



Olsztyn, 15 December 2021

**REGIONAL DIRECTOR
DIRECTOR FOR ENVIRONMENTAL PROTECTION
IN OLSZTYN**

WOOŚ.420.8.2021.BG.18

Annex to the decision of the Regional Director for Environmental Protection in Olsztyn of 15 December 2021, ref. no.: WOOŚ.420.8.2021.BG.18, on environmental conditions of the planned undertaking titled: Construction of a meteorological radar on plot of land no. 330/3, Uzranki precinct, commune of Mrągowo, poviát of Mrągowo, Warmian-Masurian Voivodeship.

Characteristics of the planned investment

The planned project consists in the construction of a meteorological radar whose aim will be to increase precision in monitoring the condition of the atmosphere in terms of meteorological phenomena. It will be carried out on a plot of land with registration number 330/3, boundary 0026 Uzranki, commune of Mrągowo, poviát of Mrągowo, Warmian-Masurian voivodeship. The area of the above mentioned plot is 0.3002 ha, while the planned investment together with the accompanying infrastructure will cover an area of 0.03 ha.

The planned investment includes the construction of a meteorological radar tower on a circular plan topped with a dome containing the radar antenna. The antenna system will be adjusted to the radar system in a way ensuring the best accuracy and quality of measurements. The system will be adapted to dual polarization measurements. The reflector will be of the parabolic type. Antenna parameters:

- The pin beam width, measured at -3 dB, will be less than 1 degree.
- The antenna gain will be equal to or greater than 45 dB.
- Side lobes: less than -30 dB for the first lobe less than 3 degrees from the main axis, less than -34 dB for the second leaf at a distance greater than 5 degrees from the main axis.
- Cross polarization separation in the main beam will be greater than 35 dB,
- Range of operation in elevation from -2 degrees to 182 degrees,
- Operating range in azimuth is to be 360 degrees,
- Antenna alignment accuracy in azimuth and elevation will be 0.1 and 0.1 respectively degree.
- The speed ranges of antenna movement in azimuth will be configurable from at least 0.5-40 degrees/second with an accuracy of at least 0.2 degrees for speeds up to 20 degrees per second and 0.5 degrees for higher speeds.
- The velocity ranges of antenna movement in elevation will be configurable from at least 0.5-40 degrees/second with an accuracy of at least 0.2 degrees for speeds up to 20 degrees per second and 0.5 degrees for higher speeds.
- The acceleration of antenna movement in azimuth and elevation will be at least 20 degrees per per second.
- The antenna system will provide the ability to calibrate the measurement geometry by automatic sun tracking.
- The antenna system drive and lubrication system will be designed to to minimize service requirements, including the use of digital servo modules, brushless motors, and optical encoders.
- The rotary coupler system will be isolated and protected from dirt.
- The antenna system will have automatic systems to prevent operation antenna in the event of an open door to the dome, and systems to manually lock out the ability antenna operation.

- The antenna system will have edge protections against excessive tilt of the antenna, i.e., one that could expose the antenna system to damage, including at least one mechanical failure.
- The waveguide system will be pressurized through the use of a dehydrator to provide dehumidified air pressure throughout the waveguide system from transmitter to the antenna reflector.

The tower will be made of a steel, truss structure, closed with a sheathing of corrugated sheet metal attached to the tower structure. It is also possible to build the tower in reinforced concrete technology. The height of the tower measured from the base to the center of the installed radar antenna is to be 35 meters. Under the dome there will be a room for radar equipment. Around the dome and at the height of the radar room there will be around the dome and at the height of the radar room. The meteorological radar planned to be used will be equipped with magnetron transmitter with the following parameters:

- Operating frequency - 5 645 MHz.
- Peak power in the pulse (long, medium, short) before separation into polarizations - at least 400 kW.
- Pulse length - possibility to set at least four pulse lengths in the range 0.5 - 2.0 Hs.
- Sampling frequency (PRF) at least: long pulse 250 - 600 Hz, short pulse 500 - 2,400 Hz.
- Ability to set staggered PRF of at least pulse repetition rate ratios with at least a ratio of higher to lower pulse repetition rates: 3/2; 4/3 and 5/4; the system is to allow de-aliasing of the measured Doppler velocity.
- Spurious radar emissions - The emission range shall comply with 'ITU-R Radio Regulations Appendix 3' and CEPT/ERC/Rec. 74-01; the radar shall be equipped with systems minimizing the emission of frequencies other than the main one.
- The transmitter will be equipped with power meters, allowing remote power measurement before and after polarization separation, allowing remote calibration of the transmitter, and remote VSWR (standing wave ratio).
- The transmitter will be equipped with circuits protecting it from damage and circuits to protect the transmitter in the event of an arc in the waveguide.
- The modulator will be fully solid-state.
- Transmitter coherence will be provided to suppress standing echoes greater than 40 dB.

In addition, the following technology components will be implemented as part of the investment:

Receiver and signal processor:

- Receiver type - superheterodyne, 2 intermediate frequencies.
- Noise factor less than 2 dB.
- Dynamic range of the receiver not less than 115 dB.
- Minimum detectable signal level to be less than -114 dB for long pulse.
- Mirror frequency attenuation to be greater than 80 dB.
- Radar sensitivity at 100 km is to be better than 0.05 mm/h.
- The receiving filters will be applied, limiting the band of received and processed and processed signal to the frequency area of ± 2 MHz in relation to the nominal frequency. In the remaining range the return signal will be attenuated by at least 60 dB. I and Q channels will be directly output (16-bit format), as well as the possibility recording of the data stream from these channels to a file on a computer disk connected to high speed LAN network (1 GB link in the radar room).
- A minimum processing resolution better than 15 m will be achieved.
- A maximum number of primary cell processing greater than 5,000 for each polarization separately.
- Fixed echo filters based on Doppler effect techniques and with signal reconstruction function.
- It will be possible to enable filtering of interference from WiFi transmitters operating at radar frequencies.
- Detected interference from wind turbines as non-meteorological echoes will be removed from the radar signal and meteorological data will be corrected.
- A power meter will be installed to measure the returning signal. The power meter will have the capability to remotely perform the measurement.

- The signal processor should be based on standard PC technology and run on LINUX operating system.
- The signal processor will record at least the following data in real time output (in at least 8 bit format): dBZ (uncorrected and corrected), radial velocity (V), spectral width (W), SignalQuality Index (SQI), Differentialreflectivity (ZDR), Differentialphase (PhiDP), Specificdifferentialphase (KDP), Correlationcoefficient (RhoHV), Clutter to Signal Ratio (CSR), Reciever signal to noise ratio (LOG) and Hydrometeor classification.
- The signal processor should perform real-time attenuation correction in the atmosphere for Z and ZDR based on "Specific differential phase" results.
- Triggering of filters or threshold will be indicated by a flag in the raw volumetric data.
- All meteorological moments will be simultaneously available as corrected and uncorrected. Definition of corrected data has to be characteristic icon configurable from the user level for each moment separately, at least with respect to the fixed echo filter, noise filter, and speckle filter.
- The signal processor will have the ability to estimate noise power radial by radial (radial by radial) and associated data correction.

Radar Control Processor:

- The radar control processor (RCP) will provide an interface to the radar system for operating system and service system.
- The RCP will allow remote analysis and control of the radar system, enable and only subsystems, resetting and viewing antenna system operating parameters, receiver, transmitter, signal processor, and the RCP itself.
- The RCP will be PC-based and use the LINUX operating system.
- The RCP will generate BITE information when errors or faults are identified in the subsystems. This information will be recorded as logs and available through operational and maintenance software.

Dome:

- A dielectric dome without metal components will be installed (distorting the measurement) or another one with better parameters, with dimensions adapted to the size of the antenna and the dimensions of the radar tower.
- The loss of transmitted power in dry conditions will not exceed 0.2 dB, and in the case of 10 mm/h rain - not more than 0.4 dB.
- The dome will be resistant to winds of at least 65 meters/second, made of materials with hydrophobic properties. Thickness and properties of materials used in the dome panels will be uniform throughout the structure.
- The dome will have a hatch with the ability to open and access to obstruction lighting.

The principle of radar operation is based on the principle of reflection of electromagnetic waves from precipitation particles and the use of the Doppler phenomenon, enabling real-time monitoring of the state of the atmosphere. Radar sends a short electromagnetic pulse with high peak power. When the pulse reaches a meteorological object it dissipates. Part of the signal returns to the radar antenna where it is received. Based on the power of the return signal, the intensity of the phenomenon is calculated. The direction and speed are calculated from the Doppler effect. The frequency of the return signal reflected from an object that is moving is different from the emitted signal. The speed of the object relative to the radar is calculated from the magnitude of the displacement.

In the radar tower, in the ground zone, the following will also be located: a toilet, an emergency power generator, a tank with a capacity of 1 000 l of fuel for the generator, UPS equipment and heating, air conditioning and ventilation equipment. The tower will be equipped with a lifting device - a cargo and passenger elevator. The radar base has been appropriately planned to accommodate the entire social and technical facilities.

Moreover, within the scope of the project, it is planned to construct an exit from the commune road and parking spaces, allowing access to the radar station and parking and free maneuvering for at least 3 passenger cars. The exit and the parking lot will be built in a technology which guarantees long-lasting use and will be adapted to truck traffic with a permissible total weight above 15 tons (e.g., from jamb slabs). A sidewalk made of cobblestones will lead from the parking lot to the entrances to the radar station with a width of at least 1 m.

The planned facility will be supplied with water from the water supply system. The operation of the radar will not generate significant amounts of sewage, only domestic sewage will be generated as a

result of the temporary stay of the maintenance staff (6 times a year, two people). It is planned to construct a sealed, non-residential wastewater storage tank with a capacity of up to 10 m³, which will be emptied as needed by authorized entities.

The planned project will operate practically unmanned. The applied telecommunications technology will allow for infrequent maintenance and service inspections.

The planned facility will be connected to the existing power grid. Additionally, the facility will be equipped with a power generator and a 10 kW UPS emergency power supply unit, in case of power failure. During the operation of the project air conditioners will be used for heating and cooling.

The planned project will be implemented within the boundaries of Natura 2000 area Mazurska Ostoja Żółwia Baranowo PLH280055. For the above-mentioned area, a plan of protection tasks has been established by the order of the Regional Director for Environmental Protection in Olsztyn of 20 March 2015 on the establishment of a plan of protection tasks for the Natura 2000 area Mazurska Ostoja Żółwia Baranowo PLH280055 (Journal of Laws of the Warm.-Maz. Province of 2015, item 1038). In addition, plot No. 330/3 is located in the Leginsko-Mrągowskie Lakes Protected Landscape Area, in relation to which the binding legal act is the resolution No. XXXIII/727/17 of the Sejmik of the Warmińsko-Mazurskie Voivodeship of 28 December 2017 on the Leginsko-Mrągowskie Lakes Protected Landscape Area (Journal of Laws of the Warmian-Masurian Voivodeship of 2018, item 415). As indicated in § 5 (1) (2) of the aforementioned resolution, in the area of the protected landscape area the implementation of projects likely to have a significant impact on the environment within the meaning of the provisions of the EIA Act is prohibited, which includes the planned investment. However, pursuant to § 5 (3) (1) of the said resolution, this ban does not apply to the execution of projects likely to have a significant impact on the environment, for which the conducted environmental impact assessment showed that there was no negative impact on nature conservation and landscape protection of the protected landscape area. The conducted assessment of the environmental impact of the project showed that the execution of the investment will not have a negative impact on Natura 2000 areas and other forms of nature protection. The area of the planned project is located outside the areas of ecological corridors.



REGIONALNY DYREKTOR
OCHRONY ŚRODOWISKA
w Olsztynie
Agata Moździerz



Olsztyn, 15 December 2021

**REGIONAL DIRECTOR
DIRECTOR FOR ENVIRONMENTAL PROTECTION
IN OLSZTYN**

WOOŚ.420.8.2021.BG.18

**DECISION
on environmental conditions**

Pursuant to Article 71 section 2 point 1, Article 75 section 1 point 1 letter i, Article 82 and Article 85 section 1 of the Act of 3 October 2008 on the provision of information on the environment and its protection, public participation in environmental protection and environmental impact assessments (Journal of Laws of 2021, item 247, as amended) and § 2 section 1 item 7 letter d of the Regulation of the Council of Ministers of 10 September 2019 on undertakings likely to significantly affect the environment (Journal of Laws of 2019, item 1839), in connection with Article 104 of the Act of 14 June 1960. Code of Administrative Procedure (Journal of Laws of 2021, item 735, as amended), having examined the application of the Institute of Meteorology and Water Management - National Research Institute, 61 Podleśna St., 01-673 Warsaw, acting through the authorised representative, Mr Marcin Walter.

determine

environmental conditions for the planned undertaking entitled: Construction of a meteorological radar on lot No. 330/3, Uzranki area, commune of Mrągowo, County of Mrągowo, Warmian-Masurian voivodeship, according to the investment variant "I", and at the same time I determine:

I. Type and location of project

The planned project involves the construction of a meteorological radar, which will increase the precision of monitoring the state of the atmosphere in terms of meteorological phenomena. Within the scope of the investment it is planned to build a new radar tower with the height to the center of the antenna of about 35.0 m above sea level and the accompanying infrastructure. The investment will be realized on the plot of land no. 330/3, Uzranki area, commune of Mrągowo, powiat of Mrągowo, Warmian-Masurian voivodeship.

The radar in question will be an element of the Country Monitoring and Protection System of the Polish national hydrological and meteorological service and will be included in the Polish network of meteorological radars POLRAD, ensuring real-time monitoring and effective warning against dangerous meteorological phenomena.

II. Essential conditions for using the environment at the stage of execution and exploitation or use of the project, with particular emphasis on the need to protect valuable nature values, natural resources and monuments, as well as limitation of onerous for the neighbouring areas:

1. In order to limit noise nuisance, carry out construction works, in particular the most acoustically onerous ones, only during the daytime, i.e. between 6° and 22°; carry out works with the use of heavy construction equipment between 7:00 a.m. and 7:00 p.m., in the summer period from the second half of June to the end of September, and carry them out intermittently, with the use of heavy equipment in an alternating manner,
2. Perform construction work using technically efficient construction equipment and means of transport, properly operated and maintained, used in accordance with their intended use.
3. During construction work, turn off the engines of machinery and vehicles when loading and unloading materials and other breaks in work, and limit the idling of construction machinery.
4. Traffic of trucks bringing building materials and technical equipment should be carried out on public roads with limited speed, and on the unpaved road from Uzranki to the investment area - at a speed of 10 -20 km/h.
5. To reduce dust, sprinkle water on the construction site during dry periods; use construction materials on an ongoing basis without long-term storage on site.
6. The material and equipment base and the machine park should be located on a hardened area
7. The construction site should be equipped with a sorbent station for liquidation of possible leakages of oil derivatives and other harmful substances; in case of emergency, e.g. occurrence of a leakage, used sorbent and soil contaminated by the leakage should be immediately collected and handed over to an authorized company for further management.
8. Do not conduct refueling of construction vehicles and machinery and repair of equipment, oil changes in machinery and equipment during construction work, on site.
9. Store substances hazardous to soil and water on the Site in leak-proof containers at the construction site.
10. The social facilities of the construction site shall be equipped with sealed, non-returnable waste containers (portable toilets), ensuring that they are emptied by an authorized company; do not allow these containers to overflow.
11. Use earth masses and topsoil (fertile, stored separately) as much as possible for the development of the project site.
12. The waste generated during the execution of the project should be selectively collected in designated places and containers at the construction site, marked and protected against access of unauthorized persons, and systematically transferred to authorized entities.
13. Conduct construction works with the use of heavy equipment outside the bird breeding season, i.e. from September to the end of February.
14. As the Uzranki-Kosewo dirt road crosses the Baranowo Mazurian Tortoise Refuge, including the Zawady ecological site, transportation of equipment and materials should be carried out from the exit of the DK59 national road through Uzranki.
15. When using the Uzranki-Kosewo dirt road, for the period of construction it is necessary to fence off hydrated areas crossing the road and places of potential migration of turtles, amphibians and other reptiles, with safe containers for these animals (protected against predators). These containers should be emptied several times a day, and animals found in them should be inventoried by a specialist and moved safely to the other side of the road.
16. Before commencing the works, the area where the works are to be performed should be fenced with a fence preventing small animals from entering the construction site. The fence should be made of thick, smooth plastic sheeting at least 40 cm high with a tag to prevent animals from entering the fenced area. The foil should be stretched on metal or wooden stakes driven deep into the ground so that the fence is a stiff and stable structure.

The bottom edge of the foil should be recessed into the ground to prevent animals from getting under the fence. Fences should be removed after all construction work is completed. Once the area has been fenced off, the fenced off area should be inspected and if amphibians are found, they should be trapped and moved out of the construction area.

17. If it is necessary to move specimens of species under species protection, a permit must be obtained from the Regional Director for Environmental Protection in Olsztyn for the performance of activities subject to prohibition, in relation to species under strict and partial protection, issued pursuant to Article 56 paragraph 2 point 1 of the Act of 16 April 2004 on Nature Conservation (Official Gazette of 2020, item 55).

18. After completion of all construction works, the project site should be cleaned up.
19. Draw water for the operation of the project from the water supply system.
20. Social and domestic wastewater at the stage of project exploitation should be discharged to a sealed non-reflux tank, systematically emptied by authorized entities; do not allow the tank to overflow.
21. Place the fuel tank for the genset in a separate room in the radar tower; provide sorbent in this room for use in the event of a fuel spill during refueling.
22. Drain rainwater and snowmelt from paved areas and roof surfaces to the ground on the Investor's own land, without disturbing the water relations of neighboring areas.
23. Waste generated during facility inspections and repairs should be collected selectively, without storage at the radar station site, and then handed over for further management to entities licensed to do so.

III. Environmental requirements necessary to be included in the construction project:

1. Design the antenna system so that the areas of average power density of electromagnetic fields with values greater than or equal to 10 W/m² are concentrated at high altitudes (min. 237 m above sea level), in free space and in places inaccessible to the public;
2. Design the radar antenna control system to ensure the movement of the antenna beam only within the range of the upper hemisphere and to guarantee its horizontal operation, i.e. with an antenna design that excludes the possibility of its operation at an elevation angle below +5° from the horizontal line of the antenna.
3. Design a sealed, non-returnable domestic sewage tank with a capacity of up to approximately 10 m³.
4. Use a bunded fuel tank with a capacity of approximately 1000 l, with anti-corrosion protection of the external surface and protected with a drainless sump capable of accepting the entire contents of the tank; the tank should be equipped with:
 - a mechanical overfill sensor system during tank filling,
 - tightness control system in the interstitial space of the tank.
5. Design adequate radar tower lighting to reduce potential collisions with passing birds by illuminating the radar facade with flashing lights (not steady lights) to "warn" passing birds of the tall object.

IV. I do not impose an obligation:

- to conduct an environmental impact assessment as part of the proceedings to issue a building permit,
- carry out proceedings on cross-border environmental impact.

V. Requirements concerning counteracting the effects of industrial accidents, with respect to projects classified as upper-tier establishments or establishments with a high risk of a major industrial accident.

The project is not included in the above group of establishments.

VI. The characteristics of the entire project are attached to this decision.

JUSTIFICATION

The investment in question, involving the construction of a meteorological radar tower with a radiated power (EIRP) of 436.5 kW, qualifies as a project which may always have a significant impact on the environment, listed in § 2 sec. 1 item 7 letter d of the Regulation of the Council of Ministers of September 10, 2019 on projects which may have a significant impact on the environment (Journal of Laws of 2019, item 1839), i.e. radio-communication, radio-navigation and radio-location installations, excluding radio-lines, emitting electromagnetic fields with frequencies from 0.03 MHz to 300 000 MHz,

in which the equivalent isotropic radiated power determined for a single antenna is not less than 20 000 W. Pursuant to Art. 71 section 2 point 1 of the Act of 3 October 2008 on the provision of information on the environment and its protection, public participation in environmental protection and environmental impact assessments (Journal of Laws of 2021, item 247, as amended), hereinafter referred to as the EIA Act, a decision on environmental conditions is required for the planned project which may always have a significant impact on the environment.

The planned project is an investment within the meaning of the provisions of the Act of 8 July 2010 on special principles of preparation and execution of investments in the field of flood control structures, for which the competent authority to issue a decision on environmental conditions, pursuant to Art. 75 par. 1 section 1 letter i, is the regional director for environmental protection.

In a letter dated 22 April 2021 The Institute of Meteorology and Water Management - National Research Institute, Podleśna St. 61, 01-673 Warsaw, acting through the proxy of Mr Marcin Walter applied to the Regional Director for Environmental Protection in Olsztyn for issuing a decision on environmental conditions for the undertaking consisting in "Construction of a meteorological radar on a plot of land no. 330/3, Użranki precinct, Mrągowo municipality, Mrągowo County, Warmian-Masurian Voivodeship". The application was accompanied by:

- power of attorney,
- - Environmental Impact Assessment Report - OVFMP 4A.3. POLRAD weather radar modernization - Użranki radar station. Location: plot of land no. 330/3, Użranki precinct, municipality of Mrągowo, powiat of Mrągowo, Warmian-Masurian Voivodeship, elaborated on 23 April 2021 by the author's team led by Marcin Walter, M.Sc. - Klimas Przedsiębiorstwo Budowlano-Projektowe Ryszard Klimas, 116 Zdunowska St., 63-700 Krotoszyn,
- map, in paper and electronic form, with the indication of the predicted area on which the project will be executed, and the indication of the predicted area which the project will have impact on
- a simplified excerpt from the land register covering the area where the project will be executed, in an electronic form,
- certificate of the Head of the Commune of Mrągowo, sign: IPP.6727.35.2021.Z of 22.02.2021 regarding the local spatial development plan,
- confirmation of payment of stamp duty.

The Regional Director for Environmental Protection in Olsztyn, in a letter dated 05.05.2021, asked the Applicant to complete the documentation in terms of proper submission of the power of attorney, the presentation of excerpts from the land register covering the area which the project will have impact on, and a copy of the cadastral map certified by the competent authority covering the area where the project will be implemented, and the area which the project will have impact on. On 24 and 27 May 2021 the Applicant submitted the relevant addendum, which allowed the case to be considered.

In connection with submitting the required documentation, by virtue of a notification dated 01.06.2021 The Regional Director for Environmental Protection in Olsztyn informed about commencement of administrative proceedings for issuing a decision on environmental conditions for the aforementioned project. At the same time, after the analysis of the submitted report on the impact of the planned project on the environment, in a letter dated 01.06.2021, the body called the Applicant to supplement it in the following areas: the analysis of project alternatives, the impact of the investment on the acoustic climate, justification of the lack of cumulative impacts and an indication of the report preparation date. In the letter of July 6, 2021 the Applicant submitted the addendum, which was not signed by the report's author. Therefore, by letter dated July 12, 2021, the authority called the Applicant to supplement the above mentioned deficiency. On 23.07.2021 the appropriate supplement was submitted.

In accordance with Art. 77 par. 1 section 2 and Art. 78 par. 1 section 2 and Art. 77 par. 1 section 4 of the Environmental Protection Act, the Regional Director for Environmental Protection in Olsztyn applied in letters dated 27 July 2021 to the Warmia and Mazury State Regional Sanitary Inspector for an opinion on conditions of implementation of the project in question and to the State Water Management in Białystok for agreement on conditions of implementation of the project in question.

On 30 August 2021, the request was received from the State Water Management in Białystok dated 25 August 2021 (ref. BI.RZŚ.4360.32.2021.JK) for clarification and completing the environmental impact report regarding the classification of the project according to the ordinance on projects that may have a significant impact on the environment, indication of the domestic sewage treatment method and measures minimising the impact on the soil and water environment at the stage of project execution. In connection with the above, in a letter dated 01.09.2021 the Applicant was requested to supplement the report according to the content of the above mentioned letter of the body competent to issue the water permit assessment. On 09.09.2021 an appropriate supplement was submitted, which was later sent by letter dated 13.09.2021 to the consulting/advisory bodies, i.e. PGWP Regional Water Management Board in Białystok and Warmian-Masurian Voivodeship Sanitary Inspector.

On 29.09.2021 the decision was received from PGWP Regional Water Management Board in Białystok, no.: BI.RZŚ.4360.32.2021.JK of 23.09.2021, in which the aforementioned body agreed to the execution of the aforementioned project and set out the conditions and requirements which need to be included in the decision on environmental conditions. The aforementioned conditions were taken into account in the sentence of this decision.

The Warmia and Mazury State Regional Sanitary Inspector by a notification dated 27 August 2021, mark: ZNS.9022.2.12.2021.W informed of taking over, in accordance with the competence, whereas by notices dated 27 August 2021 and 20 September 2021 he informed of setting a new deadline for handling the case, first until 20 September 2021 and then until 30 September 2021. On September 30, 2021 a letter was received from Warmia and Mazury National Voivodeship Sanitary Inspector ZNS.9022.2.12.2021.W, in which a positive opinion on the execution of the project was expressed. The above authority stated that there are no contraindications for the implementation of the project, taking into account in particular: the location of the radar station (including the height of the antenna installation, the distance from residential buildings), the characteristic parameters of the installation and the types and magnitude of expected impacts on the environment, as well as the obligation to measure the electromagnetic fields immediately before the use of the radar station in question, resulting from Article 122a paragraph 1 of the Act of 27 April 2001. Environmental Protection Law (Journal of Laws of 2021, item 1973), which will allow to verify compliance with the permissible levels.

Pursuant to Art. 33 section 1, in connection with Art. 79 section 1 of the EIA Act, the Regional Director for Environmental Protection in Olsztyn assured public participation in the pending proceedings twice, which was announced by two notices dated 27 July 2021 (WOOS.420.8.2021.BG.9) and 4 October 2021 (WOOS.420.8.2021.BG.13). The above mentioned notices were posted on the RDOŚ website in Olsztyn and placed on the notice board of the local authority, as well as on the notice board in the seat of the Municipal Office of Mrągowo and on the BIP website of this authority, and on the notice board of the villages of Uźranki, where the project will be implemented. The interested parties could read the submitted application and the report on the environmental impact of the project and its complements in the seat of the Regional Directorate for Environmental Protection in Olsztyn, as well as submit comments and applications, orally, in writing and by electronic means, within 30 days from the date of public disclosure (i.e. from 2 to 31 August 2021 and from 7 October to 5 November 2021). No comments or applications were submitted within the aforementioned deadline.

At the same time, on 29.10.2021, during the second public participation in the proceedings, a letter was received from the Applicant informing about a change in the allocated radar frequency from 5 650 MHz to 5 645 MHz and the impact of this change on the environment. In connection with the above, the authority applied to the consulting/recommendation bodies for renewed consent to the conditions for implementation of the project and for an opinion on the planned project. On November 16, 2021 a decision was received from PGWP Regional Water Management Board in Białystok, no. BI.RZŚ.4360.53.2021.AB of November 10, 2021, in which the aforementioned body agreed on the execution of the aforementioned project and sustained previous conditions and requirements that had to be included in the decision on environmental conditions. On the other hand the Warmia and Mazury National Voivodeship Sanitary Inspector in the letter dated 15.11.2021, ZNS.9022.2.12.2021.W sustained his earlier positive opinion arguing that the

requested change does not change the predicted levels of electromagnetic fields in the environment generated by the installation.

The Regional Director for Environmental Protection in Olsztyn, seeking to issue a decision on environmental conditions for the project, by a notification dated 22.11.2021 informed that in the case in question evidence has been collected, and the parties to the proceedings, in accordance with Article 10 of the Act of the Code of Administrative Procedure, have the right to familiarize themselves with the files, comment on evidence and materials collected so far and submit demands before issuing a decision on the merits of the case. In the course of the administrative proceedings the parties to the proceedings did not file any comments regarding the planned project.

Analyzing in detail the files of the project, the body conducting the proceedings to issue this decision stated as follows.

The area where the project is planned to be carried out is not covered by the provisions of a valid local spatial development plan.

The planned investment, consisting in the construction of a meteorological radar, will be implemented on a plot of land with evidential number 330/3, boundary 0026 Uźranki, commune of Mrągowo, district of Mrągowo, Warmian-Masurian voivodeship. The rural commune of Mrągowo has an area of 295 km², including: arable land - 61.1% of the total area, forest land - 20.7%. The commune is inhabited by 7 975 people.

According to the extract from the land register, the area of the plot on which the investment is planned to be executed is 0.3002 ha and it is arable land class IVa and permanent pasture class IV. Currently, the plot is undeveloped and used for agricultural purposes as an arable field. There are no trees or shrubs on the area intended for the investment. The investment along with the accompanying infrastructure will occupy an area of 0.03 ha, while the rest of the area will be an unpaved, biologically active surface.

Meteorological radar will be located on the left side of the municipal road, from which communication to the project site will be conducted. The surroundings of the investment includes arable fields and pastures. Around the plot no. 330/3, where the radar will be located, there are no dense buildings. At a distance of approx. 65 m from the border of the investment plot, in the eastern direction, there is a homestead development area with areas used for agricultural purposes. Another homestead development area is located to the south, at a distance of about 200 m from the project area. However, the compact developments in Uźranki are located at a distance of 1.5 km away.

The planned project involves the construction of a meteorological radar, which will be used for the purposes of the State Hydrological and Meteorological Service provided by the IMGW-P113. The aim of the investment is to increase precision in monitoring the condition of the atmosphere in terms of meteorological phenomena. The radar will be included in the Polish network of meteorological radars POLRAD and will provide real-time monitoring and effective warning of dangerous meteorological phenomena (such as: strong wind, storm, tornado, intense precipitation, hail).

The planned investment includes the construction of a meteorological radar tower on a circular plan topped with a dome containing the radar antenna. The tower will be made in a steel, trussed structure, closed with a sheathing made of corrugated sheet attached to the tower structure. It is also possible to build the tower in reinforced concrete technology. The height of the tower measured from the base to the center of the installed radar antenna is to be 35 meters. There will be a room for radar equipment under the dome. Around the dome and at the height of the radar room there will be service platforms with barriers. The meteorological radar planned to be used will be equipped with a magnetron transmitter with the following parameters:

- operating frequency - 5 645 MHz,
- peak power in the pulse (long, medium, short) before separation into polarizations - at least 400 kW,
- Pulse length - possibility to set at least four pulse lengths within the range of 0.5 - 2.0 ps,
- sampling frequency (PRF) at least: long pulse 250 - 600 Hz, short pulse 500 - 2 400 Hz,

- ability to set alternate sampling frequency (staggered PRF) at least with ratios of higher to lower pulse repetition rates: 3/2; 4/3 and 5/4; the system is to allow de-aliasing of the measured Doppler velocity;
- unwanted radar emissions - the range of emissions is to follow the standards of 'ITU-R Radio Regulations Appendix 3' and CEPT/ERC/Rec. 74-01; the radar will be equipped with systems minimizing the emission of frequencies other than the main one;
- The transmitter will be equipped with power meters, allowing remote power measurement before and after polarization separation, enabling remote transmitter calibration and remote VSWR (standing wave ratio) measurement;
- the transmitter will be equipped with circuitry to protect it from damage and circuitry to protect the transmitter in the event of an arc in the waveguide;
- The modulator will be fully solid-state;
- the coherence of the transmitter will ensure the attenuation of standing echoes greater than 40 dB.

The operation of radar is based on the principle of reflection of electromagnetic waves from precipitation particles and the use of the Doppler phenomenon, enabling real-time monitoring of the state of the atmosphere. Radar sends a short electromagnetic pulse with high peak power. When the pulse reaches a meteorological object it dissipates. Part of the signal returns to the radar antenna where it is received. Based on the power of the return signal, the intensity of the phenomenon is calculated. The direction and speed are calculated based on the Doppler effect. The frequency of the return signal reflected from an object that is moving is different from the emitted signal. Based on the magnitude of the shift, the speed of the object relative to the radar is calculated.

In the radar tower, in the ground zone, there will also be located: a toilet, an emergency generator, a tank with a capacity of 1 000 l fuel for the generator, UPS equipment and heating, air conditioning and ventilation equipment. The tower will be equipped with a hoisting device - a freight and passenger elevator. The radar base has been appropriately planned to accommodate the entire social and technical facilities.

In addition, the project includes the construction of an exit from the municipal road and parking spaces, allowing access to the radar station and parking and free maneuvering for at least 3 passenger cars. A sidewalk will lead from the parking lot to the entrances to the radar station. The planned project will operate virtually unmanned. The applied telecommunications technology will allow for infrequent maintenance and service inspections.

The planned facility will be connected to the existing power grid. Additionally, the facility will be equipped with a power generator and a 10 kW UPS emergency power supply unit, in case of power failure.

Within the analysis of alternatives carried out in the report, no other location of the project was considered, since the location of the radar on the plot no. 330/3, Użranki precinct, allows obtaining the largest possible range of scanning, getting rid of interferences by high objects. The above was supported by multi-criteria analysis of experts in meteorology, radar construction and operation, as well as environmental values were taken into account.

At the stage of project planning, various variants of technical infrastructure facilities and method of space heating were considered. Investment variant "I" assumed the construction of a radar tower heated electrically, with the use of air conditioners. In alternative variant "II", the construction of the radar tower was considered together with the technical building, heated with gas. Realization of the investment in the alternative variant will be associated with a greater occupation of the land, additional works related to the construction of infrastructure and the execution of additional security in case of failure of the heating system. The foundation of the liquid gas tanks will also be associated with additional security and technical requirements of the facility. Moreover, the change of the heating system from electric to liquefied petroleum gas results in the emission of pollutants into the air.

Taking into account the above, the investment variant "I" proposed by the Applicant will be more beneficial for the environment and as such it has been accepted for implementation. This variant takes into account the optimal location of the investment in relation to a public road,

minimal development of the plot's area - no technical building and no additional development for the gas tank, no need to make a gas connection, maintaining an appropriate distance from wooded areas and human concentrations, as well as the location closest to the border of protected areas where the hill in question is located.

The execution and possible decommissioning phase of the planned project will be associated with a periodic increase in emissions of exhaust fumes, noise and dust caused by the operation of mechanical equipment and traffic of vehicles delivering the necessary equipment and materials. The nature of emissions will be unorganized. Access to the construction site will be provided via public roads with limited speed (30 - 40 km/h, and on the unpaved road from Użranki to the investment site - 10 - 20 km/h), due to the weight and large size of vehicles. The area intended for the radar tower will be leveled, the top layer of soil will be removed, and an access road and a parking lot will be constructed. The greatest annoyance at this stage will be an increase in local dust. In order to minimize the impact it is planned to limit the duration of construction works, especially the most acoustically burdensome ones, to daytime only, i.e. from 6:00 a.m. to 10:00 p.m. Works with the use of heavy construction equipment will be conducted from 7:00 a.m. to 7:00 p.m., in summer from the second half of June to the end of September. The above work will also be carried out intermittently and heavy equipment will be used in an alternating manner to avoid cumulative impacts. In addition, all construction works will be carried out using technically efficient construction equipment in accordance with its intended use. Minimization of emissions of pollutants and noise at the stage of construction works will be ensured by economical use of vehicles and machinery, including turning off engines during loading and unloading of materials and other breaks in work, as well as limiting the idling of construction machinery. In order to reduce dust, it is planned to spray the construction site with water during dry periods. Construction materials will be used on an ongoing basis without long-term storage on site. It is anticipated that the range of nuisance caused during the execution phase of the project, as well as its eventual decommissioning will be limited to the immediate vicinity, and emission of pollutants and noise will be of short-term nature and will cease upon completion of the construction works. The construction phase, similarly to the decommissioning phase, may last approximately 3 months. At the same time, the report includes modeling of emission of pollutants into the air at the stage of the radar construction along with the assessment of their impact on air cleanliness in the area of investment. Forecast calculations did not show the possibility of exceeding acceptable air quality standards.

In order to protect the soil and water environment from contamination, the material and equipment base as well as the machinery park will be located on a paved area. Stops of mechanical equipment necessary for the construction of the radar station will be made in a manner ensuring elimination of the possibility of contamination of soil or groundwater with petroleum-derived substances. The construction site will be equipped with means to absorb possible spills of fuel and other harmful substances. In case of an emergency situation, e.g. a spill, used sorbent and soil contaminated by the spill will be immediately collected and handed over to an authorised company for further management. It is not planned to refuel construction vehicles and machines and to perform repairs of the equipment or change oils in machines and equipment during construction works on the construction site. Substances hazardous to the soil and water environment, which may potentially be present within the area of the works, will be stored in tight containers, meeting fire and environmental protection requirements. The social facilities of the construction site will be equipped with portable toilets of the toi-toi type, with assurance of removal of domestic sewage by an authorized company to the nearest sewage treatment facility.

During the project implementation phase, the impact will also be associated with excavation for foundations; however, no deep dewatering of construction excavations is anticipated.

Prior to the leveling works, the top layer of soil will be removed and deposited in separate areas for later use. Earth from the excavations will be used primarily within the project area - at the end of the construction works it will be used in the subject area for its leveling.

The construction site will be secured against access of unauthorized persons and the construction works will be carried out with respect to environmental protection and due diligence. During the execution of the project there will be created hazardous waste and non-hazardous

waste classified in group 13 (waste oils and liquid fuel waste), group 15 (packaging waste; sorbents, wiping cloths, filtering materials and protective clothing not included in other groups), group 16 (waste not included in other groups - batteries and accumulators), group 17 (waste from construction, repair and dismantling of buildings and road infrastructure), according to the Regulation of the Minister of Climate of January 2, 2020. on waste catalog (Journal of Laws 2020, item 10). In addition, municipal waste will be produced. The largest amount of generated waste will be waste from group 17. All waste will be temporarily accumulated on the investment site in a selective manner in designated places and containers, separated, marked and secured against access of unauthorized persons. After collecting a sufficient amount of waste, it will be handed over to authorized receivers for further management. After completion of all construction works, the project area will be cleaned up. Having the above in mind, it should be stated that the technical and organizational solutions adopted in the scope of water, sewage and waste management at the stage of the investment will protect the environment against penetration of pollutants to underground waters and soil.

During the operation of the meteorological radar, an important type of impact on the environment will be the emission of electromagnetic field, whose source will be the antenna. It is a parabolic metal mirror with a diameter of 4.1 m. In the focus of the paraboloid, which is the reflector, there is a proper antenna supplied with signal from the transmitter. Thanks to this construction, the antenna directs the emission in the direction to which the antenna reflector is directed.

The radar antenna sends short electromagnetic pulses with high peak power, When the pulse reaches the meteorological object, it scatters and a part of the signal returns and is received by the radar. From the power of the return signal, the intensity of the phenomenon is calculated, while the direction and speed of the meteorological object are calculated from the Doppler effect. The frequency of the return signal reflected from the moving object is different from the emitted frequency - on this basis the speed of the object relative to the radar is calculated.

The measurement is performed in a 10 minute cycle. First, the classic scan starts with a range of 250 km. The antenna is set at the lowest elevation angle (+ 0.5 degrees). It performs a full 360 degree rotation simultaneously sending out electromagnetic pulses and receiving signals reflected from meteorological objects. After a full rotation, the antenna rises to a higher elevation angle and repeats the observation cycle. A total of 10 antenna elevation angles are predicted. A Doppler scan with a range of 125 km is then initiated. The procedure is identical to the classical scan. The organization of the scanning strategy (e.g., selection of elevation angles) may vary; however, the radar antenna control system will provide movement of the antenna beam only within the range of the upper hemisphere and guarantee horizontal operation (no downward tilt of the radiation beam).

Radar antenna parameters:

- antenna center position: 35 meters above the terrain,
- pin-beam width (measured at -3 dB): less than 1°,
- gain: at least 45 dE3,
- antenna position accuracy in azimuth/elevation: 0,142/ 0,1e',
- antenna movement speed ranges in azimuth/elevation: from 0.51s to 40°/s - with an accuracy of at least 0.2a (for speeds up to 20°/s) and 0.5° (for higher speeds).

Transmitter parameters:

- transmitter type: magnetron,
- operating frequency: 5645 MHz,
- Frequency stability: at least 1 MHz
- Peak power in pulse: at least 400 kW,
- Pulse length: pulse length settings of at least 0,5 - 2 pS.

According to the Annex to the Regulation of the Minister of Health of December 17, 2019 on permissible levels of electromagnetic fields in the environment (Journal of Laws of 2019, item 2448) for the installation in question, being a source of electromagnetic fields with a frequency range from 2 GHz to 300 GHz, the permissible levels of electromagnetic fields (characterized by permissible values of physical parameters) are: power density S equal to 10 W1m2; electric component E equal to 61 Vim, magnetic component H equal to 0.16 A/m. In the

analysis of the expected distribution of electromagnetic fields it is sufficient to check compliance with one of these parameters. By places accessible to the public means, in accordance with Article 124, paragraph 2 of the Act of 27 April 2001, Environmental Protection Law (Journal of Laws of 2021, item 1973) any place, with the exception of places to which access of the public is prohibited or impossible without the use of technical equipment.

In the analysis accompanying the report on the impact of the project on the environment, the predicted range and locations of electromagnetic fields exceeding the permissible level of non-ionizing radiation (10 W/m²) were determined. The analysis shows that the area of electromagnetic fields with a power density value equal to or greater than 10 W/m² may occur within a maximum range of 59 m from the antenna and at a considerable height (approx. 35 m a.s.l. = 237 m a.s.l.). There are no sites accessible to the public here (the area of the site at the radar tower is approximately 202 m above sea level). The area around the planned facility is an agricultural and forest area, not intended for development. The nearest buildings are homesteads and are located at a distance of about 65 m from the investment plot. Therefore, it is expected that in the outer space (outside the tower) the area of electromagnetic fields with power density values exceeding 10 W/m² will occur only in places inaccessible to humans. However, in places accessible to humans (ground level, buildings), the power density will be much lower than the acceptable value. Taking into account the above, it should be concluded that the functioning of the meteorological radar station will not cause exceedence of permissible levels of electromagnetic fields in places accessible to the public.

Immediately before the commencement of the use of the radar station in question (i.e. at the time of test activation of the installation) it will be mandatory to measure the levels of electromagnetic fields - in accordance with Article 122 a paragraph 1 of the Act of 27 April 2001. Environmental Protection Law, which will allow to verify compliance with the permissible levels.

During project operation no significant impacts are expected in terms of noise emissions, including the nuisance to residential buildings. The nearest areas under acoustic protection, determined on the basis of the actual development (no local spatial development plans for the areas adjacent to the investment) are located at a distance of approximately 65 m from the border of the investment plot, in the eastern direction, and constitute farmstead development areas along with areas used for agricultural purposes, for which the permissible noise level, in accordance with the Regulation of the Minister of the Environment of 14 June 2007 on permissible noise levels in the environment (Journal of Laws 2014, item 112), during the daytime is 55 dB respectively.

The operation of the installation will cause noise emissions to the environment resulting from the operation of 2 air-conditioning units mounted on the radar tower, periodic operation of the generator and vehicle traffic around the station area. It is planned to install two typical wall-mounted air conditioners, where the sound source is external units mounted on building walls, with a sound power level of approximately 50 dB(A). The emergency power generator will not be used continuously. It will only be used in emergency situations due to a power outage. It was also assumed that the station area will be entered by one service employee's car per day, only during daytime, several times a year. Considering the nature of operation of the planned noise sources, low acoustic power level of air conditioners and the distance to the buildings under acoustic protection, there is no possibility of exceeding the acceptable noise levels due to the operation of the project.

The exploitation stage of the planned project will not be connected with air pollution emission from combustion of fuels - the rooms will be heated by electrical devices in form of 2 air conditioners. The air conditioners will be equipped with cooling agents not depleting the ozone layer, operating in a closed cycle. The only source of emissions to air will be a diesel-powered 40 kVA (30 kW) generator set, which will be switched on during power failures or test activations during technical inspections (maintenance of the unit will be performed once a month for a maximum of 1 hour). The source of fugitive emission of pollutants into the air will be vehicle traffic on the investment site - it is estimated that one passenger vehicle will enter the site every two months. Transport-related emissions will therefore be marginal, with no impact on air quality.

The report includes calculations of air emissions from the operation of the generator and an analysis of their impact on atmospheric air quality. The predictive calculations did not show any possibility of exceeding acceptable air quality standards as a result of the project operation.

Due to the fact that the investment is located in the areas used for agricultural purposes, far from residential buildings, the acoustic climate in the described area is shaped mainly by the agricultural machinery operating in the fields. Therefore, there is no risk of cumulative impact in terms of noise emission. The possibility of accumulation of impacts on other environmental components is also not expected. The area of impact is limited to the area of the property, while the radiation beam affects the environment within about 60 m radius at the height of 35 m above sea level, where no other impacts occur. The cumulative effect of impacts with respect to air emissions takes into account the air pollution background adopted for the calculations and the results of those calculations, which did not show the possibility of exceeding the permissible concentrations of pollutants in the air in connection with the project implementation.

The planned investment will not have a negative impact on climate change. Its exploitation is not associated with greenhouse gas emissions - minor emissions of communication pollutants and periodic, small emissions from the operation of the power generator will be of strictly local and transitory nature. It is expected that the construction of the new meteorological radar will increase precision in monitoring the state of the atmosphere in terms of meteorological phenomena. The radar will be included in the POLRAD Polish network of meteorological radars and thus will provide real-time monitoring and effective warning of dangerous meteorological phenomena (such as: strong wind, storm, tornado, intense precipitation, hail). As a result, the quality of meteorological and hydrological protection will be improved as well as the level and effectiveness of protection against damage caused by floods and other dangerous meteorological phenomena. Moreover, the applied technological solutions will ensure the project's resistance to climatic conditions, including extreme conditions such as strong and gusty winds. Appropriate protection and dome will prevent their destruction during precipitation (including hail and snow), lightning protection installations will ensure safety during storms and lightning discharges, and appropriate insulation will ensure safety during very intensive precipitation. There is no risk of flooding in the radar station area. Maintaining a safe distance between the planned facility and steep slopes and water bodies and rivers will minimize the risk of landslides.

Due to the nature of the planned investment and taking into account the scale of the project, materials and substances used, technologies applied and its proper operation, the risk of a serious industrial accident is not expected. There may occur technical failures during which equipment is usually switched off. In this case the antennas are switched off and stop emitting electromagnetic radiation. The investment will be preceded by a geological reconnaissance performed by an authorized geologist and designed by an authorized designer. Maintaining the equipment in a good technical condition and carrying out periodic inspections as required by law in this area will contribute to reducing the possibility of emergencies.

The planned facility will be supplied with water from a water supply connection. The radar will not generate significant amounts of sewage, only domestic sewage will be generated as a result of temporary stay of the maintenance staff (6 times a year, two people). It is planned to construct a sealed, non-return valve for domestic sewage with a capacity of up to 10 m³, which will be emptied as needed. Sewage will be taken to the nearest sewage treatment plant by an authorized entity. Rainwater will be discharged on the surface to the granite. Due to the nature of the project, the small number of parking spaces and expected insignificant car traffic on the property, it is expected that the content of suspended solids and petroleum hydrocarbons will not exceed acceptable standards.

In order to minimize the possibility of soil contamination by petroleum compounds, a bunded tank for fuel for the power unit (diesel oil) with anticorrosion protection of the external surface will be used. The tank will be equipped with a system of mechanical overfill sensors during tank filling and with a leak control system in the tank interlayer space. Moreover, the unit and the fuel tank will be shielded from weather impacts and seated on a sealed sump to prevent potential leakages to the environment, both in case of failure or refueling. The facility will be equipped with a sorbent, which in the event of a fuel spill during refueling will allow efficient removal of the spilled fuel. Moreover, it is planned to equip the radar station with fire extinguishers and fire sensors, as well as a video surveillance system and an alarm system against unauthorized access.

The subject project, in accordance with the Regulation of the Council of Ministers of 18 October 2016 on the Water Management Plan for the Pregola River Basin (Journal of Laws of 2016, item 1959), is located (for the most part) in the Pregola River Basin in the basin of a

groundwater body (GWB) with code: PLGW700020. The subject project in accordance with the Regulation of the Council of Ministers of 18 October 2016 on the Vistula River Basin Management Plan (Journal of Laws 2016, item 1911) is located (in smaller part) in the Vistula River Basin in the drainage basin of a groundwater body (GWB) with code: PLGW200031. In accordance with article 59 of the Water Law Act, the environmental objective for the groundwater bodies is: to prevent or limit the input of pollutants into the groundwater bodies, to prevent deterioration and to improve their status and to protect them and undertake remedial actions as well as to ensure the balance between abstraction and recharge of these waters in order to achieve their good status. In accordance with the above regulations, the quantitative status and chemical status of the aforementioned GWB have been determined as good and the risk of failure to achieve the environmental objective as not threatened. The above-mentioned GWBs have been designated for water intake for the purpose of supplying the population with water intended for human consumption.

Moreover, the planned project in the investor's variant is located in the catchment areas of surface water bodies (SWB):

Dejna to the outflow from Lake Dejnowa with the code PLRW70002558482953 is a monitored, natural water body, the water status is assessed as good, and the status assessment shows that it is not threatened by the risk of not achieving the environmental objective,

LW30174 Kuc Lake is a monitored, natural water body, its condition is assessed as good and the condition assessment shows that there is no risk of failure to meet the environmental objective.

In accordance with Article 56 of the Water Law Act, the environmental objective for surface water bodies not designated as artificial or heavily modified is to protect and improve their ecological status and chemical status so as to achieve at least good ecological status and good chemical status of surface waters, and to prevent deterioration of their ecological status and chemical status,

The planned project is located outside the areas of special flood hazard within the meaning of Art. 16 point 34 of the Water Law Act, outside the protected areas listed in Art. 16 point 32 letter b, e of the Water Law Act. In the area of the project and its closest vicinity no wetlands, protection zones of water intakes and protection areas of inland water reservoirs were found.

Taking into account the above, after analyzing the application in terms of the requirements for the protection of the soil and water environment and with the implementation of the environmental protection solutions specified in the sentence, concerning, among others, proper organization of the construction site, disposal of domestic sewage, as well as taking care of the technical condition of construction machinery and equipment, the planned project should not pose a threat to the achievement of environmental objectives referred to in Article 56, Article 57, Article 59 and Article 61 of the Act of 20 July 2017. Water Law.

During the operation of the project waste will be generated in the process of maintenance and repair of the installation equipment. These will be waste from group 13 (mineral engine, gear and lubricating oils not containing halogenated organics), group 15 (packaging waste; sorbents, wiping cloths, filter materials and protective clothing not included in other groups) and group 16 (waste electrical and electronic equipment, batteries and accumulators), according to the Regulation of the Minister of Climate of 2 January 2020 on waste catalog (Journal of Laws of 2020, item 10). They will be selectively collected by the company performing maintenance and repairs, without storage on the station premises, and will then be transferred to authorized entities. Radar is an unmanned installation, therefore no municipal waste generated by the employees is expected.

The planned project will be carried out within the boundaries of the Natura 2000 area Mazurska Ostoja Żółwia Baranowo PL1-1280055. For the aforementioned area, a plan of protection tasks has been established by the order of the Regional Director for Environmental Protection in Olsztyn of 20 March 2015 on the establishment of a plan of protection tasks for the Natura 2000 area Mazurska Ostoja Żółwia Baranowo PL1-1280055 (Journal of Laws of the Warm.-Maz. Province of 2015, item 1038). In addition, the plot of land no. 330/3 is located in the Protected Landscape Area of Legińsko Mrągowskie Lakes, in relation to which the binding legal act is the Resolution No. XXXIII/727/17 of the Sejmik of the Warmińsko-Mazurskie Voivodeship

of 28 December 2017 on the Protected Landscape Area of the Legińsko-Magowskie Lakes (Journal of Laws of the Warm.-Maz. Province of 2018, item 415), As indicated in § 5 (1) (2) of the aforementioned resolution, in the area of the protected landscape area the implementation of projects which may have a significant impact on the environment within the meaning of the provisions of the EIA Act is prohibited, which includes the planned investment. However, pursuant to § 5 Section 3 Clause 1 of the said resolution, the ban does not apply to the execution of projects likely to have a significant impact on the environment, for which the conducted environmental impact assessment showed that there was no negative impact on nature conservation and landscape protection of the protected landscape area. The area of the planned project is located outside the areas of ecological corridors.

According to the plan of protection tasks for the aforementioned Natura 2000 site, no protection activities were established on the plot of land 330/3, no natural habitats occurring in the area were identified, and no key areas for the protection of the European pond turtle nesting grounds were located in the area. According to the report, the project area is located 1.5 km from the nearest permanent and well-documented site of the European pond turtle. There are floodplains within 500 m and approximately 800 m of the proposed project area that may provide habitat for pond turtles. These floodplains are in close proximity to other highly favorable habitats for the pond turtle, which form a natural corridor that connects to the permanent pond turtle habitat, Zawady Ecological Land. Therefore, it is very likely that these floodplains may be used by pond turtles. During construction, the project will have a very limited impact on habitat important to pond turtles (the site will be developed over an area of approximately 0.03 ha); therefore, the project during construction will have no impact on the local population of pond turtles. The possible impact concerns transportation of equipment and materials for the construction of the radar station.

The location of the plot, as well as the land characteristics described in the report and the way it is managed prove that it is not a habitat suitable for the occurrence of species listed as protected objects of the Natura 2000 area Mazurska Ostoja Żółwia Baranowo PLI-1280055.

There are no woody or shrubby vegetation within the project area that could provide habitat for birds. However, the described area may be a temporary and incidental resting/feeding site for birds. However, the possibility of birds nesting on the area in question cannot be ruled out. Therefore, in order to completely eliminate the possibility of negative impact of the investment on birds, the works should be commenced outside the breeding season from March to August.

Taking into account the nature of the investment, the type of habitats to be occupied, the type of land use in the vicinity of the investment (availability of suitable foraging habitats) and taking into account the minimizing measures mentioned in the operative part of this decision, it should be concluded that the execution of the investment will not have a significant negative impact on the local and national ornithofauna.

Due to its height (38.35 m) the radar will be well visible from a distance (several dozen - several hundred meters). Location of the radar on a high hill will also allow the object to be seen from further away (several kilometers). In order to minimize the impact of the facility on the landscape, the investor envisages that the radar tower will be appropriately painted to blend in with the landscape and at the same time reduce the potential risk of birds colliding with such a tall object. It is envisaged that the execution of the project, despite the fact that it will affect the landscape, will constitute its integral part and apart from the meteorological function, and thus the warning function, it will blend into the landscape of the area.

Due to the scale, nature and location of the planned project (140 km from the eastern border, 52 km from the northern border, 471 km from the western border, 492 km from the southern border) as well as the potential impacts that may occur at the stage of construction and operation, the possibility of transboundary impacts is not anticipated.

The project area is not used or anticipated to be used as a mineral deposit.

In the area of project location and its immediate surroundings there are no objects listed in the register of immovable monuments. The planned Project will not be located within a conservation protection zone, and there are no areas or objects of significant cultural value in its immediate vicinity. Due to the distance of the Project from the nearest cultural and architectural assets, the planned investment will not have a negative impact on this element of the environment during its operating period. The project may affect this element of the environment only through

increased motor vehicle traffic during the construction phase, but this will be a short-term, negligible impact.

A small scope of works during the implementation of the project, contained within the area to which the investor will have legal title will ensure that the project will not have a negative impact on third party property.

The project is a long-term investment, serving the society, therefore at this stage its decommissioning is not planned. In case of necessity of the project decommissioning the impact of this phase on the environment will be analogous to the construction phase. The inconvenience will be short-lived, of a small scale and will cease upon completion of the decommissioning works. The project area will be restored to its present state, i.e. designated for agricultural use.

Due to the fact that the available information on the project allows to sufficiently assess its impact on the environment, that the implementation of the investment will not cause negative effects on Natura 2000 areas and other forms of nature protection, and that there is no risk of cumulative impacts, the Regional Director for Environmental Protection in Olsztyn stated that the implementation of the project does not require a repeat of the environmental impact assessment. Nevertheless, pursuant to Art. 88 (1) of the Act, if the architectural and construction administration authority recognizes that in the application for the issuance of the construction permit changes were made in relation to the requirements set out in the decision on environmental conditions, it may declare the necessity to assess the environmental impact of the project and impose on the investor the obligation to prepare a report, at the same time specifying its scope.

The analysis of the impact of the planned project on the environment in terms of emission of electromagnetic fields, air pollution, noise, water and sewage management, waste management and impact on the natural environment shows that the execution of the project should not have a negative impact on the environment, provided that the protective devices are properly installed and the conditions for the project specified in this decision are duly fulfilled.

In view of the above, the decision was issued as set forth in the ruling.

The parties may appeal against this decision to the General Director for Environmental Protection, through the Regional Director for Environmental Protection in Olsztyn, within 14 days after delivery of the decision.



REGIONALNY DYREKTOR
OCHRONY ŚRODOWISKA
w Olsztynie
Agata Moździerz

Receive:

1. Mr Marcin Walter, KLIMAS Przedsiębiorstwo Budowlano-Projektowe, 116 Zdunowska St., 63-700 Krotoszyn
2. Institute of Meteorology and Water Management - National Research Institute, 61 Podleśna St., 01-673 Warsaw
3. Mr Henryk Stachelek
4. Ms Urszula Stachelek
5. Mrs. Magdalena Gębka
6. the Commune of Mrągowo, ul. Królewiecka 60A, 11-700 Mrągowo
7. aa

For information:

1. The Warmia and Mazury State Regional Sanitary Inspector, ul. żołnierska 16, 10-561 Olsztyn
2. State Water Management Company Polish Waterways National Regional Water Management Board in Białystok, ul. J. K. Branickiego 17A, 15-085 Białystok

Pursuant to part I item 45 and part IV of the Annex to the Act on Stamp Duty of 16 November 2006 (Journal of Laws of 2021, item 1923 as amended), the applicant paid stamp duty in the amount of PLN 222.0 (including PLN 20.5 for the decision on environmental conditions and PLN 17 for a power of attorney).