National Aeronautics and
Space Administration

John H. Glenn Research Center
Lewis Field
Cleveland, OH 44135-3191

November 28, 2012

Reply to Attn of: CHB

MEMORANDUM FOR RECORD

FROM: CHB/Contracting Officer, Procurement Division

SUBJECT: Source Selection Statement (SSS) for Solicitation NNC12ZDP001Q, Ka-Band Indoor Frequency Converters

Procurement History

This procurement will establish a firm-fixed price, commercial contract for Ka-band indoor frequency converters. The contract will consist of one basic effort and no option efforts.

The combination synopsis/solicitation for this procurement was issued through the NASA Acquisition Internet Service on 9/21/2012 as a Request for Quote (RFQ). Market research indicated that this procurement was suitable as a 100% Small Business Set-Aside, and so NASA created the RFQ as a 100% small business set-aside. In addition, market research, along with the nature of the item, indicated that this procurement was suitable as a commercial purchase, and therefore commercial terms and conditions were used. During the RFQ phase, 2 Amendments were released. Amendment 1 increased the amount of time for both question and quote submittal. Amendment 2 responded to various questions submitted by interested potential offerors.

Four offers were received on time by 10/03/2012. The four offers were submitted by the following organizations:

1) Miteq, Inc. (Miteq)
2) SenarioTek LLC (SenarioTek)
3) QuinStar Technology, Inc. (QuinStar)
4) Mu-Del Electronics, Inc. (Mu-Del)

The evaluation team concluded its evaluation of offers on 11/02/2012 in accordance with the 'Best Value' features set forth in the RFQ. The details of these evaluations are summarized below.

Findings

Companies are listed below in order of lowest price to highest price, which is the order they were evaluated in. Of these, Mu-Del submitted the lowest price followed by Miteq. The offer from QuinStar was the third highest offer with SenarioTek being the highest.

The RFQ stated that the Government will award a contract whose offer conforming to the solicitation will be most advantageous to the Government, price and other factors considered. This means award will be conducted on a BEST VALUE basis. In considering the value to the Government, the following factors were used to evaluate offers:

1) Price/Cost – The ability of the offeror to provide a fair and reasonable price.

2) Technical Merit – The ability of the offeror to successfully meet all specifications in Section 3 of the Solicitation.

3) Past Performance – The ability of the offeror to show their relative past performance, preferably 5 years or more, in manufacturing similar Ka-band indoor frequency converters. This past performance should include a history of manufacturing multiple converters for multiple professional organizations.

4) Better Value features –These following features are considered 'better value features' and are features that go above and beyond what the Government is minimally asking for. These better value features are in no particular order of importance and are all of equal value. Offerors who did *not* provide these better value features were *not* rated negatively for failing to provide them. However, offerors who *do* meet or exceed the better value features had the potential to be rated more favorably than those who do not:

    a. **Total Rack Height**: The lower the total height of one up/down converter is more desirable.

    b. **Delivery**: The ability of the offeror to deliver before 150-days ARO is more desirable.

    c. **Tuning Step Size**: The ability of the product to adjust the Ka-band center frequency with a smaller step size than 1-MHz is more desirable.

    d. **Warranty**: The ability to provide a warranty longer than 1-year is more desirable

    e. **Spurious Signals**: The ability of the product to minimize spurious signals and for any spurious signals be much lower in amplitude than -60 dBc is more desirable.

    f. **Amplitude Flatness Upconverter**: A smaller amplitude ripple than ±0.5 dB over ±25-MHz is more desirable.

g. **Amplitude Flatness Downconverter**: A smaller amplitude ripple than ±1 dB over any 650-MHz is more desirable.

Technical and past performance ratings, when combined, are EQUAL to price.

Past performance was evaluated by NASA evaluators considering past-performance information supplied by offerors which showed their relative past performance, preferably 5 years or more, in manufacturing similar Ka-band indoor frequency converters. In addition, any documented first-hand experience NASA has had with individual offerors relating to the above criteria was taken into account.

Mu-Del

The Mu-Del offer is the lowest-priced offer received in response to this solicitation.

Mu-Del Electronics has offered a combined up/down converter. The offer fully meets all of the minimum technical specifications.

Mu-Del addressed and met 2 of the 7 better value features; which include total rack height and warranty (2 years).

Regarding past performance, NASA evaluators have recent first-hand experience with Mu-Del Ka-band up and down converters procured under a previous NASA contract, and these converters did not perform to specifications and suffered from multiple internal local oscillator failures (six of eight local oscillators failed in two converters). Therefore NASA evaluators gave Mu-Del an unsatisfactory rating.

Miteq

The Miteq offer is the second highest priced offer received in response to this solicitation. Its price was moderately higher than Mu-Del's.

The Miteq quote fully meets all of the minimum technical specifications. In addition to fully meeting all of the minimum technical specifications, the offer significantly exceeds minimum technical specifications in several areas, including: gain control, resolution in frequency control, frequency stability, wider operational temperature range, and better rejection of spurious signals.

Miteq addressed and met 3 of the 7 better value features; which include total rack height, tuning step size and warranty (3 years).

Miteq's past performance was rated satisfactory. NASA has first-hand experience with Miteq converters, and all experiences were satisfactory or above.

QuinStar

The QuinStar offer is the third highest priced offer received in response to this solicitation. Its price was moderately higher than Miteq's.

The QuinStar quote fully meets all of the minimum technical specifications.

QuinStar addressed and met 2 of the 7 better value features; which include total rack height and warranty (2 years).

QuinStar's past performance was rated satisfactory.

SenarioTek

The SenarioTek offer is the highest priced offer received in response to this solicitation and was significantly higher than QuinStar's.

The SenarioTek offer *does not meet* all technical specifications. Specifically, its offer does not meet the group delay specification.

Because of both the relatively high price and the evidence from its offer that they could not meet all minimum technical specifications, SenarioTek's offer was not further evaluated for better value features or past performance. NASA cannot justify award to a higher priced offeror, which does not meet the minimum technical specifications, all while there are two lower priced offerors, with satisfactory past performance, that meet or even exceed minimum technical specifications. Even if SenarioTek were to provide all 7 better value features and have satisfactory past performance, its inability to meet all minimum technical specifications coupled with its relatively high price would disqualify it from being the best value to the Government.

Source Selection Decision

The Contracting Officer/Source Selection Authority Jeffrey Hoyt was fully briefed on the results of the evaluations by the technical evaluation team.

Based on the information presented, I fully understand the evaluation process and the findings of the evaluation team.

As cost was equal in weight to both technical ability and past performance combined, the price of the converters was a sizeable aspect of overall ratings. Mu-Del was the lowest priced offeror. However, their past-performance was rated unsatisfactory by NASA. Miteq, the next lowest priced offer, fully met all technical specifications, exceeded several of them, in addition to having a satisfactory past-performance rating. QuinStar was the next lowest priced offer, met all minimum technical specifications while also having satisfactory past performance. Finally, SenarioTek's offer was significantly higher than the other 3 offers while not meeting all technical specifications. Even if the offer were to rate exceptionally high in both technical and

past performance, the 50% weighting of the cost evaluation factor would bring their overall rating down to an unsatisfactory level.

In the area of Technical Merit, Mu-Del fully met all of the minimum technical specifications; however there was no evidence to show that they exceeded any of them. Miteq also met all of the minimum specifications, and even exceeded the minimum specifications in areas such as gain control, resolution in frequency control and stability, and presented a significantly wider operational temperature range. QuinStar also fully met the minimum technical specifications; however there was no evidence to show that they exceeded any of them. Senariotek did not meet the group delay minimum technical specifications.

In the area of Better Value features, I reiterate from the RFQ that while no offeror could be penalized if they failed to offer these features, offerors meeting any of these could be rated higher for doing so. Mu-Del and QuinStar both met 2 of the 7 better value features, whereas Miteq met 3 of the 7 better value features. One feature that these three offerors had in common is that they all provided an extended warranty. Mu-Del and QuinStar both offered a 2-year warranty, whereas Miteq offered a 3-year warranty.

In the area of Past Performance, I note that both QuinStar and Miteq have satisfactory past performance and that Mu-Del had unsatisfactory past performance. Specifically, NASA GRC evaluators have had actual hands-on experience with Miteq Ka-band up and down converters under a previous NASA contract, and these converters performed to specifications. Also, NASA evaluators have first-hand experience with Mu-Del Ka-band up and down converters under a previous NASA contract, and these converters did not perform to specifications.

Decision

While Mu-Del was the lowest priced offeror overall, Miteq is the lowest priced offeror that fully meets all of the minimum technical specifications *and* significantly exceeds the minimum specifications in many areas. In addition, the offer has also exceeded the other offers in several of the Better Value features, being the offerer who met and addressed the most features overall, especially with an extended warranty period of 3 years. Plus, NASA has had positive past-performance experiences for similar items with Miteq as opposed to unsatisfactory past performance with Mu-Del for similar items, and is the lowest priced offer with a satisfactory past performance rating. The estimated benefit to NASA in choosing an offeror with high technical ratings, satisfactory past performance and the most-offered better value features significantly exceeds any benefit NASA would obtain by choosing the lowest-priced offeror. Therefore, I hereby select Miteq, Inc. to perform the contract requirements as stated in the RFQ and subsequent Amendments for $157,980.00.

Jeffrey Hoyt

Jeffrey Hoyt
Contracting Officer and Source Selection Official