



Date: 16 April 2015

ITB/SEC/06/2015

**Supply and installation of geo-thermal equipment for greenhouse heating in Uzbekistan
Clarification Note 1**

The Organization for Security and Co-operation in Europe has received requests for clarification from potential bidders on Mon Mon 13/04/2015 09:14 with regard to Invitation to Bid No. ITB/SEC/06/2015. The OSCE would like to provide the following clarifications:

Q1: What is the planting method of the crops (vegetables) in the greenhouse:

a. The distance in between the beds.

a1: The distance between the beds is 40-50cm.

b. Is the growing methods using trellising system (handing the crops on ropes) or using the "Spanish" type trellising supports (lines of support beds side wires)?

b1: Traditional trellising system is used (crops are handed on ropes bound to wires installed on top across the greenhouse).

c. What is the length of the beds?

c1: The beds are laid alongside of the greenhouse, i.e. 54m.

d. The plants are planted in the natural soil or in soilless growing media?

d1: The plants are planted on natural soil.

e. Is there a central or side pathway for operational services?

e1: For operational services side pathways are envisaged.

Q2: What type of irrigation system is in use in the greenhouse?

A2: Drip irrigation system is planned to be installed.

Q3: Availability of the geothermal water?

a. Is it available on site? or it need to be found, drilled and pumped from the deep geothermal aquifer ? if need to drill – what is the expected depth for the required borehole ?

b. What is the temperature of the geothermal waters?

c. What is the characteristic of the geothermal water? (Please provide us with the comprehensive water test analysis).

d. In case the water is available – how far is the water source from the greenhouse?

A3: No geothermal water is planned to be used due to difficulties in accessibility to the ground waters, therefore only ground source based heating to be used.

Q4: According the technical compliance list & requirements - it seems that the system supposed to provide heat and cooling environment in the greenhouse (like air-conditioning system) is it so?

a. Can you provide us the weekly statistics for average day/night outside temperatures along the year with indication for extreme minimum / maximum cases?

b. Can you provide us the weekly statistics for average relative outside humidity day/night along the year?

a-b4: All the necessary data can be found at www.meteo.uz. Mean-time accidental peaks/lows should not be considered, as emergency heating system is envisaged in these cases.

c. Is it possible to introduce 2 independent systems – the "heating system" operating during the cold seasons and the "wet pad curtain" for reducing temperature during the hot seasons?

c4: Yes, it is possible.

Only for information purposes, the following pictures are also presented as part of this Request for Clarification:



This Clarification Note is dispatched simultaneously to all economic operators known to be interested and can be found at the same time uploaded under the relevant procurement notice on the OSCE's web-site at www.osce.org/procurement/tenders.

END