GUIDELINES FOR THE IMPLEMENTATION OF THE CONTRACT ON ENVIRONMENTAL AND SOCIAL POLICIES OF THE WORLD BANK CONTRACT 4A.3.2 / d - MODERNIZATION OF THE PERUN ATMOSPHERIC DISCHARGE DETECTION AND LOCATION SYSTEM TASK - LOCATION: MICHAŁKÓW AEROCLUB - IN CHANGE ZA KALISZ

Checklist for environmental and social activities

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PART 1: GENERAL INFORMATION ABOUT THE PROJECT AND LOCATION

INSTITUTION	L AND ADMI	NISTRATIVE	INFORMATION							
Country	Poland									
Project title	Contract 4A.3.2 / d Modernization of the PERUN lightning detection and location system - task: location: Aeroklub Michałków in exchange for Kalisz									
Scope of the project and activities	Under the Task of the Contract 4A.3.2 / d, the Contractor shall perform: - Obtain the necessary official decisions for the performance of works; - Plot development project; - Technical project; - Power connection; The supplier will design and build a power connection and install all the necessary cables between the access point indicated and made available by the manager of the Aeroclub. The output of the LV terminals is to be provided in a dedicated control cabinet adapted for outdoor installation. This cabinet must ensure that the environmental requirements for the operation of all auxiliary devices are met; - Grounding, surge protection and equipotential bonding installations; - Design and construction of a security fence; - Paving the fenced area of the station with paving slabs with dimensions of 30x30x5 cm; - Mast installation; - Installation of the LS7002 detection station (passive antenna and power supply / management system) with configuration and start-up; - Installation and configuration of the communication module ensuring communication between the station and the Central Unit of the PERUN system. The PERUN system is responsible for the detection and location of atmospheric discharges. It is a system that, while receiving data, does not generate any radiation,									
Institutional solutions (Name / Full name and contacts)	BKP		dversely affect people and the en Purch Institute of Meteorology and Water M tute in V	naser anagement - National Research Insti-						
Implementation (Name / first name and surname and contact)	EMP Coordinator Supervision carried out by the Supervision Inspector The Contractor OMC Envag Sp. z o. o									
LOCATION DE	SCRIPTION									
Location name	Michałków Ae	ro Club								
Description of the location	The planned in be located on 55/2 in the Lev the commune Wielkopolski, Ostrów Wiell province of Gr The plot has an ha, and the in on the plot will									

land, which will be fenced and paved, of which 1 m2 will cover the area under the newly built 2 m mast (LS7002).

The mast will be located in the fenced area of the newly built station at the Michałków Aeroclub.

The plot is not covered by the Local Development Plan. The Study of the Conditions and Spatial Development of the commune of Ostrów Wielkopolski is located in KL - the area of the airport.



Who is the owner of this site?

Aero Club of Ostrow - Michałków Airport

IMWM-PIB leases a part of the plot

Description of the geographic, physical, biological, geological, hydrographic and socioeconomic context **Geological structure** - the investment area is located on the glacial glacial deposits (moraine, glacial) from the Warta Glaciation period. It is located in the Sudeten monocline, more precisely in the Wschowa-Ostrzeszów zone. The nearest deposits of natural aggregates are located approx. 2 km to the north and south, and 1.7 km to the south, deposits of clay raw materials for construction ceramics.

Due to the nature of the project, no impact of the investment on the geological conditions is expected.

Soil conditions - according to Corine Land Cover 2018, the area in question belongs to the group 231 - meadows and pastures. Podzolic and brown soils with poor and medium permeability developed on the tills.

Due to the nature of the project, no impact of the investment on the soil is expected.

Surface waters - The investment area is located within the catchment area of the Uniform Parts of Surface River Waters with the European code RW60001784429 Ołobok to Niedźwiada.

The planned investment will not create a threat to the achievement of the environmental objectives for surface water bodies.

The investment area receives on average between 500-550 mm of rainfall a year. Rainwater and snowmelt will be discharged to the ground by spontaneously flowing from the facilities. In the area covered by the investment, it is planned to create a hardening of paving slabs with dimensions of 30x30x5 cm over the entire area of the fenced plot (25 m^2) and foundations for the mast and possible lashings (1 m^2) . However, this area will be small and will not disturb the infiltration of rainwater into the ground.

The planned investment is not associated with a threat to the soil and water environment.

Flood risk areas

According to the flood hazard maps and flood risk maps published on October 22, 2020, the investment area is not located in an area of particular flood risk.

Groundwater - the analyzed area is located on the border of the groundwater body (JCWPd) with the code PLGW600081, the chemical and quantitative condition of which is defined as good and is not threatened with failure to meet environmental objectives. The plot is not located within any GZWP.

Impact on surface and underground waters

It is planned to build a facility that does not require a permanent water supply, either for technological or social purposes.

Potential contamination of surface waters and shallow circulation groundwater is not diagnosed at the stage of construction and operation.

Relief and water system

No areas and places filled with stagnant water, watercourses or ditches were observed on a fragment of plot 55/2, which is now part of the airport. There were also no other hydrated and wetlands or ponds.

Landscape

The new 2 m high mast will be located on a plot of land, which is now part of the airport. The fence of the plot will be openwork. Due to the similar planned development of the plot, it will not adversely affect the landscape, although it will be noticeable.

The negative impact of the mast construction on the landscape is not diagnosed.

Air quality

The scale of the planned investment will be very small. It will require the work of 2 people, which means that the traffic of vehicles will be limited to the delivery of installations and equipment necessary for its assembly.

The nuisance of the planned project during the construction works will be related to the possibility of temporary, limited mainly to the area of the works, increased dust and gas emission related to the operation of machines, earthworks, etc. Due to the disorganized nature of the emission, its variability over time, time of occurrence this emission is difficult to estimate, but it is not expected to have a lasting impact on air quality. It will be short-term, reversible and local.

The PERUN system is responsible for the detection and location of atmospheric discharges. It is a system that, while receiving data, does not generate any radiation, therefore it will not adversely affect people and the environment.

Short-term local effects on air quality during construction work are diagnosed, but will cease once the works are completed.

The acoustic climate

At the stage of construction and implementation works of the project in question, the noise may be nuisance within a distance of up to 100 meters from the machines in operation or the works being carried out. The greater the distance from the emitter, the greater the decrease in acoustic power. Taking into account the location of the buildings - single-family housing (approx. 200 m), as well as a very small and short-term scope of works, the implementation stage will not involve any inconvenience and exceeding the permissible standards. Due to the use of the land, the area around the plot should be considered as agricultural land (undeveloped, grass-covered airport area), which, in accordance with the Regulation of the Minister of the Environment of June 14, 2007 on permissible noise levels in the environment (Journal of Laws of 2014, item 112) are not protected.

For the duration of the construction works, i.e. about 1 month, there will be several journeys by trucks with transport or disposal of waste from earthworks, which may emit noise of up to 102 dB (at the source). Car journeys will take place between 6:00 - 22:00. Due to their passage, vibrations and local noise may occur, however, they will not exceed the permissible noise standards (50 dB) for single-family housing areas located 200 m away. If vibrations occur, they will be negligible and will not cause degradation of the surrounding buildings or road surfaces.

Noise emission at the project implementation stage is temporary and will cease once the works are completed.

Flora, biota of fungi and plant communities

The area of the planned station is currently not fenced off, so it may be a feeding ground for large mammals. However, it must be taken into account that this is an airport area which, due to noise emissions, may not be attractive to animals.

It can be a feeding place for birds and small mammals typical of agricultural and urbanized areas.

The station is covered with grassy plants that are regularly mowed. There are no protected species of fungi or lichens, or species of multi-fruit fungi.

No valuable and protected natural habitats were found within the future station and in the tested 100 m buffer.

The construction of the mast will not adversely affect the natural environment and nearby protected areas or biodiversity.

There is no need to clear trees or bushes.

The negative influence of the mast construction on flora and fauna is not diagnosed.

Elements of the environment protected under the Act of 16 April 2004 on nature protection and ecological corridors:

The following forms of nature protection are located within a radius of 5 km from the investment:

10 nature monuments (0.68 - 4.57 km away).

The planned investment will not adversely affect the forms of nature protection due to their remoteness and the scale of the project.

Cultural heritage

The planned investment is located approx. 280 m south of the archaeological site with traces of settlement of the Przeworsk culture. The planned station will not affect this site in any way due to the significant distance of works, however, it is advisable to be careful with earthworks due to the possibility of finding other objects.

The planned investment will not have a negative impact on the cultural heritage or, in the event of finding objects of historic importance, it will have a negligible impact.

Adjacent areas

The implementation of the project will not have a significant negative impact and will not change the areas adjacent to the plot. The investment area is located at the airport. There are agricultural and urbanized areas around. The nearest housing development is located approx. 200 m to the north-east.

The planned investment will not adversely affect the neighboring areas.

Materials used

Only environmentally safe, non-toxic materials will be used during construction. First of all, elements of the steel structure, concrete, sand left over from earthworks and finishing materials will be used, in total amounts not exceeding 400 kg of steel, 1 m3 of concrete and approx. 1/6 of the palette of finishing materials. These materials will be stored throughout the month. Due to the short time and small scope of works, if the paved areas do not currently exist, so as not to degrade the ground surface, the materials will be stored in an area protected with a thick construction foil, and a sorbent will be available at the storage site. It will make it possible to neutralize any leaks. Due to the fact that hazardous materials will not be stored, they do not require additional protection.

Waste will be stored in dedicated closed containers at a designated place and regularly exported, so that it will not be deposited.

SUMMARY

There are no wetlands in the area designated for the investment, and thus no hydrogenic ecosystems .

The investment will not affect species perceived as conflicting and will not increase the penetration of alien species.

As a result of the investment, the sites of regionally and nationally valuable species, as well as natural habitats, will not be destroyed.

The implementation of the investment will not adversely affect the habitats and species of flora, fauna and fungi.

In the case of the planned Investment, there is no possibility of direct and indirect impact of the objects to be modernized on the loss, fragmentation or modification of habitats. The investment will be located on a small area.

The investment will not have a negative impact on any forms of nature protection.

Locations and distances to places where materials can be obtained, especially aggregates, water, stone? NOT APPLICABLE

LEGISLATION

Identification of the national and local laws and permits applicable to the project activities

National legal acts:

- Act of 3 October 2008 on the provision of information on the environment and its protection, public participation in environmental protection and on environmental impact assessments (i.e. Journal of Laws of 2021, item 2373, as amended);
- Act of April 16, 2004 on nature protection (i.e. Journal of Laws of 2021, item 1098, as amended);
- Act of 23 July 2003 on the protection and care of monuments (i.e. Journal of Laws of 2021, item 710, as amended);
- The Act of July 20, 2017, Water Law (i.e. Journal of Laws of 2021, item 2233, as amended);
- Act of April 27, 2001, Environmental Protection Law (Journal of Laws of 2021, item 1973, as amended);
- Act of March 21, 1985 on public roads (i.e. Journal of Laws of 2021, item 1376, as amended);
- The Act of July 7, 1994 Construction Law (i.e. Journal of Laws of 2021, item 2351, as amended):
- Act of 28 September 1991 on forests (i.e. Journal of Laws of 2021, item 1275, as amended);
- Act of 27 March 2003 on spatial planning and development (i.e. Journal of Laws of 2021, item 741, as amended);
- Act of June 9, 2011 Geological and Mining Law (i.e. Journal of Laws of 2021, item 1420, as amended);
- Act of June 14, 1960 Code of Administrative Procedure (i.e. Journal of Laws of 2021, item 735, as amended)
- Act of December 14, 2012 on waste (i.e. Journal of Laws of 2021, item 779, as amended);
- Regulation of the Minister of the Environment of 9 October 2014 on the protection of plant species (Journal of Laws of 2014, item 1409, as amended);

- Regulation of the Minister of the Environment of 9 October 2014 on the protection of species of fungi (Journal of Laws of 2014, item 1408, as amended);
- Regulation of the Minister of the Environment of December 16, 2016 on the protection of animal species (Journal of Laws of 2016, item 2183, as amended);
- Regulation of the Council of Ministers of September 10, 2019 on projects that may significantly affect the environment (Journal of Laws of 2019, item 1839, as amended);
- Regulation of the Minister of the Environment of June 14, 2007 on permissible noise levels in the environment (ie Journal of Laws of 2014, item 112, as amended);
- Regulation of the Minister of the Environment of 13 April 2010 on natural habitats and species of Community interest, as well as the criteria for selecting areas eligible for recognition or designation as Natura 2000 areas (i.e. Journal of Laws of 2014, item 1713, as amended) d.).

Determining when / where the public consultation process took place

Public consultation on the checklist is not necessary.

(see Part 3 for additional information)

BUILDING INSTITUTIONAL CAPACITY

Will there be any capacity building?

[X] N or [] Y if yes, Annex 2 contains a capacity-building program

PART 2: INFORMATION ON PREVENTION OF IMPACTS ON THE ENVIRONMENT

ENVIRONMENT / SOCIAL RESEARCH							
	Activity	Status	Unleashed actions				
	A. Construction works	X Yes [] No.	See see A and B below				
	B. Little new construction	X Yes [] No.	See see A and B below				
	C. Individual wastewater treatment system	[] Yes X No.	See see point C below				
Will the activity at the project	D. Historic building (s) and neighborhoods	[] Yes X No.	See see point D below				
site include /	E. Land occupation ¹	[] Yes X No.	See point E below				
concern any of the following?	F. Hazardous or toxic materials ²	[] Yes X No.	See point F below				
the following?	G. Nature protection	X Yes [] No.	See point G below				
I	H. Road and pedestrian safety	[] Yes X No.	See H point below				
	I. Specific guidelines for proceedings in the event of an epidemic or epidemic threat or state of emergency during the execution of works	X Yes [] No.	See point I below				

¹Land seizures include the displacement of people, change of living conditions, intrusion into private property, i.e. land that is acquired / transferred, and this affects people living and / are squatters and / or running a business on the land purchased.

²The toxic / hazardous material includes but is not limited to asbestos, toxic paints, harmful solvents, lead paint removal, etc.

The tables below detail the general rules described for Contract 4A.3.2 in *Guidelines for the implementation of the Contract in the field of environmental and social policies of the World Bank Contract 4A.3.2 Modernization of the PERUN lightning detection and location system*, available on the OPDOW Project website ³. In addition, if during the implementation of the Task, any phenomena or the need to perform activities etc. will occur, they will be performed in accordance with the recommendations set out in the Guidelines for the Contract implementation.

PART 3: MITIGATING MEASURES

ACTIVITY	PARAMETER	CHECKLIST OF MITIGATION ACTIONS
A. General conditions for the performance of works	Appropriate organization and work safety	 (a) Local building and environmental inspectorates as well as the local community were informed about the upcoming actions in accordance with the requirements of Polish law, in a customary manner. (b) The public opinion was informed by IMWM-PIB about the works through appropriate notifications on generally accessible websites. (c) All the building permits required by law have been obtained. (d) The contractor formally undertakes that all work will be carried out in a safe and disciplined manner, with the aim of minimizing the impact on local residents and the environment. (e) Health and safety supervision has been established, which will be responsible for appropriate marking (including informing employees about key rules and regulations that must be followed) and securing the construction site. (f) The personal protective equipment of employees will be in line with international good practice (helmets, if necessary, masks and goggles, harnesses and safety shoes are always mandatory). (g) The work area will be properly secured and marked. If it is found that there are dangerous zones that pose a threat to human life and health, they will be marked with warning boards and secured against unauthorized access to their premises. (h) The equipment, machines or tools used during the works must guarantee compliance with the quality requirements of the Works, health and safety regulations and health and safety at work regulations (if required) and may not cause damage to the existing infrastructure and elements of development and land development. The contractor will apply the principles of SARS-CoV-2 - COVID-19 disease prevention. (i) The contractor is obliged to report all accidents involving employees and bystanders, as well as events significant from the point of view of the ES Code of Conduct.
B. Construction work	Air quality	(a) The Contractor's vehicles may not pollute the surrounding environment (pavements, roads).(b) During the works, leaving vehicles and machines idling will be limited to the necessary minimum.(c) Only vehicles, machines and devices complying with current emission standards will be used.
	Noise	 (d) The noise related to the works will be limited to the working hours (6.00 - 22.00). (e) Vehicles, machines and devices will be used to reduce noise to the applicable regulations and standards. (f) During operation, engine covers for generators, air compressors and other motorized mechanical devices should be closed and devices located as far away from residential areas as possible.
	Water	(g) Construction site facilities should be protected against possible contamination and should be properly hardened or protected with foil.

³https://odrapcu.pl/projekt-opdow/popdow-dokumenty/

	Soils	(h) If it is necessary to destroy a layer of fertile soil, it should be collected, stored in piles, and then used for its restoration.
		 (i) Construction site back-up facilities should be protected against possible contamination. (j) In the case of the emission of petroleum pollutants onto the soil surface, immediate measures should be taken to prevent the spread of pollution, e.g. scatter the sorbent and immediately remove the contaminated soil with
	Waste management	the sorbent, and then dispose of it properly as waste. (k) Waste segregation, storage and neutralization paths and places will be defined for all types of waste expected as a result of the task implementation. (l) The waste should be handed over to entities authorized for further management.
C. Individual wastewater treatment system	Water quality	(m) Records of waste disposal will be kept as evidence of proper management as planned.(a) Household sewage should be collected in tight, drainless containers, the contents of which will be handed over to entities with appropriate permits for their further management (in the absence of access to the sewage system)
D. Monument (s)	Cultural heritage	(a) Earthworks should be carried out with due care, taking into account the nearby archaeological site.(b) In the event of finding objects that may have or have historic value, the works should be stopped immediately, the area secured and the Provincial Conservator of Monuments notified. Due to the nature of the works and the current good archaeological research of this area, no prior archaeological research will be carried out.
E. Land take	Land acquisition plan / framework	NOT APPLICABLE (the works will be performed in the area where IMWM-PIB is the lessee and there is no need to acquire land for permanent or temporary use)
F. Toxic materials	Toxic / hazardous waste management	(a) In the event of hazardous waste, it will be segregated and stored in separate, designated containers, protected against the effects of weather.
G. Nature protection	Protected areas, natural habitats, protected species	(a) Due to the small area of works and the lack of naturally valuable habitats and species, the Contractor will not employ a team of naturalists responsible for constant environmental supervision of these works for the time of preparation and implementation of the works. The environmental supervision functions will be performed by a Contractor's employee with appropriate knowledge, appointed by the construction manager and approved by IMWM - PIB. Activities in the field of environmental supervision will be carried out in accordance with applicable regulations and good practices developed under the OPDOW Project under the supervision of a representative of IMWM-PIB.
	Dendroflora	(b) There will be no need to clear trees and bushes.(c) It will not be required to protect trees and shrubs, as they are not found within a radius of 100 m from the investment.
H. Road and pedestrian safety	Direct or indirect hazards to public traffic and pedestrians from construction activities	 (a) In accordance with national regulations, the Contractor will ensure adequate protection of the construction site and regulation of construction traffic, especially on public roads. This includes, but is not limited to the following: Marking, warning signs. Providing safe and permanent access and transit for emergency services. Agreeing the traffic plan of the transport with the road owners - if necessary. Arrangements with the authorities of the Aero Club - if necessary.

I. Special guidelines	Direct or indirect	(a) If there is an epidemic or epidemic emergency during the works, the Contractor is obliged to:
for proceedings in the	threats to public health	1. to provide persons on the construction site with all necessary precautions to maintain the health and
event of an epidemic		safety of manual workers, the Contractor's staff, in particular as regards the introduction of appropriate
or an epidemic threat		measures to avoid or minimize the spread of diseases, including measures to avoid or minimize disease
or a state of		transmission infectious, which may be related to the influx of temporary or permanent workforce related
emergency during the		to the implementation of the Contract, in the manner specified in the content of the applicable Law, e.g.
execution of works		in the Act of December 5, 2008 on preventing and combating infections and diseases issued on the basis
		of Article 46a infectious in humans (i.e. Journal of Laws of 2021, item 2069, as amended), regulations
		on the establishment of certain restrictions, orders and bans in connection with an epidemic,
		2. designate a person responsible under the Contract for matters related to the principles of occupational
		health and safety during an epidemic or epidemic emergency,
		3. implement appropriate recommendations of sanitary services in the Republic of Poland and the World
		Bank,
		4. cooperate with the Employer, in particular provide current information on the taken or planned
		precautionary measures, including the proper protection of the construction site against unauthorized
		access and the implementation of appropriate procedures.

PART 4: MONITORING PLAN

Activity	What	Where	How	When	Why	Expense	Who
A. General conditions for the performance of works	The conditions set out in Part 3, point AND	Michałków Aero Club Control and verification of the Contractor's documents (point 3A ac)	Verification- assessment / approval of documentation submitted by the Contractor to IMWM-PIB. Visual monitoring, photographic documentation.	During the performance of the Contract, on an ongoing basis, at least once a month.	Control of the need for individual activities, control of the correctness of implementation.	The Contractor bears.	Contractor's staff, IMWM-PIB staff
B. Construction work	The conditions set out in Part 3, point B	Michałków Aero Club	Verification- assessment / approval of documentation submitted by the Contractor to IMWM-PIB. Visual monitoring, photographic documentation.	During the performance of the Contract, on an ongoing basis, at least once a month	Control of the need for individual activities, control of the correctness of implementation.	The Contractor bears.	Contractor's staff, IMWM-PIB staff.
C. Individual wastewater treatment system	The conditions set out in Part 3, point C.	Michałków Aero Club	Verification- assessment / approval of documentation submitted by the	During the performance of the Contract, on an ongoing basis,	Control of the need for individual activities, control of the correctness	The Contractor bears .	Contractor's staff , IMWM-PIB staff.

Activity	What	Where	How	When	Why	Expense	Who
			Contractor to IMWM-PIB. Visual monitoring, photographic documentation.	at least once a month	of implementation.		
D. Historical buildings	The conditions set out in Part 3, point D	Michałków Aero Club	Verification- assessment / approval of documentation submitted by the Contractor to IMWM-PIB. Visual monitoring, photographic documentation.	During the performance of the Contract, on an ongoing basis, at least once a month	Control of the need for individual activities, control of the correctness of implementation.	The Contractor bears.	Contractor's staff, IMWM-PIB staff.
E. Land take	NOT APPLICABLE						
F. Toxic materials	The conditions set out in Part 3, point F.	Michałków Aero Club	Verification- assessment / approval of documentation submitted by the Contractor to IMWM-PIB. Visual monitoring, photographic documentation.	During the performance of the Contract, on an ongoing basis, at least once a month	Control of the need for individual activities, control of the correctness of implementation.	The Contractor bears.	Contractor's staff, IMWM-PIB staff.

Activity	What	Where	How	When	Why	Expense	Who
G. Nature protection	The conditions set out in Part 3, point G.	Michałków Aero Club	Verification- assessment / approval of documentation submitted by the Contractor to IMWM-PIB. Visual monitoring, photographic documentation.	During the performance of the Contract, on an ongoing basis, at least once a month	Control of the need for individual activities, control of the correctness of implementation.	The Contractor bears.	Contractor's staff, IMWM-PIB staff.
H. Road and pedestrian safety	The conditions set out in Part 3, point H.	Michałków Aero Club	Verification - assessment / approval of the documentation provided by the Contractor to IMWM-PIB. Visual monitoring, photographic documentation (including the condition of roads and the possible condition of buildings if transports were frequent and under load), control of obtaining	During the performance of the Contract, on an ongoing basis, at least once a month	Control of the need for individual activities, control of the correctness of implementation.	The Contractor bears.	Contractor's staff, IMWM-PIB staff.

Activity	What	Where	How	When	Why	Expense	Who
			opinions and / or arrangements required by law, administrative decisions.				
I. Special guidelines for proceedings in the event of an epidemic or an epidemic threat or a state of emergency during the execution of works	The conditions set out in Part 3, point H.	Michałków Aero Club	Verification - assessment / approval of the documentation provided by the Contractor to IMWM-PIB. Visual monitoring, photographic documentation, control of obtaining opinions and / or arrangements required by law, administrative decisions.	During the performance of the Contract, on an ongoing basis, at least once a month	Control of the need for individual activities, control of the correctness of implementation.	The Contractor bears.	Contractor's staff, IMWM-PIB staff.