

TERMS OF REFERENCE

Supply of trays to phase-out methyl bromide in tobacco cultivation in Bosnia and Herzegovina

1. GENERAL INFORMATION

These terms of reference shall be used for the preparation of bids for the supply of the following items required to phase-out methyl bromide consumed by the tobacco sector in Bosnia and Herzegovina using the soil-less floating trays technology:

- X Seventy thousand (70,000) expanded polystyrene trays for the production of seedlings by the floating tray system, to be delivered to one place in Bosnia and Herzegovina according to the specifications described later.

Suppliers shall deliver DDU to the places described later. The Government of Bosnia and Herzegovina will authorize a free customs clearance.

Please quote separately trays and transportation cost, DDU Orasje, Bosnia and Herzegovina.

2. THE PROJECT

The tobacco grown in Bosnia and Herzegovina is Virginia, Burley and Semi- Oriental variety. Tobacco is cultivated on 2,909 ha with average production of 5,482 tons in total.

The production of Semi - oriental type of tobacco is completely located in Herzegovina, due to the specific climatic advantages for production of this type.

The project aims at phasing out 19.6 tons of methyl bromide equivalent to 11.79 ODP tons (8.25 tons in tobacco sector, 8.4 tons in vegetable production and 3.0 tons in flower production, equivalent to 4.9, 5.0 and 1.8 respectively). In tobacco, this will imply the elimination of more than 60% of the total amount of methyl bromide used in Bosnia and Herzegovina by introducing the Floating Tray System production of seedlings. The remaining 40%, used in vegetable and production, will be eliminated with the application of biofumigation and solarization technology.

3. SCOPE OF SUPPLY

For the purpose of implementing the phase-out project, the Contractor shall supply to the Ozone Office site described later, the following:

Seventy thousand (70,000) expanded polystyrene trays according to the following specifications:

- a) Material: non-recycled expanded polystyrene. (EPS)
- b) Long: Minimum 500 ± 2 mm. Maximum 530 ± 2 mm. **(ISO 1923-1981)**
- c) Wide: Minimum 300 ± 1.5 mm Maximum 325 ± 1.5 mm. **(ISO 1923-1981)**
- d) High: Minimum 55 ± 1 mm. Maximum 65 ± 1 mm. **(ISO 1923-1981)**
- e) Number of cells per tray: Minimum 200, Maximum 228

- f) Number of cells/m²: Minimum 1,200, Maximum 1,400
- g) Shape of the cells: inverted pyramid or conic.
- h) Cells volume: Minimum 20.0 ± 1 cm³
- i) Apparent density of each piece: 32 ± 5 % grams/liter (**ISO 845-1988**)
- j) Water absorption as per **ISO 2896-1987**: less than 3% by volume in 28 days
- k) Force at 20 mm deflection as per **ISO 1209-1:1990**: not less than 200 Newton¹

4. DELIVERY SCHEDULE AND DELIVERY SITES

The contractor shall deliver the by 15 December 2004,

To the following Address:

“Bosanac”- preduzece za proizvodnju i preradu duhana

Orasje, Bosnia and Herzegovina

Phone: 387 31 712 104; 712 564;

Fax: 387 31 712 164

5. PACKAGING

The contractor should deliver the trays in packages containing the number that the supplier consider convenient for the shipment and wrapped with plastic.

6. CONTRACTOR’S GENERAL RESPONSIBILITIES

6.1 The contractor shall assume overall responsibility for the quality and timeless supply of the equipment and services related to this contract.

6.2 The contractor shall arrange for transportation and insurance of the materials and bear all costs risks thereof

6.3 The contractor shall be responsible for applying best international procedures, including safety aspects in the equipment supplied

6.4 The contractor is responsible for securing that all equipment supplied is new.

6.5 The contractor shall be responsible for the control of all the work, services and supplies that might be executed by local subcontractors.

6.6 The contractor shall be responsible for the quality and completeness of its technical services.

7. CONTRACTOR QUALIFICATIONS

7.1 The contractor shall be a manufacturer of the equipment having its own production facilities and the necessary technical personnel. The contractor shall include in the bid documentary evidence of the above.

¹ Test specimen shall be a standard tray with 500 mm distance between support edges

7.2 The contractor shall have proven experience in manufacturing expanded polystyrene trays for the production of seedlings using the floating tray system. Experience in the manufacture of trays for the production of tobacco seedlings, will be an asset.

7.3 The contractor shall include a list of its production equipment and prove its capabilities to accomplish the delivery plan

8. TERMS OF GUARANTEES

The contractor shall guarantee the quality and completeness of its work, equipment, supplies and its compliance with the specifications described in paragraph 3 above.

UNIDO will keep the right to carryout quality tests. In case of non-compliance with the aforementioned specifications, UNIDO will stop the payments and return the trays to the supplier at its own expenses

9. COMPLEMENTARY INFORMATION REQUIRED

The contractor shall include in the bidding documentation the **original documents** of the results and protocol of bending tests carried-out as per ISO 1209-1:1990 (Newton) using as test specimen two trays of the dimensions specified in the offer.

The contractor shall include in the bidding documentation the **original documents** of the results and protocol of the compressive tests at 10% relative deformation as per ISO 844-1978 (kPa) using as test specimen a prism of 100mm x 100mm x 25mm having a minimum density of 33 ± 5 % grams/liter.

Both tests shall be carried-out by a Local or International State Institution. UNIDO reserves the right to withdraw any proposal with incomplete documentation and/or documentation originated from unknown institutions.

10. LANGUAGE OF THE PROPOSALS

All proposals shall be written in English.