

## **611.002-70 Metric system implementation.**

(a) *Policy.* The Metric Conversion Act of 1975, as amended by the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 205a, *et seq.*), requires Federal agencies to establish implementing guidelines pursuant to metric policy to adopt the metric system as the preferred system of weights and measurements for United States trade and commerce. This section establishes the Department of State's metric conversion guidelines.

(b) *Applicability.* This section applies to all DOS acquisitions, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to U.S. firms.

(c) *Definitions.*

*Dual system* means the use of both traditional and metric systems. For example, an item is designated, produced and described in inch-pound values with soft metric values also shown for information or comparison.

*Hard metric* means the use of only standard metric (SI) measurements in specifications, standards, supplies and services.

*Hybrid system* means the use of both traditional and hard metric values in specifications, standards, supplies and services.

*Measurement sensitive* means any item having an application or meaning depending substantially on some measured quantity. For example, measurement sensitive items include product or performance criteria and standards binding on others, such as emission levels, size and weight limitations, etc.

*Metric system* means the International System of Units (Le System International d'Unites (SI)) of the International Bureau of Weights and Measures.

*Metriation* means any act that increases metric system use, including metric training and initiation or conversion of measurement sensitive processes and systems to the metric system.

*Soft metric* means the result of mathematical conversion of inch-pound measurements to metric equivalents. The physical dimensions, however, are not changed.

*Traditional system of weights and measurements* means the predominant weight and measurement system currently used in the United States, also referred to as the "inch-pound system." The traditional system includes such commonly used units as inch, foot, yard, mile, pint, quart, gallon, bushel, ounce (fluid and avoirdupois), pound, degree Fahrenheit, ampere, candela, and second.

(d) *Procedures.*

(1) DOS contracting activities shall implement the metric system in a manner consistent with 15 U.S.C. 205a, *et seq.*

(2) All DOS contracting activities shall use the metric system in acquisition consistent with security, operations, economic, technical, logistical, training and safety requirements.

(3) The Department shall encourage industry to adopt the metric system by acquiring commercially available metric products and services that meet the Department's needs whenever practical.

Toward this end, solicitations for DOS acquisitions shall:

(i) State all measurement sensitive requirements in metric terms whenever possible. Alternatives to hard metric are soft, dual and hybrid metric terms. The Metric Handbook for Federal Officials regarding the selection of proper metric units and symbols is available from the National Technical Information Service; and

(ii) For contracts expected to exceed \$500,000 contracting officers shall return to the requirements office all specifications and statements of work that are not expressed in some form of metric terms unless the requirements office has prepared a justification, for the approval of the contracting officer, for the use of non-metric specifications or statements of work. The justification shall be in a format as prescribed by the head of the contracting activity. Option year prices shall be considered when computing the \$500,000 threshold.

(4) Waivers are not required when ordering from Federal Supply Schedules.

(5) Valid justifications for non-metric specifications or statements of work include, but are not limited to:

(i) Existing specifications or standards are in inch-pound units, unless conversion of the existing specifications or standards is necessary or advantageous to the Government. Unnecessary retrofit of existing systems with new metric components should be avoided if the total cost of the retrofit, including redesign costs, exceeds \$50,000;

(ii) Metric is not the accepted industry system with respect to a business-related activity; however, soft, hybrid, or dual systems may be used during the transition to hard metric;

(iii) The use of metric is impractical or is likely to cause significant inefficiencies or loss of markets to U.S. firms.

(6) The contracting officer shall review and, if acceptable, approve the waiver prior to the release of the solicitation. The waiver shall be placed in the contract file. If the waiver is not approved, the contracting officer shall return it to the requirements office with an explanation for the disapproval.

(7) The in-house operating metric costs shall be identified. Identification includes, but is not limited to, the cost of metric aids, tools, equipment, training and increased cost to develop metric specifications. All contracting activities and requirements offices shall maintain a record of any costs and/or savings brought about by metric conversion.

(8) Bulk (loose, unpacked) materials shall be specified and purchased in metric or dual units.

(9) Measuring devices, shop and laboratory equipment shall be purchased in metric or dual units.

(10) Shipping allowances, bills of lading and other shipping documents shall be expressed in metric or dual units.

**Parent topic:** PART 611—DESCRIBING AGENCY NEEDS