1. TRD for COTS Products Purchases

To: AFTC/PZIOA, Eglin AFB, FL
For: USAF/350SWW 16EWS MATLAB Licenses and Toolboxes

2. Purpose

The 16th Electronic Warfare Squadron (16 EWS/SWB) Reprograming Center (RC) has a critical need for the following software products to satisfy its mission requirements. Specific software and associated toolboxes facilitate tailoring of Mission Data Files (MDF) to specific Areas of Responsibility (AOR) and airframes by enabling the RC to test, analyze, correct, and improve products prior to laboratory or flight testing and subsequent operational fielding. The cost savings to perform this verification/validation process via software simulation without tying up precious hardware in the loop (HITL) laboratory or flight test resources is substantial. Where HITL resources do not exist, this process saves funds by ensuring verified/validated MDFs taken to a contractor facility are ready to test upon arrival.

3. Software Specifications

- Allows numerical operations like linear algebra, statistics, Fourier transforms, and differential equations.
- Optimized software for matrix manipulations, which is crucial in scientific, radio frequency and engineering computations.
- Tools for importing, cleaning, analyzing, and visualizing large datasets.
- Customizable 2D and 3D plots, graphics, and charts for data interpretation and communication.
- An interactive environment with rich language features to facilitate rapid algorithm prototyping and development.
- A user interface that can implement, test, and refine algorithms iteratively.
- Graphical environment for model-based design and simulation that allows users to model and simulate complex systems and generate code for deployment.
- Compatible software language with existing operational programming.
- Integration with prime contractor coding and other common coding languages.
- Analyzes and processes noise reduction signals, filtering, spectral analysis, communication, phased array systems, and radar signatures.
- Provides functions for designing, simulating, and analyzing control systems.
- Supports integration with other programming languages and systems such as Python, C/C++, Java, and Fortran.

The functionalities being requested are robust solutions for engineering and scientific needs. The software's capabilities for numerical computation, data analysis, algorithm development, and system simulation are essential for advancing MDF creation and released products. Moreover, the specialized toolboxes will cater to specific domains like signal processing, map image processing, radar signatures, and radio frequency analysis, allowing us to address diverse technical challenges effectively.

All licenses and plugins listed below are required to fully meet 16EWS mission requirements for Mission Data production:

*Qty (6) Antenna Toolboxes (AA), Individual Perpetual
*Qty (6) DSP System Toolboxes (DS), Individual Perpetual

*Qty (6) Phased Array System Toolboxes (AR), Individual Perpetual
*Qty (6) RF Toolboxes (RF), Individual Perpetual
*Qty (6) Radar Toolboxes (RA), Individual Perpetual
*Qty (2) MATLAB Compilers (CO), Individual Perpetual
*Qty (3) MATLAB License Renewals (MLSMS), Individual Perpetual
*Qty (3) Signal Processing Toolbox renewals (SGSMS), Individual Perpetual
*Qty (3) MATLAB License Reinstatements (MLSMR)
*Qty (3) Signal Processing Toolbox reinstatements (SGSMR), Individual Perpetual

4. Technical Contractual Requirements

4.1 Authorized Resellers

The contractor may be an authorized reseller of software/toolboxes for OEMs proposed under this DO. The contractor may also procure directly from the OEM or utilize other legitimate distribution channels to provide the required products in accordance with the OEM's policies on reselling. Any contractor's channel relationships with their OEM partners (gold, silver, etc.) will be represented in the best pricing offered. The contractor shall ensure all products are genuine and eligible for any OEM warranties, maintenance agreements and licensing as offered. Genuine products are those products the OEM, by their policy, considers not "secondary", destroyed, stolen or scrapped.

4.2 Items on Backorder

In their response to a Request for Quote (RFQ), the contractor shall provide notification, if applicable, that a particular item is on backorder, the expected lead-time to fulfill the order, etc. It shall be implicit that a response to an RFQ with no items identified on backorder is a declaration that the items are available at the time of quote submission.

4.3 Warranty

The contractor shall provide any OEM pass-through warranty and standard commercial warranties applicable to the products being purchased at no cost.

5. Delivery Requirements

60 Days ARO

5.1 Shipping Information

All products shall be shipped to:

[redacted]
Eglin AFB, FL 32542

Inspection/Acceptance: The following Government officials are responsible for receiving the products and performing inspection:

Primary POC:
[redacted]

Billing POC:
[redacted]

The government reserves the right to refuse final acceptance until all discrepancies have been resolved to the satisfaction of the government.