AMENDMENT NO. 2

Date: 19/02/2021

Subject: Amendment No:2 to Invitation to Bid (ITB) for “Turnkey Supply and Installation of Wind Turbines” within the scope of “Increasing Employability for Syrians and Turkish Host Community Members in the Renewable Energy Sector” issued on 08 February 2021

Ref: UNDP-TUR-ITB(KR)-2021/02

Dear Madam/Sir,

Please find ATTACHMENT-1 Important Notes Regarding the Submission of Bids, ATTACHMENT-2 for the “Answers to Questions from Prospective Bidders”, ATTACHMENT-3 for “The revisions made to the ITB Clauses” and ATTACHMENT-4 “Amended Version of Form E: Format of Technical Bid - SECTION 2: Scope of Supply, Technical Specifications, and Related Services” within the context of subject ITB issued on 08 February 2021 for “Turnkey Supply and Installation of Wind Turbines” within the scope of “Increasing Employability for Syrians and Turkish Host Community Members in the Renewable Energy Sector”.

You are kindly requested to prepare and submit your bids in response to our subject ITB with consideration of this amendment whereas all other clauses of the ITB remaining valid.

Please make sure that you submit your bid via eTendering System latest by March 02, 2021 07:00 a.m. – (New York local time Zone).

ATTACHMENT-1 “Important Notes Regarding the Submission of Bids”

ATTACHMENT-2 “Answers to Questions from Prospective Bidders”

ATTACHMENT-3 “The revisions made to the ITB Clauses”

ATTACHMENT-4 “Amended Versions of Form E: Format of Technical Bid - SECTION 2: Scope of Supply, Technical Specifications, and Related Services”

Yours sincerely,

UNDP Turkey Country Office
ATTACHMENT-1 IMPORTANT NOTES REGARDING THE SUBMISSION OF BIDS

Bidders shall disregard the previous version of “Form E: Format of Technical Bid - SECTION 2: Scope of Supply, Technical Specifications, and Related Services” given in the Original ITB and prepare their bids as per the “Amended Version of Form E: Format of Technical Bid - SECTION 2: Scope of Supply, Technical Specifications, and Related Services” given as Attachment-4 in this Amendment. The bidders are also advised to take into consideration the amended version of Returnable Bid Forms published when preparing their bids.
ATTACHMENT-2 ANSWERS TO QUESTIONS FROM PROSPECTIVE BIDDERS

**Question 1:** Regarding the Overspeed and Storm Protection feature, is only active pitch control mechanism suitable or any other mechanism would be suitable as well?

**Answer 1:** As clearly defined in Article 1.8 of Section 5a: Schedule of Requirements and Technical Specifications of the ITB, overspeed and storm protection shall be provided by means of active pitch control. Any other mechanism shall **not** be accepted.

**Question 2:** Within the scope of this ITB, is only the supply of the turbines requested or the whole system (including inverter, controller, battery, tower, etc.) is expected to be supplied?

**Answer 2:** The wind turbines will be used for educational purposes in Vocational Schools in each location. The bidders are expected to turnkey supply and install the Wind Turbines including all the accessories for the proper functioning of the whole system. The bidders shall submit their bids including their own configuration for capacity of the complementary items (i.e., with or without inverter, battery charger, regulator, resistance, etc.) based on capacity of the wind turbines to be offered as a compatible system, provided that they meet the requirements defined in the Section 5a: Schedule of Requirements and Technical Specifications of the ITB. As clearly defined in FORM F: Price Schedule Form of the ITB, the bidders shall include all types of costs to be incurred until turnkey delivery of the turbines at locations stipulated in the ITB in their bid prices (including but not limited to the terms and conditions defined in Section 5b: Other Related Requirements). No additional payment over and above the bid price of the successful bidder shall be made and Bidders are advised to carefully review the terms and conditions of the ITB. Please also refer to ATTACHMENT-3 “The revisions made to the ITB Clauses” and ATTACHMENT-4 “Amended Version of Form E: Format of Technical Bid - SECTION 2: Scope of Supply, Technical Specifications, and Related Services.”
ATTACHMENT-3 REVISIONS MADE TO THE ITB CLAUSES

With reference to Section 5a: Schedule of Requirements and Technical Specifications, and Form E: Format of Technical Bid under Section 6: Returnable Bidding Forms / Checklist; below clauses have been amended as follows:

<table>
<thead>
<tr>
<th>Clause Nr.</th>
<th>Clause in the Original ITB</th>
<th>Revised Clause</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Section 5a: Schedule of Requirements and Technical Specifications” (pg.26) and “Section 6: Returnable Bidding Forms / Checklist, Form E: Format of Technical Bid, Section 2” (pg.38)</td>
<td>1.6 Power Control: Remote, Web and/or smart phone application, PLC and/or Scada</td>
<td>Güç Kontrolü: Uzaktan, web ve/veya akıllı telefon uygulaması, PLC ve/veya Scada or equal</td>
</tr>
<tr>
<td>“Section 5a: Schedule of Requirements and Technical Specifications” (pg.27) and “Section 6: Returnable Bidding Forms / Checklist, Form E: Format of Technical Bid, Section 2” (pg.39)</td>
<td>New clause inserted: 1.20 Installed system shall include and be able to charge four (4) gel type batteries with 12V nominal voltage and 200 Ah capacity.</td>
<td>Kurulu sistem 12V nominal voltaja ve 200 Ah kapasiteye sahip dört (4) adet akü içermeli ve bu aküleri şarj edebilmelidir.</td>
</tr>
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<td>“Section 5a: Schedule of Requirements and Technical Specifications” (pg.27) and “Section 6: Returnable Bidding Forms / Checklist, Form E: Format of Technical Bid, Section 2” (pg.39)</td>
<td>New clause inserted: 1.21 A basic drawing of offered system configuration indicating nominal capacity, nominal voltage and nominal current values of each item used in the system configuration shall be submitted with the bid.</td>
<td>Teklif edilen sistem konfigürasyonuna ait basit çizim ve konfigürasyonda kullanılan kalemlere ait nominal güç, nominal gerilim ve nominal akım değerleri teklifle birlikte sunulmalıdır.</td>
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<td>“Section 5a: Schedule of Requirements and Technical Specifications” (pg.27) and “Section 6: Returnable Bidding Forms / Checklist, Form E: Format of Technical Bid, Section 2” (pg.39)</td>
<td>New clause inserted: 1.22 The wind turbines with all accessories as a system will be used for educational purposes in Vocational Schools in each location. Delivery, configuration, installation and commissioning of the wind turbines as a system with all accessories (including but not limited to inverters, batteries, controllers, towers, etc.) shall be</td>
<td></td>
</tr>
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provided on a turnkey basis in line with the requirements defined in technical specifications and the Contractor shall not charge additional fees for the materials such as cables, fasteners, bolts, welding etc. or for accessories/materials which are not specified in the technical specifications. System components and whole system must be compatible with each other.

Rüzgar türbinleri tüm aksesuarları ile bir sistem olarak her bir lokasyondaki Meslek Yüksekokullarında eğitim amaçlı kullanılacaktır. Rüzgar türbinlerinin tüm aksesuarları (inverterlar, bataryalar, kontrolörler, kuleler vb. dahil ancak bunlarla sınırlı olmamak üzere) bir sistem olarak temini, konfigürasyonu montaja ve hizmete alımı teknik şartnamede belirtilen şartlara uygun anahtar teslimi olarak tamamlanacak ve Yüklenici kablo, bağlantı elemanı, civata, kaynak vb malzemeler ile teknik şartnamede belirtilmeyen aksesuarlar/malzemeler için ek ücret talep etmeyecektir. Sistem bileşenleri ve tüm sistem birbiriyle uyumlu olmalıdır.
SECTION 2: Scope of Supply, Technical Specifications, and Related Services

This section should demonstrate the Bidder’s responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed; and demonstrating how the proposed bid meets or exceeds the requirements/specifications. All important aspects should be addressed in sufficient detail.

Bidders shall fill out below table in English by indicating the Brand Name and Model number of the products offered as well as the specifications of the offered products corresponding to the specifications listed in below table. If the offered product does not meet any of below minimum technical specifications, it will not be considered to be compliant and the offer will be disqualified. Please ensure that the offered product meets the minimum specifications requested below.

<table>
<thead>
<tr>
<th>#</th>
<th>Description/Specifications of the item to be supplied</th>
<th>Your Offer (Please confirm conformance with the required technical specifications and indicate if there is any deviation from the required technical specifications)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Wind Turbine (Quantity:5)</td>
<td>Indicate Brand Name and Model Number:</td>
</tr>
</tbody>
</table>
| 1.1 | Type: Horizontal  
**Tip:** Yatay | |
| 1.2 | Rated Output: minimum 3000 Watt  
**Nominal Çıkış:** en az 3000 watt | |
| 1.3 | Peak Output: maximum 5500 Watt  
**En yüksek çıkış:** en çok 5500 Watt | |
| 1.4 | Number of Blades: minimum 3  
**Kanat Sayısı:** en az 3 | |
| 1.5 | Voltage: 48 VDC /400 VAC  
**Voltaj:** 48 VDC /400 V AC | |
| 1.6 | Power Control: Remote, Web and/or smart phone application, PLC and/or Scada or equal  
*Güç Kontrolü: Uzaktan, web ve/veya akıllı telefon uygulaması, PLC ve/veya Scada veya eşit* |
| 1.7 | Nacelle: Yes  
*Nasel: Evet* |
| 1.8 | Overspeed and Storm Protection: Active pitch control  
*Aşırı Devir ve Fırtına Koruma: Aktif kanat açı kontrolü* |
| 1.9 | Application: On-grid, off-grid, hybrid and energy storage (battery charging)  
*Uygulama: Şebekeye bağlı, şebekeye bağlı olmayan, hibrit ve enerji depolama (akü şarj etme)* |
| 1.10 | Survival Speed: minimum 30 m/s  
*Dayanma Rüzgar Hızı: en az 30 m/s* |
| 1.11 | Start-up Speed: maximum 3 m/s  
*Başlangıç Rüzgar Hızı: en çok 3 m/s* |
| 1.12 | Tower: Foldable  
*Kule: Katlanır* |
| 1.13 | Tower Height: minimum 9 m  
*Kule Yüksekliği: en az 9 m* |
| 1.14 | Shall have one of the IEC 61400-2 or EN 61400-2 test certificates. A copy of the IEC 61400-2 or EN 61400-2 certificate shall be submitted within the quotation.  
*IEC 61400-2 veya EN 61400-2 test sertifikalarından birine sahip olmalıdır. IEC 61400-2 veya EN 61400-2 test sertifikasının kopyası teklif içerisinde sunulacaktır.* |
| 1.15 | Installation/configuration of the base of turbines (including excavation and construction works): Yes  

_Türbinlerin tabanlarının kurulumu/montajı (kazı ve inşaat işleri dahil): Evet_ |
| 1.16 | Site visits to the each delivery location shall be organized by the contractor within 10 business days following the contract signature date. One representative of the contractor shall attend all site visits. Construction plan for the base of the wind turbines and technical drawings of the offered product shall be submitted to UNDP within 10 business days after contract signature date. Technical drawings shall also include a sample single line diagram for hybrid, on grid and off grid applications of the offered product. The technical drawings and construction plans shall be subject to UNDP approval.  

_Sözleşme imza tarihinden itibaren 10 iş günü içerisinde yüklenici tarafından saha ziyareti organize edilecektir. Yüklenicinin bir temsilcisi tüm saha ziyaretlerine katılacaktır. Rüzgar türbinlerinin temellerine ait inşaat planları ve teklif edilen ürünün teknik çizimleri sözleşme imza tarihinden itibaren 10 iş günü içerisinde UNDP’ye teslim edilecektir. Teknik çizimler teklif edilen ürünün hibrid, on grid ve off grid uygulamalarına yönelik örnek tek şemalarını da içerecektir. Teknik çizimler ve inşaat planları UNDP onayına tabidir._ |
| 1.17 | User Training: 12 hours training following completion of delivery  

_Kullanıcı Eğitimi: Kurulum tamamlandıtından sonra 12 saat eğitim_ |
| 1.18 | Warranty: Minimum 5 years of valid manufacturer/importer company |
guarantee. Signed and stamped guarantee certificate shall be submitted at delivery.

*Garanti: Minimum 5 yıl üretici/ithalatçı firma garantisi olacaktır. İmzalı ve kaşeli garanti sertifikası teslimatta verilecektir.*

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<th>1.19</th>
<th>Application and User Manual: Yes</th>
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<td></td>
<td><em>Uygulama ve Kullanıcı Kılavuzu: Evet</em></td>
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Product catalogue/brochure of the proposed brand/model showing detailed technical specifications of the goods and a copy of the IEC 61400-2 or EN 61400-2 certificate should be submitted.

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<th>Other Related services and requirements (based on the information provided in Section 5b)</th>
<th>Compliance with requirements</th>
<th>Details or comments on the related requirements</th>
</tr>
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<tr>
<td>Turnkey Delivery and installation of each turbine in each location within 110 days following the signature of the contract</td>
<td>Yes, we comply</td>
<td></td>
</tr>
<tr>
<td>Guarantee (min. 5 years)</td>
<td>No, we cannot comply (indicate discrepancies)</td>
<td></td>
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<tr>
<td>Training following installation</td>
<td></td>
<td></td>
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