Appendix 2.1 – technical description

The tenderer must fill in the two columns on the right, it is not allowed to delete the cells.

Requirement Nr	Requirement description	Does the offer meet the requirement? YES/NO	Reference to the documentation of the offered product, on the basis of which the fulfillment of the requirement can be verified
1.	Non penetrating rooftop mast. Mast type – floating pipe mast, i.e. pipe mast with installed equipment can be installed without being attached to the roof.		
2.	A drawing must be prepared for the pipe mast with the necessary strength calculations for the structure.		
3.	Wind load calculations must be made in accordance with the EVS-EN 1991-1-4 standard and taking into account the maximum weight and dimensions of the equipments. Weight of equipment set: at least 235 kg Wind surface of the equipment set: at least 2m2 Height of the center of gravity of the equipment set from the roof: up to 4 m Wind speed: 21m/s Building height: up to 30m		
4.	The dimensions of the vertical pipe for installing the equipment are 88.9 mm, the wall thickness is 3,6-4 mm.		
5.	The height of the pipe mast from the roof must be 4 - 6 m.		
6.	The upper part of the pipe mast for at least 2.5 m must be free for installation of equipment.		
7.	The vertical pipe must be vertical when installed. The possibility of adjustment must be provided to compensate for a roof slope of up to 10 degrees.		

8.	The mast installation area on the roof must be a maximum of 3100 x 3100mm. The proposed solution must fit within this dimension		
9.	To install the pipe mast on the roof, the set must include 4 base plates made of strong weatherproof plastic with dimensions from 1200x1200mm to 1300x1300mm. The base plate must be able to withstand a long-term load of at least 500 kg.		
10.	To ensure the stability of the entire installation, the set must include concrete blocks that can be placed in the corners of the structure as a counterweight. The total weight of the blocks must correspond to the wind load calculations. The weight of one block must be 25 - 30 kg		
11.	The fixing pipe must be made of hot-dip galvanized steel. Diagonal supports made of hot-dip galvanized steel or aluminum alloy 6063 The structure connecting the support points and supporting the vertical pipe can be made of hot-dip galvanized steel or aluminum alloy 6061, 6082		
12.	The construction of the support surface must consist of four support points, which must be located on the plane in such a way that the distance between the centers of adjacent support points is 2500-3100 mm (to ensure sufficient storm resistance).		
13.	The support points must be interconnected by means of a suitable metal structure in such a way that the main bearing load of the entire structure and the vertical pipe falls on the horizontal support beams.		
14.	It must be possible to attach diagonal supports to the support		

	points, which ensure that the vertical pipe stays on the roof without additional support tensioners (the goal is not to damage the roofing material in any way).		
15.	Pipe mast steel grade: S355J2 according to standard EN 10025-2.		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*
16.	The pipe material is produced in accordance with the standard EN 1090-2:2018		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*
17.	Construction welding quality class: C according to standard EN ISO 5817:2014		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*
18.	Shape tolerances of welded structures according to EN ISO 13920 class B and F		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*
19.	Hot-dip galvanizing of pipe mast and structure according to standard EN ISO 1461		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*
20.	Pipe mast and structure environmental class: C4 according to EN ISO 12944-2 standard, corrosion protection of products expected life is at least 20 years		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*
21.	Weld inspection method: 100% visual inspection (VT) according to EN ISO 17637		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*
22.	Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards		*Corresponding reports or certificates must be submitted regarding the fulfillment of the listed standards*