

 AS "Augstsprieguma tīkls" Reg. No 40003575567 Dārziema iela 86, Rīga, LV-1073, Latvia Phone (+371) 67728353; Fax (+371) 67728858		Instructions JSC "Augstsprieguma tīkls" Job Instruction for the contractors			Page1 (10)
					Approved:
Number: ID-1 -010 Version: 06	Developed by: Head of the Department, Artis Vītiņš Approved by: Chairman of the Management Board Varis Boks	Document valid from:	The version valid from:	The version valid until:	

Content:

1. What is JSC "Augstsprieguma tīkls" integrated management system?	1
2. Why are these questions binding to the contractors of JSC "Augstsprieguma tīkls"? ..	1
3. What do you need to know about the quality requirements?	2
4. What do you need to know about work safety and occupational health when performing works for JSC "Augstsprieguma tīkls"?	2
5. Fire safety requirements	5
6. What do you need to know about environmental protection at JSC "Augstsprieguma tīkls" objects?	6
6.1. Environmental aspect – operation of electrical installations.....	6
6.2. Environmental aspect – repair of buildings, structures, electrical installations, or electrical equipment	7
6.3. Environmental aspect – clearing of transmission line routes	7
6.4. Environmental aspect – reconstruction, demolition or construction of objects	7
6.5. Environmental aspect – waste management.....	7
7. What do you need to know about AST energy efficiency principles?	8
8. An extract from JSC "Augstsprieguma tīkls" policies of quality, environment, energy managements, labour protection and occupational health.....	8
9. Awareness and responsibility	10

1. What is JSC "Augstsprieguma tīkls" integrated management system?

JSC "Augstsprieguma tīkls" integrated management system is a management tool that comprises the requirements of standards ISO 9001, ISO 14001, OHSAS 18001 and ISO 50001 with regards to the following:

- quality and energy efficiency of the services provided by JSC "Augstsprieguma tīkls",
- protection of the environment, work safety and occupational health in the framework of the economic activity.

2. Why are these questions binding to the contractors of JSC "Augstsprieguma tīkls"?

The contractors hired by JSC "Augstsprieguma tīkls" performing dismantling or installation of electrical equipment, repairs, etc. works or services [*in accordance with an Agreement (-s)*] are directly involved in electricity transmission system technical maintenance and development.

This fact extends the group of employees whose contribution directly impacts the quality and energy efficiency of the services provided by JSC "Augstsprieguma tīkls", which, in this case, includes the employees and professionals of the contractor. The electricity transmission and

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page2 (10)
----------------------------------	---	------------

maintenance of the equipment can be performed as qualitative, environmentally friendly and energy efficient only as qualitative, environmentally friendly and energy efficient the contractual works have been performed. The more informed contractor’s personnel on the risks of the working environment, performing works safely, environmental protection and principles of energy efficiency, the more likely the contractor's personnel will not deteriorate its health and will not be hurt, will not harm the environment, and the works will be performed in an energy efficient manner.

Although JSC “Augstsprieguma tīkls”, subject to the requirements of the regulatory enactments of Latvia, technical requirements, expertise and other factors, try their best to precisely define these requirements within the contracts, in order to minimize disagreements, the contractors personnel shall be guided by the principle: “don't know or in doubt, you better ask”.

3. What do you need to know about the quality requirements?

Each employee's work and contribution is crucial to the overall result.

As already mentioned above, the hired contractors are directly involved in the technical maintenance, development and operational safety of the electricity transmission system. Such quality criteria as interruption of power supply, voltage characteristics, network mode (in case of work delay), defects of electrical equipment and installation depend on the quality of the contractor.

If technical requirements, for the most part, are set by technical standards, the organizational issues, from the viewpoint of Latvian legislation and regulations, are a matter of an agreement between the Contracting Parties. Despite the positive trend that disagreements regarding implementation of a project or delays in project become less common, experience shows that it is still the organizational matters that remain the major weakness.

For reference, JSC “Augstsprieguma tīkls” usually appoints a person on its behalf, whose tasks include monitoring of implementation of the projects, monitoring repairs and coordinating issues. To improve cooperation with the contractors, it is recommended to deal with the outstanding issues as soon as possible by informing the responsible persons at JSC “Augstsprieguma tīkls”, instead of postponing them at a later time. The consequences of delayed problems are more difficult to solve.

4. What do you need to know about work safety and occupational health when performing works for JSC “Augstsprieguma tīkls”?

JSC “Augstsprieguma tīkls” may not always know the technology and methods of the contractor, and it may not be within our competence, but we can introduce you to the work environment risks that exist at JSC “Augstsprieguma tīkls” objects (for example, electromagnetic field intensity, the nearest electrical equipment under voltage, safe movement routes, etc) so that the work environment risks at JSC “Augstsprieguma tīkls” sites would not undermine the health and safety of the contractor’s staff.

4.1 The contractor may be allowed to start the work when a letter has been submitted with a list of workers involved in the project and the parties have agreed on a Project of works or other document (if necessary).

4.2 When preparing the work site for the contractor, the staff shall be responsible for:

- the adequacy, completeness and correctness of security measures when preparing the work place, as well as for distribution of the work area (equipment disconnection, earthing, fencing, etc);
- the completeness, accuracy and quality of the initial instructing in the work place for the contractor’s staff.

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page3 (10)
----------------------------------	---	------------

4.3 The staff of the contractor shall be responsible for:

- the relevance of the rights and safety groups of the staff;
- the compliance of the contractor's staff with the instructions received during the instructing as well as during the execution of the works;
- the compliance with the requirements of the national regulations for work with dangerous equipment and fire-hazardous works;
- the technical condition, adequacy and correct use of the collective and personal protective work equipment;
- the fencing of the work place, the earthing and maintenance of safety notices and closing devices;
- the compliance with the requirements specified in the project of works or the work performance project;
- the quality of work performance and the compliance with the time limits;
- compliance with the provisions on labour protection while performing works at the territory of JSC “Augstsprieguma tīkls”.

4.4 The contractor’s staff performing the work must have valid certificates for electrical safety group (if necessary), for the right to work with dangerous equipment or other special jobs.

4.5 If the works are performed by employees of a foreign company who are not trained according to the 08.10.2013. Regulation of the Cabinet of Ministers No.1041 and the requirements of LEK 025, and who do not have a valid certificate for the electrical group, a supervisor shall be appointed.

4.6 The contractor's staff shall use personal protective equipment (helmets, etc.) throughout the territory of JSC “Augstsprieguma tīkls” in accordance with the safety signs and labour protection instructions.

4.7 The contractor is obliged to respect the work discipline and working arrangements, to comply with labour protection, hygiene and fire safety requirements.

4.8 The conditions of the work environment harmful to health are such working conditions due to which the employee can lose the ability to work, to get ill (including with occupational disease). The longer the exposure time to harmful factors, the more danger it causes to life and health. The employee working under harmful factors may get sick suddenly or over a longer time period.

4.8. The main health threatening work environment risk factors are:

Factors related to physics:

4.8.1 the microclimate – increased or lowered temperature within the premises;

4.8.2 meteorological conditions – rain, snow, increased or lowered temperature, wind, solar radiation, etc.

Factors related to physical work:

4.8.3 probability of injury by stumbling, falling from a height, injury due to falling objects, injuries due to hitting, scratching and cutting against constructions, animal bites;

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page4 (10)
----------------------------------	---	------------

4.8.4 physical exercise, with walking longer distances;

Biological factors:

4.8.5 ticks, *heracleum* plants, wasps and other insects, animal and snake bites;

Chemical factors:

4.8.6 insulation oil, various solvents, paints, etc., which may be contacted while repairs, reconstruction, or in case of damage to the equipment;

4.8.7 SF6 gas which can cause poisoning when decomposing, or it can cause lack of oxygen - suffocation if it leaks within enclosed spaces. SF6 decomposition products may be recognized by the smell of rotten eggs;

Electrical factors:

4.8.8 electric shock risk when in contact with parts of installation under voltage in case of damages;

4.8.9 electric and magnetic field.

4.9 Protective measures against the harmful conditions of the work environment:

4.9.1 Technical protective measures against harmful conditions of the work environment:

- organization of work place in accordance with the safety requirements for electrical installations;
- operation of equipment and work equipment in accordance with the requirements of work safety;
- strict compliance with the technological process;
- organization of work place in accordance with sanitary and ergonomic requirements;
- introduction and use of new, less hazardous technologies, equipment and substances;
- use of equipment, accessories and the personal protective equipment in accordance with labour protection requirements.

4.9.2 To take into account the effects of seasonal weather when moving around, and not to perform activities which may endanger ones or other people’s safety due to the weather conditions (wet, slippery, snowbound roads and equipment platforms, etc.). When moving through places difficult to get through (swamp, water barriers, forest windbreaks, thick snow etc.) one shall move according to the necessary safety requirements.

4.9.3 All equipment not under repair shall be considered to be at work and it is not permitted to approach it closer than the Regulation of Cabinet of Ministers No.1041 allowed safety distances, irrespective of its actual working situation:

- up to 20 kV - not closer than 0.6 m;
- 110 kV - not closer than 1 m;
- 330 kV – not closer than 2.5 m.

4.9.4 During a thunder storm one must not find himself under the overhead lines, separately growing trees, in the vicinity of poles or within an installation of distribution.

4.9.5 If an employee notices signs of poisoning with SF6 – nausea, dizziness, dyspnoea, etc., the victims must be immediately evacuated away from the site of poisoning in the fresh air. If it gets worse, one shall perform CPR (if necessary) and call for emergency medical assistance mentioning poisoning with sulphur hexafluoride (in medical terminology it is classified as a simple asphyxiant i.e. only suffocating gas).

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page5 (10)
----------------------------------	---	------------

4.10 Most common causes of accidents:

- 4.10.1** electric shock, burns if not complying with the safety requirements when working in electrical installations;
- 4.10.2** moving around the territory, spaces, stairs without caution - results in falls causing fractures or bruising;
- 4.10.3** traumas due to use of damaged tools, machines and protective equipment, as well as due to lack of the necessary protective equipment.

4.11 In the work premises employees must follow the following rules:

- not to enter premises that are not ones work place and the work does not require entering such premises;
- move around the rooms, corridors and especially the stairs with caution in order not to fall and not to get hurt; the premises must be adequately lit;
- premises shall be kept in order and clean;
- not to start or stop any machinery or equipment, which one has not been assigned to (with the exception of stopping it when in danger and otherwise an accident or incident becomes unavoidable);
- not to open containers with an unknown liquid or other substances, not to use such fluids as to not become intoxicated;
- if one sees that a colleague does not comply with the safety requirements, one shall immediately stop him and show him the correct working methods, if necessary, report to their direct manager;
- not to do work that one has not been assigned to and that does not fall within ones scope of responsibilities.

4.12 Always remember that electricity, unlike other forms of energy, have several features, most dangerous of which is that an electric current is not visible, its presence can be detected only with special devices.

5. Fire safety requirements

5.1. Staff action:

- One has the responsibility to prevent the outbreak of the fire or activities, which may cause fire, as well as, when in construction site, to immediately evacuate when a fire alarm goes off or a fire comes in sight.
- The evacuation from the premises and buildings shall be carried out through any evacuation exit possible;
- The staff whose vehicles are located next to the burning buildings, fire hydrants and drive-up roads shall immediately move their vehicles;
- Extinguishing the fire in electrical equipment shall be prohibited;
- In case of fire on the site, one shall call without delay **112 (901 or 9112 from the local communications network, Network Dispatchers of the AST Dispatch Department - from local telephone phone 25484 or Mobile 929342139)**, and call the fire department and the staff who allowed to work, and act in accordance with the instructions received while instructing.
- If the fire does not set off the automatic fire detection and alarm system (fire alarm), one shall start it by breaking the glass and pressing the button of signalling apparatus within the red housing located in visible places within the building - in corridors or vestibule, or notify the security guard;

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page6 (10)
----------------------------------	---	------------

- If there is human health and life threatening situation, one must immediately leave the work place and inform the other employees. One shall immediately take measures in order to prevent work colleagues and / or other people from entering the danger zone.
- After the evacuation, returning to the buildings, premises, where the fire alarm went off shall be allowed only by a security guard or the person responsible for the object;

5.2. While staying and performing works at the AST objects, one must comply with fire safety rules.

5.3. The main causes of the fire:

- recklessness with fire;
- irregularities in service of the electrical grid and electrical installations;
- irregularities in service of electrical household appliances;
- smoking in inappropriate places;
- irregularities in the performance of welding works.

5.4. Smoking on the premises and territory of JSC “Augstsprieguma tīkls” is prohibited. Smoking is allowed only in places specially equipped for this purpose.

5.5. Dirty wiping materials shall be collected in tanks intended for this purpose.

5.6. One shall prevent that flammable materials accumulate in working areas (dust, particles, sawdust, shavings, etc.). One should always keep the territory and premises clean and orderly. All flammable waste shall be systematically removed to specially intended places. When finishing work, one shall not leave flammable waste or highly flammable liquids at the work premises.

5.7. Access to fire extinguishing equipment shall always be kept free.

5.8. The evacuation exit corridors, passageways and stairwells must not be blocked up.

5.9. The condition of heating devices, ventilation systems and electrical installations shall be followed up and any damages which might cause the fire shall be reported immediately to the employer.

6. What do you need to know about environmental protection at JSC “Augstsprieguma tīkls” objects?

JSC “Augstsprieguma tīkls” has defined that its operation will be guided by the working methods which are environmentally sound or the negative impact on the environment is as small as possible.

This decision is reinforced by the condition that treatment of contaminated environment is expensive and time-consuming.

The cause or reason that can change the quality of the environment is called the environmental aspect. The hired contractors may affect the following environmental aspects:

- operation of electrical installations;
- repairs of buildings, structures, electrical installations or electrical equipment;
- clearing of transmission line routes;
- reconstruction, dismantling or construction of buildings, structures;
- waste management;

6.1. Environmental aspect – operation of electrical installations

When operating the equipment, there is a risk of defects, which may result in environmental pollution from chemical substances and mixtures of products (including oil), leaks in the soil, soil and groundwater contamination. In the case of oil leak from the transformer, there is a possibility that the

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page7 (10)
----------------------------------	---	------------

nature of the defect forms conditions for inflammation and burning of oils, which increases environmental pollution. The human factor is fundamental to the machine operations, because the lack of knowledge, inattention, negligence, etc. can cause environmental pollution resulting from human acts or omissions.

6.2 Environmental aspect – repair of buildings, structures, electrical installations, or electrical equipment

Without the technology or incomplete work technology, there may be environmental pollution by hazardous substances – oil, paints, solvents, sulphur hexafluoride etc. Absorbents should be used when performing works with oil in order to prevent environmental pollution. The used absorbents shall be properly managed. Environmental pollution while repairing electrical installations and electrical equipment may be caused by a human action or inaction (insufficient knowledge, inattention, negligence, etc.).

After completing the repairs, waste shall be managed by paying attention on the classification of the waste (household waste, hazardous waste or production waste). Mixing types of waste it is not acceptable, particularly mixing of hazardous waste.

6.3. Environmental aspect – clearing of transmission line routes

As a significant environmental aspect of transmission line routes clearing process is the forest, thatch etc. fire raging, which may result in causing material losses, threats to human life and health, substantial damage to the environment. When clearing the transmission line routes, the technical condition of the cleaning tools and machines shall be followed up. In case of derogations or damages, the works shall be stopped and the defects or faults shall be repaired or other (reserve) tools and machines shall be used.

The works are to be coordinated with the land owner or possessor thereof, in order to comply with the requirements and to avoid damage or inconvenience to the landowner or possessor.

Upon completion of the work, one shall pay attention to the wood residues – are they managed in accordance with the requirements and do not cause the fire hazard. One shall verify that no waste is left, including whether felled trees and tree branches are managed in accordance with the requirements, and whether the roads, fields or crops are not damaged, and whether the land owners or possessors have no complaints.

6.4. Environmental aspect – reconstruction, demolition or construction of objects

Notwithstanding the technological, fire safety measures, the waste management conditions may cause material losses, environmental pollution by hazardous substances, additional waste, including hazardous waste. Acting incompetently and irresponsibly may cause inconvenience to work efficiency and place difficulties on everyday normal activities of the people of adjacent areas (damaged territory, roads, damaged drainage system, submerged or wet areas). These conditions will lead to claims, mutually unpleasant negotiations or penalties.

6.5. Environmental aspect – waste management

Inadequate management of waste may significantly increase the environmental pollution (the mixing of hazardous waste with municipal waste and the mixing of various types of hazardous waste, using inappropriate tare or packaging.), may lead to contamination of the environment. Environmental pollution may be increased by human action or inaction (insufficient knowledge, inattention, negligence, etc.).

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page8 (10)
----------------------------------	---	------------

Remember that hazardous waste is harmful and dangerous (due to their physical and chemical properties), their entering the environment is detrimental to the environment, but in the future may endanger human health.

7. What do you need to know about AST energy efficiency principles?

Energy consumption during daily activities may be affected by the technical condition of the operating equipment, machines, devices, as well as habits, knowledge and organization of daily activities and actions of the staff.

With regard to the technologies used (equipment, instruments, or machines), AST lays down the requirements in the procurement regulations, performance of work projects or it is within the contractor’s own interests to work energy efficiently.

As regards to staff habits, knowledge and organisation of daily activities and actions, the following principles shall be taken into account:

- Compliance with recommendations on the indoor climate of buildings and premises; if possible, when ventilating the premises, the heating and air-conditioning equipment shall be turned-down, thus ventilation of premises for short periods (approximately 5 minutes) are performed with draughts (in this case, major air exchange is rapidly carried out retaining the construction of the premises –the walls and the ceiling - as a thermal inertia – the walls and the ceiling cannot cool / heat);
- In order to reduce unjustified electricity use for lighting, employees must follow to that all lights would not be switched-on without the need; when leaving the premises for more than 5 minutes, the lighting must be switched-off;
- Electric tools and machines must be maintained in good technical condition and any technical defects shall be addressed in a timely manner. It should be followed up that the means of transportation or specialised transport and mechanical machinery engines are not running too long without the need for it.

In cases of uncertainty or in cases where one has any questions or suggestions regarding energy efficiency principles, one may apply to AST staff responsible for work supervision of contractors.

8. An extract from JSC “Augstsprieguma tīkls” policies of quality, environment, energy managements, labour protection and occupational health

8.1. JSC "Augstsprieguma tīkls" quality policy:

- Operation in the interests of sustainable development of the country – ensures equal access to the electricity transmission system and its services and the continuous, safe and sustainable transmission of electricity throughout Latvia.
- Leadership and Unity in Achieving Objectives – AST's management promotes staff unity and solidarity, creates awareness, creates an environment in which employees engage in the successful achievement of AST's goals.
- Process-oriented approach – clearly defines processes and their interactions in order to continuously improve and ensure effective performance through joint planning, performing, testing and acting.
- An evidence-based approach to decision-making – adopts effective decisions based on operational and development needs, objective data, AST knowledge, available technology and innovation, information analysis and experience.

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page9 (10)
----------------------------------	---	------------

- Collaboration - Collaborates with clients, partners, contractors and shareholders and parties involved in a responsible manner to ensure effective operation and sustainable development of AST, while respecting national sustainable development interests.
- Staff involvement and competence – AST staff are involved in the development and maintenance of QMS, maintaining policies, actively communicating and expressing opinions. AST ensures the principle of lifelong learning in its work so that AST's staff are competent, open to innovation and technologies that help them develop and improve.
- Continuous, developmental perfection – identifying and prioritizing the achievement of the goals necessary to increase and develop the processes, QMS, achievements and AST's value.
- Risk and Possibilities - AST manages the internal and external environment, operational incidents, information and communications with a view to eliminating or reducing risks to a reasonable level, as well as evaluating the options for improving the efficiency and processes of AST's quality management system.

8.2. Labour Protection policy:

JSC “Augstsprieguma tīkls” will take measures to prevent accidents at work and occupational diseases:

- with zero tolerance against any violations of the requirements of internal procedures and regulatory documents on labour protection, thus promoting the responsibility of managers and staff for the quality of their work and increase the level of customer satisfaction.

The main principles for solving labour protection issues are:

- compliance with the labour protection requirements under the Law of the Republic of Latvia;
- forming such working environment as to avoid the risks of the work environment or mitigate the inevitable impact of the work environment risk;
- preventing the risks of the work environment;
- adapting the work to the individual, mainly in terms of the layout of the workplace, work equipment and the choice of working and production methods;
- giving priority to collective labour protection measures over individual labour protection measures;
- preventing the risks of the work environment for the safety and health of employees who, in accordance with regulatory enactments, need special protection;
- instructing and training employees with regards to labour protection;
- carrying out assessment of work environment risk by single risk assessment methodology;
- carrying out the internal monitoring of the work environment using a computerised system of internal supervision of the work environment;
- collecting information on accidents that have or almost have happened in the past, information on occupational diseases and carrying out an analysis, evaluation of this information and the adoption of measures to reduce the accidents.

8.3. Environmental protection policy:

JSC „Augstsprieguma tīkls” Environment policy objective is to continuously improve JSC „Augstsprieguma tīkls” environmental performance by preventing or reducing the harmful effects on the environment, using the natural resources rationally and introducing the best available techniques in all JSC „Augstsprieguma tīkls” areas of activity.

The main principles to be followed in the field of the environment are as follows:

- The company organizes its operation and development in line with sustainable development principles, taking into account the economic and environmental dimensions and complying with the law in the field of environmental protection;

Number: ID-1 -010 Version: 06	Instructions Job instruction AS “Augstsprieguma tīkls” the contractors	Page10 (10)
----------------------------------	---	-------------

- The company identifies the possible environmental risks and minimizes the adverse effects on the environment in all spheres of activity of the undertaking;
- The company introduces the best available techniques, reduces the emission of polluting substances into the environment, the impact on climate change and the quantity of the waste;
- The company promotes continuous environmental performance improvement in each department and organization as a whole, promoting the efficient use of resources;
- When planning its development, the company evaluates the impact of the projects on the environment, without harming the environment and the interests of society, as well as reducing any damages to the environment to the maximum at the stages of constructing, use and closing of planned objects;
- The company maintains and enhances the environmental management system in accordance with the requirements of the standard LVS EN ISO 14001;
- The company cares and contributes to the preservation of biodiversity, assesses and monitors the effects on specially protected nature territories, species and biotopes;
- The company shall ensure the competence in the field of the environment of the responsible employees, rise environmental awareness in each work place and inform the employees on the significant environmental aspects of the company’s operation;
- The company shall inform the public and interested parties on a regular basis regarding the company’s activities in the field of the environment;
- The company acts environmentally friendly and calls its partners and the public to act environmentally friendly.

8.4. Energy management policy:

JSC „Augstsprieguma tīkls” Energy management policy objective is to continuously improve public energy efficiency performance, reducing the technical and technological losses, improving the company’s operation and improving the energy performance of its objects, as well as strategy of procurement and use of road transport.

The main principles to be followed by the company when solving energy efficiency performance related issues are:

- The company carries out projects of reconstruction and modernisation of transmission equipment and objects to ensure power transmission and safety of the required transmission volumes, examining options to optimise technological losses;
- The company carries out projects of replacing transformers and auto-transformers to ensure power transmission and safety of the required transmission volumes, examining options to reduce technical losses;
- The company continually improves the energy efficiency indicators of its economic activities and objects;
- The company performs energy accounting and analysis, in order to develop effective energy efficiency performance improvement measures;
- As much as possible, the company organizes procurements as a result of which the products and/or services of the company are energy efficient and improves the Public energy efficiency performance.

9. Awareness and responsibility

Taking into account the contractor's participation in business processes and activities, as well as the mutual cooperation during performance of contractual works, the impact of the contractor’s activities on AST business results and reputation must be acknowledged.

With regard to the contractor’s activities in our objects, we can provide information about our experience, the work environment risks, environmental aspects and energy efficiency, as we know it, and we expect an appropriate performance of contractor’s activities, without harming our reputation.