



Memorandum

Subject: Program Guidance Letter 15-2
EMAS Procurement Requirements

Date: August 7, 2015


From: Director, Office of Airport Planning and
Programming, APP-1

Reply to: Nancy S. Williams, APP-501
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To: PGL Distribution List

Purpose and Background

This guidance describes the sponsor procurement requirements for an Engineered Materials Arresting System (EMAS) when there are Airport Improvement Program (AIP) funds in the project. This guidance describes the procurement process whether there is only one or more than one manufacturer of EMAS that is technically acceptable and meets Federal funding requirements.

On April 2, 2012, the Federal Aviation Administration's (FAA's) Office of Airport Safety and Standards, in conjunction with the FAA's William J. Hughes Technical Center Airport Safety Research and Development Section, determined that the EMAS system developed by Norsk GlassGjenvinning (NGG), meets the required technical standards provided in Advisory Circular (AC) 150/5220-22, *Engineered Materials Arresting Systems (EMAS) for Aircraft Overruns*. RunwaySafe, LLC of Austin, TX has since acquired the NGG system.

Prior to the 2012 determination, Zodiac Aerospace Engineered Arresting Systems Corporation (ESCO) of Logan Township, New Jersey was the only EMAS manufacturer whose product met the requirements of FAA Advisory Circular (AC) 150/5220-22, *Engineered Materials Arresting Systems (EMAS) for Aircraft Overruns*. This is why sponsors have previously been allowed to use the noncompetitive (sole source) procurement process in 2 CFR § 200.320(f).¹

RunwaySafe is a technically acceptable manufacturer of EMAS per the April 2012 determination, and therefore, can now compete to install EMAS on AIP funded projects. This guidance will assist Sponsors in the transition from the previous sole-source method of procuring EMAS installation to the competitive procurement method.

¹ 2 CFR part 200, the Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal

1. Types of EMAS Procurement

There are two different types of EMAS procurement – competitive procurement, and noncompetitive procurement (called sole source.)

2. All Procurements must meet the Requirements of 2 CFR §§ 200.317-200.326.

All competitive or noncompetitive procurements must follow the requirements of 2 CFR §§ 200.317-200.326 (formerly 49 CFR § 18.36).

3. Relationship of 49 CFR § 18.36 to 2 CFR part 200.

The Department of Transportation (and the FAA) adopted 2 CFR part 200, in December 2014. Although the text and references of 2 CFR part 200 are different than 49 CFR § 18.36, the actual requirements are the same.

4. All procurements must follow other procurement and contracting requirements, including all required federal contract provisions.

Competitive procurements and noncompetitive procurements must follow all of the contract provisions that are required for AIP procurements. These requirements are found on the faa.gov website at the following address:

http://www.faa.gov/airports/aip/procurement/federal_contract_provisions/

5. Buy American Preference Compliance

One of the Federal funding requirements is compliance with the Buy American Preference requirements of 49 USC § 50101. A sponsor's project can comply with the Buy American Preference requirements of 49 USC § 50101 if the project will contain steel or manufactured goods that are comprised of 100% U.S. content, or if the project qualifies for the permissible waivers established under 49 USC § 50101(b). The requirements for a sponsor to submit a project waiver request to the FAA are included in the Buy American Preference appendix to the AIP Handbook.

A manufacturer can meet Buy American Preference requirements by furnishing steel or manufactured goods that are comprised of 100% U.S. content; or they may qualify for one of four permissible waivers established under 49 USC § 50101(b).

As part of the competitive proposal process for a proposed EMAS project, the sponsor will need to determine the status of a manufacturer's compliance with AIP Buy American preferences. If a manufacturer wants to seek one of the permissible waivers, the sponsor will need to obtain appropriate U.S. domestic content information from that manufacturer. The sponsor shall then submit this information to the FAA who will determine whether or not the manufacturer qualifies for one of the permissible waivers under 49 USC § 50101(b).

Note: It is not necessary for a manufacturer to possess an approved Buy American waiver prior to submittal of a proposal. However, the sponsor must not finalize award on contract to a manufacturer who is requesting a waiver to Buy American preferences unless the FAA has formally issued a waiver.

Additional information on Buy American and AIP is included in the AIP Handbook.

6. Sponsors Must Use only EMAS Manufacturers that the FAA has Determined are Technically Acceptable

As of the publication date of this PGL, the FAA has determined that both Runway Safe of Austin, Texas and Zodiac Aerospace Engineered Arresting Systems Corporation (ESCO) of New Jersey are technically acceptable.

7. Sponsors must only include the standard 1-year Warranty in the AIP Funded Project.

AIP funding is limited to a standard 1-year warranty for EMAS installations. Longer warranties are ineligible for AIP funding.

8. Noncompetitive Proposal Procurement

Because there are now two EMAS manufacturers that meet technical criteria for EMAS installations, Sponsors may no longer apply the sole-source procurement method without first considering the competitive proposal method. To use sole-source, the sponsor must have received FAA approval for sole-source procurement in advance.

9. Competitive Proposal Procurement Method

Sponsors must first apply the competitive proposal method as defined in 2 CFR § 200.320(f) when procuring EMAS proposals. In the event that only one manufacturer expresses interest in competing for a project, the sponsor must then administer the procurement as a sole source procurement.

The difference between Competitive Proposals and sealed (or low) bid procurement is that in sealed bid procurement, the sponsor awards bids based principally on price. For competitive procurements, the sponsor will base award on price *plus* other quantifiable factors, such as phasing, design factors, product durability, or total contract time.

10. Projects Currently Under Design.

200 CFR § 319 requires that “All procurement transactions will be conducted in a manner providing full and open competition consistent with the standards of this section.” To address the potential for a second manufacturer of EMAS systems, the FAA has determined that projects that are currently under design or that will be under design shortly must afford EMAS manufacturers technically acceptable manufacturers the opportunity to submit a proposal to compete for the EMAS installation.

Therefore, projects that are under design on the date of this PGL is issued, the sponsor may be required to modify its procurement process to allow all acceptable EMAS manufacturers to compete for the project.

In general, for projects that have:

- **Completed 30 percent or more of the Design:** For projects that have passed the 30 percent design stage, a sponsor will not generally be required to competitively procure the EMAS acquisition and installation of the EMAS.
- **Completed less than 30 percent of the Design** For projects that have not started or are not at the 30 percent design stage, the sponsor must use competitive procurement methods to complete design and construction of the EMAS.

For projects that are about to go underway, the ADO/RO must advise the sponsor to prepare the contract such that the project can be reviewed at the 30 percent design stage. The contract must be able to be compete (using competitive proposals) for design completion and construction.

11. Runway Safety Area (RSA) Project Procurement Process.

Frequently, the EMAS installation is only a part of a larger Runway Safety Area (RSA) project. Therefore, the EMAS design is incorporated into the overall project. The EMAS Request for Proposal (RFP) will require that the selected EMAS manufacturer work with the overall RSA design consultant to incorporate the specific features of the selected EMAS into the overall RSA project.

The RSA project with EMAS will typically follow the following steps:

- a. Sponsor conceptually considers EMAS during the planning and environmental phase of the RSA project, and selects a RSA design consultant (RSA designer).
- b. Sponsor and RSA designer identify the requirement for EMAS. The requirements will include the proposed RSA limits, the limits of the EMAS footprint, any navigational aids within the RSA and nearby, and any unique surrounding elements that may be adversely affected by the size of the EMAS bed exceeding a certain height, length or width.
- c. Sponsor issues a Request for Information (RFI) to obtain conceptual designs from EMAS manufacturers. The RFI is issued solely for informational purposes and is not a solicitation. Similarly, responses to RFI's are not offers from the EMAS manufacturers.
- d. Sponsor prepares the preliminary design and a Request for Proposal (RFP) that is used to select the EMAS manufacturer.
- e. Sponsor coordinates the RFP package with the ADO/RO.
- f. After receiving FAA concurrence with the RFP package, Sponsor completes the RFP process, and selects an EMAS manufacturer.
- g. Sponsor, RSA designer, general contractor and EMAS manufacturer complete RSA design and construction.

12. The Request for Proposal (RFP) Package.

At a minimum, the RFP must contain the following information:

- a. A description of the project.
- b. An existing site drawing showing topography, utilities and structures.
- c. Preliminary site design information that will affect the design of the EMAS bed. Examples include: RSA available dimensions, proposed grades, new drainage structures, runway/taxiway extensions, new approach light stations.
- d. Current and future (if different from current) fleet mix. Future fleet mixes must be based on terminal area forecasts approved by the FAA.
- e. All evaluation criteria and relative importance. The evaluation criteria must be:

- i. Proposals demonstrating, through design, that they can meet the requirements for a standard EMAS (70 knot stopping capability for the design aircraft), will take precedence over proposals not demonstrating that they can meet the requirements for a standard EMAS.
- ii. Among proposals demonstrating that they can meet the requirements for a standard EMAS, the contract must be awarded to the lowest responsible, responsive bidder, with respect to the cost as described in Section 13f.
- iii. If all of the proposals are unable to demonstrate that they can meet the requirements for a standard EMAS, but still demonstrate that they can meet the requirements for a non-standard EMAS (minimum of 40 knot stopping capability for the design aircraft), the sponsor must apply the following rating method for relative importance for these primary categories:
 - Stopping capability of aircraft within the fleet mix (50% weighting)
 - Cost of the bed (40% weighting)
 - Maintenance requirements and costs of the bed annually over the design life (5% weighting)
 - Other unique local conditions, such as severe occurrences of jet blast and environmental and operational impact of the EMAS footprint (5% weighting)

The sponsor may provide additional detailed evaluation criteria, such as ability to meet project schedule and any applicable and unique goal requirements, but must use the primary categories listed above. The rating method does not need to be included in the RFP.

13. EMAS Manufacturer Proposal Contents.

The proposals from the manufacturers must contain the following information:

- a. The specifications of the proposed EMAS.
- b. An updated preliminary site plan drawing that shows the actual dimensions of the proposed EMAS footprint and any changes to the sponsor's provided site design.
- c. A description of the product performance assessment and modeling process.
- d. Details on the profile and cross sections of the EMAS including grade.
- e. Preliminary calculations for the stopping capability of aircraft within the fleet mix of operation (the highest runway exit speed for each aircraft that can be arrested within the bed).
- f. Cost of the EMAS bed. The cost shall be submitted based upon the following contract types:
 - i. Firm Fixed Price for all EMAS materials, installation, self-inspection, testing and administration. (Payment for materials will be made upon delivery to the site.) At the sponsor's option, the sponsor may allow the costs for construction inspection, by the manufacturer or its representative, to be broken out separately using the cost plus fixed fee method of contract pricing.
 - ii. All shipping, storage and travel costs must be included in the firm fixed price.

- g. Schedule for material delivery.
- h. Annual maintenance cost and requirements of the EMAS over the life of the product. (Note: The costs of maintenance or extended warranty costs are not eligible for AIP funding. The annual costs are used for evaluation purposes.)

14. Sponsor Proposal Review Process.

Each proposal must be reviewed, evaluated and rated by the sponsor. The sponsor must have a method for conducting technical evaluations for each of the criteria listed in the RFP. The structure of the review process is the sponsor's responsibility but must result in the selection of a responsible manufacturer whose proposal is the most advantageous to the project.

15. FAA Review and Concurrence.

To be eligible for AIP grant funding, the FAA must have concurred with the sponsor's price analysis that establishes the proposed project costs are reasonable. Therefore, the sponsor must submit the selected proposal to ADO/RO for a reasonableness determination. The ADO/RO has the option to coordinate the review with AAS-100 or APP-500.

16. EMAS Manufacturer Selection Process.

Prior to the sponsor's final selection and award, the FAA has the option to review the sponsor's evaluation and rating. Once the sponsor has selected a qualified EMAS manufacturer, the sponsor must enter into a contract with the EMAS manufacturer for the costs described above.

17. EMAS Bed Replacements and Retrofits.

If the sponsor and FAA concur that an existing bed must be replaced, whether it has reached the end of its service life or for a different reason, the sponsor must select a manufacturer for the new EMAS bed as outlined in the guidelines above.

If it has been determined that a bed must be retrofitted, with FAA concurrence, the sponsor must determine whether the bed can only be modified or retrofitted by the original manufacturer, and whether the cost benefit of replacing the bed outweighs the cost benefit of retrofit.