the requirements of all relevant legislation (both national and international), including waste management regulations; 11. works diligently and accurately without endangering human health, property or the environment; 12. organises the workplace as required and selects appropriate tools in accordance with the nature of the work, ensuring they are in working order and safe before starting work; 13. strictly observes occupational health and safety requirements when planning work, preparing the workplace, working and organising the workplace, and takes surrounding people and the environment into account in order to prevent occupational accidents; 14. uses personal protective equipment (work clothing and footwear, safety vest, etc.) and appropriate work methods and techniques that do not threaten life or health; 15. identifies the risks (e.g. safety and deadlines) that may be associated with the achievement of goals and takes measures to mitigate them; 16. in the event of an occupational accident, performs first aid, calls for professional help and informs the emergency services and the employer of the accident; 17. in the event of a health, commercial, technical or environmental hazard, terminates the work and immediately informs the employer or the employer's representative; 18. uses all work equipment and tools prudently and properly, according to their operation instructions; 19. regularly organises and cleans the tools, devices and protective equipment used during work, according to their maintenance instructions; 20. is open to cooperation, takes part in teamwork, shares all necessary and useful information with others and works towards achieving the best result for all concerned; 21. is capable of independently adapting to changes in working conditions and can find and analyse appropriate information to perform their duties and solve work-related problems; 22. participates in professional discussions within the limits of their competence, presenting and defending their opinions in a well-argued way; 23. participates in continuing vocational training and applies what they have learned in their professional work; 24. Estonian language skills levels: understanding B2, speaking B1 and writing A2; Russian language skills levels: understanding B2 and speaking B1; English language skills levels: understanding B1; 25. ensures road safety during repair, maintenance and construction work; 26. maintains different types of safety equipment (e.g. automatic blocking and semi-automatic blocking) and safety equipment of different generations; 27. uses a computer for information processing, communication, content creation and safety at the Basic user level on the Digital Competence Self-Assessment Scale (see Annex 2);
Knowledge: 1) rules for the technical use of railways with annexes; 2) requirements of professional legislation and regulations, meanings of professional terms; 3) requirements of drafting technical documentation (e.g. technical maintenance instructions for devices and the technical management act of the station) and documents; 4) requirements of operating on railways; 5) occupational safety requirements; 6) what to do in an emergency situation;

7) principles of first aid at the site of an accident; 8) principles of waste management; 9) principles of operation and maintenance of computer equipment; 10) fire safety requirements; 11) environmental protection requirements. 12) what to do in the event of traffic and occupational accidents; 13) requirements of notification procedures in the event of railway accidents and incidents; 14) types of traffic control devices used on railways; 15) types of communication used on railways; 16) point construction and principles of operation; 17) requirements of signal construction, installation and visibility; 18) principles of road safety for repair, maintenance and construction work; 19) principles of demarcating obstacle points and hazardous areas; 20) principles of hand signalling; 21) principles of issuing a caution order; 22) requirements of section availability detection sensors; 23) requirements of open track vacancy detection sensors; 24) requirements of signalling equipment at crossings; 25) requirements of route-blocking equipment; 26) requirements of road-blocking equipment; 27) requirements of station-blocking equipment; 28) requirements of interdependence between points, signals and journeys; 29) maintenance requirements of safety and communications lines;
Assessment methods: Recurring competences are evaluated as part of the assessment of the other competences listed in the occupational qualification standard.

Part C
GENERAL INFORMATION AND ANNEXES

C.1 Information concerning compilation and certification of occupational qualification standard and reference to classification of occupations	
1. ID of occupational qualification standard in register of occupational qualifications	12-15052019-1.1.3/6k
2. Occupational qualification standard compiled by:	Aleksandr Malõsev, AS Eesti Raudtee Andres Türn, Edelaraudtee Infrastruktuuri AS Anto Looken, SA Raudteekutsed Indrek Süld, AS Eesti Raudtee Mati Lõhmus, AS Eesti Raudtee Tarvi Viisalu, AS Eesti Raudtee Tiiu Poltruk, Edelaraudtee Infrastruktuuri AS
3. Occupational qualification standard approved by:	Transport and Logistics
4. No. of decision of Sectoral Council	12
5. Date of decision of Sectoral Council	15.05.2019
6. Occupational qualification standard valid until	10.04.2024
7. Occupational qualification standard version no.	6
8. Reference to International Standard Classification of Occupations (ISCO 08)	7412 Electrical Mechanics and Fitters
9. Reference to European Qualifications Framework (EQF)	4
C.2 Occupational title in foreign language	

English:	Railway Signalling Area Engineer, EstQF Level 4
Finnish:	Rautatie mekaanikko
Russian:	Механик СЦБ железнодорожного транспорта
C.3 Annexes	
Lisa 1 Language skills level descriptions	
Lisa 2 Scale of self-assessment in digital competence	