

LIMITED SOURCES JUSTIFICATION

1. **Contracting Activity:** NASA Goddard Space Flight Center, Greenbelt, MD
2. **Purchase Request No:** 4200526898 for (REDACTED)
3. **Description of Services/Supplies Required and Total Estimated Dollar Value:**

This PR is for purchase of two new FreeFlyer Mission Licenses/NASA Solution Packs and two upgrades of existing FreeFlyer Engineer licenses to FreeFlyer Mission licenses. The new licenses require purchase of the first year of license maintenance support, as do the upgraded licenses. These licenses will be used by the Earth Observing System (EOS) missions (Aqua/Aura/Terra) flight dynamics team for daily operational support in their individual Flight Dynamics Systems (FDS) and for display generation for public relations tours. These legacy FDS software systems were funded and are used by Earth Science Mission Operations (ESMO) Project and will supplement the existing FreeFlyer license pool which has been in place since launch.

4. **General Services Administration (GSA) Federal Supply Schedule (FSS):**

FSS# GS-35F-0268R, , 70 GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT, SOFTWARE, AND SERVICES, SIN# 132 33, Perpetual Software License - SUBJECT TO COOPERATIVE PURCHASING

5. **Identification of Source:**

*AI Solutions, Inc.
10001 Dereewood Ln STE 215
Lanham, MD 20706-4864*

*POC: Walter Hamlin
Phone# 301-306-1756
walter.hamlin@ai-solutions.com*

6. **Authority Cited and Rationale:**

- FAR 8.405-6(a)(1)(A). An urgent and compelling need exists, and following normal procedures would result in unacceptable delays.
- FAR 8.405-6(a)(1)(B). Only one source is capable of providing the supplies or services required at the level of quality required because the supplies or services are unique or highly specialized.
- FAR 8.405-6(a)(1)(C). In the interest of economy and efficiency, the new work is a logical follow-on to an original GSA FSS order provided that the original order was placed in accordance with the applicable GSA FSS ordering procedures. The original order or BPA must not have been previously issued under sole-source or limited-sources procedures.
- FAR 8.405-6(b), Items Peculiar to One Manufacturer. An item peculiar to one manufacturer can be a particular brand name, product, or a feature of a product, peculiar to one manufacturer. A brand name item, whether available on one or more schedule contracts, is an item peculiar to one manufacturer.

- **ai-solutions is the only source for maintenance support of their proprietary software for both new license purchases and license upgrades**
- **This software (FreeFlyer) is currently required in three legacy operational FDSs used to provide daily and long-term flight dynamics support for existing Earth science missions (Terra, Aqua, and Aura)**
- **The FreeFlyer software can't be replaced in the existing EOS operational systems without extensive, very costly, and time-consuming modifications with the associated testing.**
- Estimated Costs to replace FreeFlyer with STK:
 - To replace FreeFlyer with STK in the EOS MOC would require a complete revision of three operational flight dynamics ground systems, including product generation, maneuver planning, and recurring analyses currently performed with FreeFlyer.
 - My coarse estimate to replace FreeFlyer with STK in the three EOS MOCs is at **(REDACTED)**.
- *PLEASE NOTE: This purchase request was to replace existing STK functionality with FreeFlyer in a visualization system and also to **enhance** the capabilities of the EOS MOC by providing an additional FreeFlyer Mission license and upgrading two existing FreeFlyer Engineer licenses to FreeFlyer Mission licenses. The enhancement of the EOS MOC capabilities should be considered a capital cost for ESMO for increased capabilities, not an expense to be covered with savings from the replacement of STK with FreeFlyer in the visualization system.*
 - *There is one visualization system that uses STK exclusively, which precipitated the replacement of all STK licenses in the EOS MOC. The other STK licenses are used for some product generation, but a security-required, operating system upgrade resulted in the implementation of FreeFlyer for generation of these products also.*
 - The yearly maintenance cost for STK in FY14 is **(REDACTED)**

- The FY15 cost to replace STK with FreeFlyer in the visualization system is (REDACTED)
- Savings after two years of replacement of STK with FreeFlyer in visualization system:
 - (REDACTED)
- Ongoing savings after two years of replacement = STK license maintenance cost – FreeFlyer yearly cost (1 Mission license)
 - (REDACTED)

7. Market Research:

The AI software is proprietary. A search of GSA Advantage for the required licenses showed that AI is the only provider of the software.

8. Other Facts:

N/A

9. Certifications:

Technical Officer: I certify that the supporting data presented in this justification are accurate and complete.

(David Tracewell), (EOS FDE)

Date

Contracting Officer: I certify that this Justification is accurate and complete to the best of my knowledge and belief.

(Jason D. Lou), Contracting Officer

Date