EVALUATION OF THIRD PARTY CERTIFICATION AS AN ENVIRONMENTAL ATTRIBUTE FOR INCLUSION IN THE FEDERAL LOGISTICS INFORMATION SYSTEM (FLIS)

M.C. Bracken
E.T. Morehouse

NOVEMBER 2002

This draft is still undergoing review and is subject to modification or withdrawal from publication. No reference should be made to this document in other publications.

I N S T I T U T E F O R D E F E N S E A N A L Y S E S
4850 Mark Center Drive, Alexandria, VA 22311-1882

CONTENTS

A. INTRODUCTION 1
B. STUDY APPROACH 2
C. FEDERAL AND REGULATORY POLICY 3
D. ABILITY TO DEFINE THIRD PARTY CERTIFICATION 6
1. Standards 7
2. Self-declaration 9
3. Third Party Certification 9
E. COST BENEFIT 14
F. THIRD PARTY CERTIFICATION AS AN ATTRIBUTE 15
1. Third Party Process 15
2. Implementation Issues 16
3. Pilot Program 18
G. SUMMARY AND CONCLUSIONS 20

A. INTRODUCTION

In 1993, President Clinton issued Executive Order 12873, *Federal Acquisition, Recycling, and Waste Prevention* that requires the Environmental Protection Agency (EPA) "to issue guidance that recommends principles that Executive Agencies should use in making determinations for the preference and purchase of environmentally preferable products." Executive Order 13101-*Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition*, published in September 1998, requires government agencies to improve their use of recycled products and environmentally preferred products (EPPs). "Environmental preferable" is defined in Section 201 of EO 13101 to mean products or services that "have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service." As a major buyer of products for the military Services, the Defense Logistics Agency (DLA) is responsible for improving the Department of Defense's (DoD's) use of EPPs that reduce life cycle costs.

In February 1997, the Joint Logistics Commanders (JLCs) tasked DLA to research the feasibility of developing a program to integrate environmental attributes into the Federal Logistics Information System (FLIS), a computerized database of more than 7 million supply items purchased by the government. The purpose is to aid procurement personnel and end users to identify products with positive environmental attributes. DLA established the Environmental Attribute Initiative and formed the Joint Group on Environmental Attributes (JG-EnvAtt) Coordinating Committee to manage the activity. DLA heads the JG-EnvATT Coordinating Committee, with the Army, Navy, Air Force, Marine Corps, and the General Services Administration (GSA) as the primary participants. Advisors include the Department of Energy, the Environmental Protection Agency, and other government agencies. The Committee is responsible for selecting, evaluating, and approving proposed attributes for inclusion into FLIS.

To date, the Committee has approved four attributes for inclusion into the FLIS. They are:

- Low volatile organic compound (VOC) content,
- Energy efficiency,

- Water conservation, and
- Items designated by the Comprehensive Procurement Guidelines (CPG) as defined by the Environmental Protection Agency

The Environment and Safety Directorate of the Defense Logistics Agency tasked the Institute for Defense Analyses to evaluate "third party certification" as an environmental attribute for inclusion in FLIS. IDA presented a draft report on third party certification to JG-EnvAtt Coordinating Committee in December 2000. The committee was in general agreement on the concept of third party certification as a potential environmental attribute but the definition of third party certification was problematic. An attribute is defined as a characteristic inherent in a product. Third party certification is a process used to evaluate the conformance of a product with a standard or specification. In addition, IDA was asked to look into a number implementation issues DLA thought could be problematic related to cataloging and product entry into the DLA system. DLA tasked IDA to research the feasibility of third party certification as an environmental attribute in the context of DLA requirements for EPP and propose a pilot program to test the practicality of integrating third party certification into FLIS.

B. STUDY APPROACH

The JG-EntAtt Coordinating Committee developed the following three selection criteria for evaluating proposed attributes:

- Regulatory or policy priority must exist
- Clearly defined comprehensive definition must be available
- Cost benefit must be evident

Following this guidance, the IDA team evaluated existing federal and regulatory policy to determine if a policy priority existed to consider third party certification as a proposed attribute. IDA held meetings with the Environmental Protection Agency to assess their position on standard setting and third party certification; the American National Standards Institute (ANSI) to assess their criteria for standards development, and NIST to review the requirements for conformity assessment systems, third party certification evaluation criteria and procedures for self-declaration by vendors. IDA also conducted meetings and discussions with third party standards setting organizations including Underwriters Laboratory, Green Seal, National Sanitation Foundation (NSF),

Blue Angel Program, Canada's Environmental Choice Program and the ECO-Label Program. IDA compared the procedures used by these organizations to criteria established by the International Standards Organization (ISO) for third party organizations in order to assess their compliance. IDA interviewed a number of these organizations regarding their experience in certifying environmentally preferable products, their potential interest in a pilot program with DLA and to assess whether they would be appropriate third party organizations to participate in a program to help implement third party as environmental attribute in FLIS.

IDA also held meetings with experts responsible for managing EPRO, EMALL, and FLIS data cataloging requirements to determine how products identified by third party certifying organizations could be entered into FLIS and new systems being designed under DLA's Business Systems Modernization (BSM) program. These included meetings with Inventory Control Points (ICPs) to understand how item managers assess whether individual products are environmentally preferable, the procedures for entering products into the DLA system and any barriers to entry. IDA also considered how third product organizations would assess the life-cycle cost effectiveness of products and how this might be reflected in attributes assigned to a product in FLIS.

C. FEDERAL AND REGULATORY POLICY

Two Executive Orders, 12873 and 13101, direct the Federal government to improve its use of recycled products and environmentally preferable products and services. EPA is responsible for issuing guidance and serves as a point of contact for government agencies' EPP programs. In September 1995, EPA published *Federal Acquisition, Recycling, and Waste Prevention*,[1] the proposed guidance for implementing Executive Order 12873. In a notice accompanying the guidance, EPA announced a public meeting to receive comments from interested persons on the potential role of third-

[1] Environmental Protection Agency, *Guidance on Acquisition of Environmentally Preferable Products and Services*, FR 60, No. 189, September 1995.

party environmental certification programs. EPA received many differing opinions on the use of third-party environmental certification programs. DoD recommended EPA be more involved in the certification process, and suggested that EPA could:

1. Serve in the certifying capacity
2. Review the procedure for third party certification programs
3. Ensure appropriate testing has been conducted when third party certification Organizations are involved[2]

The Office of Management and Budget (OMB) published a revision of Circular A-119, *Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities*, in February 1998. The Circular states that federal agencies must use voluntary consensus standards where available, but must take into account that the use of standards, if improperly conducted, can suppress free and fair competition, impede innovation and technical progress, exclude sales of less expensive products, or otherwise adversely affect trade, commerce, health, or safety.

In 1998, EPA and the Office of the Federal Environmental Executive (OFEE) issued policy on how federal agencies can use Non–Governmental Entities (NGEs)/"Third Parties" to help achieve the Administration's mandate of purchasing environmentally preferable goods and services.[3] Non-Governmental Entities (NGEs)/Third Parties were defined as "including but not limited to, standard setting organizations, third party certification programs, environmental labeling or environmental "report card" programs, and other environmental consulting organizations."[4] Subsequently, EPA issued a Federal Register Notice, entitled *Development of Voluntary Consensus Standards for Environmentally Preferable Goods and Services*. It asked for comments regarding the level of expertise currently available through standard-setting organizations and solicited their interest in helping to develop

---

2 Environmental Protection Agency, Office of Pollution Prevention and Toxics, *Summary of Comments at the Public Meeting on Proposed Guidance on Acquisition of Environmentally Preferable Products and Services,* EPA 742-R-96-005, February 1996.

3 Environmental Protection Agency, *Third Party Policy Letter*, *www.epa.gov/fedrfstr*, June 22, 1998.

4 Ibid.

voluntary consensus standards for environmental preferable products and services. Independent standards organizations expressed a strong level of interest, and a summary of their comments is available from EPA.[5] Most respondents supported the development of voluntary consensus EPP standards. EPA's Final *Guidance on Environmentally Preferable Purchasing* was published in the *Federal Register* on August 20, 1999. Guiding Principle 3: Life Cycle Perspective/Multiple Attributes supports the development of standards that reflect the life cycle of a product or service.

The use of standard setting and other non-government third party groups is also included as a Federal Agency requirement under the *National Technology Transfer and Advance Act* (P.L. 104-113). These requirements are further detailed in the OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities." Specifically, all Federal agencies are required to report annually to the Office of Management and Budget on the status of agency interaction with voluntary standards bodies.

IDA concludes:

- EPA established a clear policy priority for using third party certification programs to help the Federal Government achieve its mandates to increase procurement of environmentally preferable products
- Public Law 104-113 requires Federal Agencies to use non-government third party standards in lieu of government standards; and
- Office of Management and Budget circular A-119 requires Federal Agencies to report their use of third party standards annually

D. ABILITY TO DEFINE THIRD PARTY CERTIFICATION

An "attribute" is defined as a characteristic or property inherent in a given product. To date, the Joint Group on Environmental Attributes has established four

[5] Voluntary Standards for EPP Comment Summary, OPTS, US EPA, October 1999.

attributes. Some products will possess more than one attribute. For example, one product may use less water, but another may be more energy efficient. In this case trade-offs among various characteristics must be weighed in order to arrive at a simple scoring useful to purchasers. Multiple complex attributes can be combined into a single overall measure of environmental benefit to enable simple comparisons of different products within a class. Several organizations have developed measures of environmental performance based on multiple attributes for various classes of products**.** Typically, the organizations use their measures to determine which products should be endorsed or certified as meeting specific definitions of "environmentally preferable" products.

One approach available to the federal government to identify environmentally preferred products is to use the endorsements of dedicated environmental certifying organizations. The benefits of this approach include simplicity; efficiency; reduced risk of protest by vendors without certification because there is no subjectivity exercised by the government; and no or low cost to the government, since some other organization is covering the cost of the certification process. Certification groups are endorsing products with a single attribute and products that integrate many environmental attributes into a single endorsement

The Joint Group on Environmental Attributes requires an attribute be clearly definable in order to be adopted. EPA defines third party certification programs as programs operated by recognized organizations that verify or certify attribute claims made by manufacturer against approved standards, or other programs that compile key environmental information into "Report Cards", or that award "seals-of-approval" to those products that meet a specifics set of award criteria and/or standard. The organizations can be non-profit or for-profit, government or independent, national or international.[6] As part of this definition process it is necessary to clarify the terminology.

---

[6] Environmental Protection Agency, *Guidance on Acquisition of Environmentally Preferable Products and Services*, FR 60, No. 189, September 1995.

1. Standards

A standard as defined by the American National Standards Institute (ANSI) is "a recognized unit of comparison by which the correctness of others can be determined."[7] Standards need to be accurate and reproducible. Standards facilitate organizations ability to:

- Ensure safety and protection of American workers and consumers
- Develop new markets and ensure global market access of their technologies
- Reduce time and costs in product develop cycle, minimize anti-trust and product liability exposure

Voluntary consensus standards are standards developed or adopted by voluntary consensus standards bodies, both domestic and international. Voluntary consensus standards bodies plan, develop, establish, or coordinate voluntary consensus standards using agreed-upon procedures. In order to be considered by ANSI as a voluntary consensus standards body, an organization must meet specific criteria in the following areas:

- Openness
- Balance of interest
- Due Process
- An appeals process
- Consensus: This is defined as general agreement but not necessarily unanimity. It requires a process for attempting to resolve objections by interested parties, fair consideration of all comments, advice to each objector regarding disposition of their objection(s) and justification for disposition, and an opportunity for members to change their votes after reviewing all comments.

Consensus standards are more likely to address test procedures, technical terminology, information exchange protocols, interconnectivity conventions, or even symbols on engineering drawing and blueprints. For example, the paper industry has

---

[7] American National Standards Institute, *Understanding American National Standards,* (www.nssn.org/ans_process.html)

established definitions of "recycled" that distinguish paper that recycles post-consumer waste from that which recycles paper manufacturing waste. Manufacturers can then more clearly specify what sort of environmental products they are offering. Consensus standards are not the equivalent of a third party seal of approval.

Consistent with the development of voluntary consensus standards, EPA has initiated a program with the American Society of Testing Materials (ASTM) to create an industry standard for sustainable buildings. EPA's Environmentally Preferable Purchasing (EPP) program believes that two of ASTM standards provide guidance to purchasers, which reflect life cycle considerations and address Federal purchasers' needs. These include:

- ASTM's E2129-01 Standard Practice for Data Collection for Sustainability of Building Products
- ASTM's E1971-98 Standard Guide for Stewardship for the Cleaning of Commercial and Institutional Buildings

Three environmental standards developed by Green Seal also developed through a voluntary consensus standard were recognized as well. These standards are multi-attribute standards, that is, they consider a number of attributes in their assessment of environmental preferable products. They include:

- Green Seal Environmental Standard for General Purpose Bathroom and Glass Cleaners Used for Industrial and Institutional Purposes (GS-37)
- Green Seal Environmental Standard For Commercial Adhesives (GS-36)
- Green Seal Environmental Standard for Cleaning/Degreasing Agents (GS-34)

2. Self-declaration

Self-declaration, also referred to as self-evaluation and self-certification, is "the process by which a manufacturer or supplier declares that its product meets one or more standard based on:

- The vendor's confidence in its quality control system, or
- The results of testing or inspection the vendor undertakes or authorizes others to undertake on its behalf."[8]

---

[8] National Bureau of Standards, *The ABC'S of Certification Activities in the United States,* NBSIR 88-3821, July 1988.

This process is also known as manufacturer's declaration of conformance. DLA's iGIRDER (Interactive Government and Industry Reference Data Edit and Review Program), developed by the Defense Logistics Information Service (DLIS) is a program that encourages vendors to self-certify their products. Vendors can use iGIRDER to self-declare that their products satisfy the requirements of the environmental attributes approved by the JG-EnvAtt Coordinating Committee. iGIRDER is a web-based interactive application that serves as both a maintenance tool and information source for manufacturers, vendors and suppliers. A Declaration for Environmental Certification is available on the web site at www.gidm.dlis.dlis.mil.

3. Third Party Certification

Certification is "the procedure that assures a product or service conforms to a standard or specification."[9] Certification programs vary in their complexity and in products coverage. A "certification body" is any body operating product certifications systems.[10] Certification systems used by the certification bodies may include one or more of the following, which could be coupled with production surveillance of assessment and surveillance of the supplier's quality system or both, as described in the International Standards Organization/ International Electrotechnical Commission (ISO/IEC) Guide 53:

- Type of testing or examination
- Testing or inspection of samples taken from the market or from supplier's stock or from a combination of both
- Testing or inspection of every product or of a particular product, whether new or already in use
- Batch testing or inspection
- Design appraisal

ISO/IEC Guide 65 specifies general requirements that third parties operating a product certification system shall meet in order to be recognized as competent and reliable. In the Guide the term " certification body" is use to cover any body operating a

---

[9] American National Standards Institute, American National Standards for Certification-Third-Party Certification Program, New York, New York, p. A-7.

[10] ISO/IEC Guide 65: 1996

product certification system. The word "product" is used in its widest sense and includes processes and services; the word "standard" is used to include other normative documents such as specification or technical regulations. The general provisions are:

- The policies and procedures under which the certification body operates and their administration shall be non-discriminatory and shall be administered in a non-discriminatory manner.
- The criteria against which the products of a supplier are evaluated shall be those outlined in specified standards. Requirements for standards suitable for this purpose are contained in 'ISO/IEC Guide 7.
- The certification body shall confine its requirements, evaluation and decision on certification to those matters specifically related to the scope of the certification being considers.

The structure of the certification body shall foster confidence in its certifications. It shall:

- Be impartial
- Be responsible for decisions relating to granting, maintaining, extending, suspending and withdrawing certification
- Identify the management which shall have responsibility for performance of testing, inspection, evaluation, and certification
- Have a organization structure which safeguards impartiality including provisions to ensure the impartiality of the operation of the certification
- Ensure that each decision on certification is taken by a persons(s) different from those who carried out the evaluation
- Have the financial stability and resources required for the operation of the certification system
- Have adequate arrangements to cover liabilities arising from its operators and/or activities
- Employ a sufficient number of personnel having the necessary education, training, technical knowledge and experience for performing certification functions relating to the type, range and volume of work performed, under a responsible senior executive
- Have a quality system giving confidence in its ability to operate a certificate system for products

- Have policies and procedures that distinguish between product certification and any other activities in which the certification body is engaged
- Have senior executives and staff free from any commercial, financial and other pressures which might influence the results of the certification process
- Have formal rules and structure for appointment and operation of any committees, where members are chosen to provide a balance of interests where no single interest predominates
- Ensure that activities of related bodies do no affect the confidentiality, objectivity and impartiality of its certification
- Have policies and procedures for the resolution of complaints, appeals and disputes received from suppliers or other parties about the handling of certification or any other related matter

Independent testing and inspection organizations such as Underwriters Laboratories (UL), or National Sanitation Foundation (NSF) International provide "third party" certification. Some organizations both set standards and provide third party certification. UL, NSF, and Green Seal provide both services. Other groups provide only third party certification of products using standards developed by standard setting organizations. Green Seal developed environmental standards for classes of products and also serves as a third party certification body that evaluates specific products to determine whether they meet the standards. Approved products are allowed to carry the Green Seal certification.

A number of individuals within Government interviewed by IDA while preparing this report asked whether including third party certification in FLIS undermined the Government's procurement decisions. The answer is clearly no. While it is Government policy that third party environmental certification be a factor used by Government procurement officials, Federal procurement decisions remain an inherently governmental function. Including the existence of third party certification in FLIS in no way delegates Government procurement decisions to a non-governmental entity, and does not give a third party veto over procurement decisions. Including third party in FLIS is only a way to make DLA customers aware that a product has been certified by a third party as

complying with some standard. This is entirely consistent with making Government procurement officials informed customers.

The next logical question then is, who determines which third party certification bodies should be recognized by the Government. What prevents a private interest from establishing a third party certification organization for the purpose of promoting its own products? The answer is that third party certification organizations must be accredited. For example, the Federal Communications Commission (FCC), with support from the National Institute of Standards and Technology (NIST), recognizes private sector certification organizations as accreditors of products certifiers. Under this arrangement, NIST recognizes ANSI as a qualified accreditor of product certifiers that approve radio transmitters, telephone handsets and other FCC-regulated products. ANSI presently accredits specific organizations as certifiers of products in more than 20 industrial categories.

Most certification groups establish goals or standards. Products either meet the goals or do not, meaning specific products either get a certification or do not. With all-or-nothing certification, the details of the standards become critical. There are three critical considerations in selecting standards for use in third party certification programs:

1. What product characteristics need to be assessed to achieve the objectives of the programs (attributes)
2. How the products will be evaluated to determine whether they meet the performance requirements (test protocols)
3. Threshold values the products must meet to be certified (performance)

ANSI has recognized a number of third party organizations as accredited product certifiers. Green Seal, a third party certification group, has not sought ANSI certification in the past because they were not using a voluntary consensus standards approach, but had chosen a “leadership label” which generally sets goals so that 20% of products in a class meet the goal. Recently Green Seal has moved to a voluntary consensus process. EPA supports their use of three consensus environmental standards as mentioned earlier

in the report. Green Seal and other eco-labeling groups have adopted International Standards *ISO 14020, Environmental Labels and Declarations—General Principles,* 1998, and *ISO 14024, Environmental Labels and Declarations—Type 1 Environmental Labeling—Principles and Procedures*, 1999. Environmental labels and declarations are one of the tools of environmental management, which is the subject of the ISO 14000 series. These standards establish guiding principles for the development and use of environmental labels and declarations. The overall goal of the standards is to provide a measure third party organizations can use to certify that a product meets the requirement of the standard; or that a vendor or manufacturer of a product can determine if their product is in conformity with the standard. This requires clear, verifiable and accurate information on environmental aspects of products and services.

E. COST BENEFIT

The Government's reasons for promoting the use of third party certification are to eliminate the cost to the government of developing its own standards, decrease the cost of goods procured, and simplify the burden of complying with federal regulations. OMB Circular No. A-119 notes that all government agencies must use voluntary consensus standards in lieu of government-unique standards except where inconsistent with law or otherwise impractical. The use of standards encourages long-term growth for US enterprises and promotes efficiency and economic competition through harmonization of standards. It also furthers the policy of reliance on the private sector to supply Government needs for goods and services.

The use of voluntary consensus standards by third party certification organizations will save the government money by reduced waste management costs, need for pollution prevention, and greater reuse/recycling of materials and products. Policy guidance concerning EPP reminds buyers that life cycle costs should take precedence over lowest initial cost, and that buyers should seek best value and not just lowest initial cost. Environmental, health, and safety compliance requirements can contribute significantly to a product's life cycle costs. As noted above, aside from the purchase

price of an item that contains toxic material, the costs of storage, user training and protection, special handling facilities and disposal all increase the total life cycle cost, sometimes significantly. However, because these costs are almost always funded from different sources of money controlled by different organizations, achieving management visibility over all the costs driven by each procurement decision becomes impossible. Studies of the true costs of using industrial chemicals indicate handling and disposal costs are two to three times the initial purchase price.[11]

F. THIRD PARTY CERTIFICATION AS AN ATTRIBUTE

1. Third Party Process

Third party is not an attribute. Rather, third party certification is a procedure or process by which a product is evaluated against a standard. However, third party certification does meet the criteria established by the Joint Group on Environmental Attributes:

- Regulatory and policy priority exists
- Definition is clearly defined and comprehensive
- Cost benefit is evident

Third parties can certify products as meeting a single attribute, or multiple attributes. Considered along with DLA's current practice of listing products vendors self-certify in FLIS, this leads to a multilevel hierarchy of preference for environmental attributes. These are:

1. Self-certified against a single attribute
2. Self-certified against multiple attributes in a life-cycle analysis
3. Third-party certified against a single attribute
4. Third-party certified against multiple attributes in a life-cycle analysis

[11] Votta,T. et al., "Using Environmental Accounting to Green Chemical Supplier Contracts," Pollution Prevention Review, Spring: 67-78, 1998.

Self-certification against a single attribute is the current DLA practice. IDA recommends products self-certified against multiple attributes (more than one of the currently approved attributes) be recognized as such in FLIS, and distinguished as preferable to products meeting only one attribute. IDA recommends products with third party certification for a single attribute be recognized as such in FLIS, and be distinguished as preferable to products self-certified. This provides manufacturers and vendors with an incentive to provide the Government with independent verification of their product claims, and rewards those who expend the effort to obtain certification. IDA recommends products with third party certification against multiple attributes be recognized as such in FLIS and be distinguished as the most environmentally preferable products.

As an example, consider the case of low-VOC. The Joint Group on Environmental Attributes previously approved this as an attribute. The South Coast Air Quality Management District (SCAQMD) meets the criteria as a third party, and certifies products according to the definition adopted by the Joint Group. Vendors submit their products to SCAQMD for certification and if they meet the standard, they are entered into SCAQMD's Clean Air Solvent Certification Program. SCAQMD publishes a list of certified products on its website (www.aqmd.gov/tao/cas/prolist.html) and makes buyers aware of their availability and the criteria they meet in order to receive certification.

The more sophisticated use of third party involves evaluating a product against multiple product attributes based on a life cycle analysis. For example, Green Seal has developed multi-attribute standards and is beginning to certify products against these standards. An EPP that has been certified by a third party organization against a life-cycled standard is clearly preferable to either a product certified against a single attribute, or a product where a vendor self-declares their product meets the requirements of a standard.

2. Implementation Issues

The next issue becomes how to implement such a mix of such a hierarchy of products in FLIS. To indicate the products that satisfy the specific attributes already approved, DLIS implemented a Master Requirement Code (MRC) titled Environmental Attributes Code (ENAC). Products that meet the requirements of the existing environmental attributes are designated through the assignments of ENACs to National Stock Numbered (NSN) items found in the Federal Logistics Information Systems. (FLIS). To date there are four classes of Environmental Attribute Codes approved for inclusion in FLIS, representing products that exhibit preferred characteristics in the areas of Energy Efficiency (EE), Water Conservation (WC), Low Volatile Organic Compounds (Low-VOC) and Comprehensive Procurement Guidelines (CPG) Items.

The system as now structured does recognize products independently certified by a third party process. A vendor or manufacturer who goes through the effort to obtain independent third party verification of their claims of environmental preferability are designated in the same way as those who self-declare. Further, there is no differentiation between products with third party certification against multiple attributes in a life-cycle analysis and products that meets the requirements of a single attribute. This provides no incentive for a vendor to go through the third party process. Yet, as discussed above, it is Government policy to make use of third party standards.

The IDA study team met with catalogers, and designers of EPRO, EMALL and iGIRDER cataloging experts at DLIS headquarters in Battle Creek. DLIS staff agreed with the concept of third party certification being a process rather than an attribute and in addition, agreed that the use of third party organizations for certification of EPP products was a useful and cost effective mechanism for informing DLA customers about the environmental performance of products they buy. They also noted that the means for distinguishing third party certified products already existed. A Master Requirement Code (MRC) -- Environmentally Preferred Product Certification (EPPC) already exists, but has not yet been used. The current definition of EPPC in DLIS is " Indicates the type of certification indicating the item is an environmentally preferable product". Two classes

of products were associated with the EPPC: one for third party certification and one for unverified self-certification or self-declaration by a vendor.

IDA has identified two options for cataloging products in FLIS, but more possibilities may exist.

1. A product certification by a recognized third party organization would receive the relevant ENAC code and an EPPC code to indicate third-party certification. This would give third party certification the same status as an ENAC—that is, its own Master Requirement Code—EPPC. Both designations would appear in FLIS, EPRO and FEDLOG. Buyers would easily recognize that the product was third party certified and that it was a green product that met an ENAC approved attribute definition.

2. A second option would be that a new ENAC for third party certification would be created as a new class code. This would show third party certification in the same way as an attribute. The product also would be displayed with its relevant ENAC class code. Third party would be represented by its two digit alphanumeric code.

3. Pilot Program

The Joint Group on Environmental Attributes suggested that a pilot program be developed to test the practicality of using a third party organization to identity environmental preferable products. The South Coast Air Quality Management District (SCAQMD) program for Low-VOC was selected as the pilot effort. SCAQMD published a protocol with information on how applications can obtain a certificate stating that their product meets the requirements of Low-VOC content as stated in California State regulations. This is the definition that has been accepted by the Joint Group on Environmental Attributes for Low-VOC. Applicants submit a sample product and a fee of $458.41 to SCAQMD for each product to be tested. This fee covers the cost of a Gas Chromatograph/Mass Spectrometer Analyses (GC/MS), time and materials, and the Clean Air Solvent (CAS) certification. Products that are approved are published on the SCAQMD web page.

Products certified by SCAQMD, a third party organization that meets the criteria as stated in the ISO/IEC Guide 65, are candidates for listing on FLIS as environmentally preferable third party certified products. They could receive an ENAC for Low-VOC and using the Option One Scenario discussed above, plus the Master Requirement Code EPPC- Environmentally Preferred Product Certification Type with the identification that the product was third party certified. The identification of the third party organization will be provided in response to the Requirement Code.

IDA held discussions with FLIS about the possibility of using SCAQMD and the products that have been certified and listed on the SCAQMD website as a pilot program for third party certification. The FLIS staff had no difficulty with the concept or the mechanics of adding the data to FLIS. As part of the pilot effort the Magnaflux Company, which is listed on the SCAQMD web site, was contacted. The company has a number of industrial cleaners certified and listed, is currently selling these products to DoD and has National Stock Numbers. The company was unaware of the DLA EPRO program and did not know that they could self-declare their products and receive an ENAC designation. They were also in interested in receiving recognition in FLIS that their product was third party certified. By working with the FLIS staff, arrangements have been made to obtain ENAC codes for the industrial cleaners as having met the Low-VOC definition and pending the results of the Joint Group on Environmental Attributes, they could receive recognition for third party certification as a result of their certifications by SCAQMD.

With the existing structure of FLIS, the buyer or person making the procurement decision would not know that these products have also been certified by a third party. The products would appear on FLIS with the same designation as products that meet the definition and are self-certified. However, if they receive a secondary designation such as the EPPC Master Requirements code, the buyer/user would recognize that the vendor has paid for certification by a third party. The FLIS staff indicated there would be no technical difficulties implementing the new MRC. The product would receive the Low-

VOC ENAC and the MRC EPPC with a reply code indicating third party certification by SCAQMD.

As noted above the other option for third party certification recognition is a separate ENAC class code for third party certification. It would be another two digit alphanumeric code similar to the other approved attributes.

G. SUMMARY AND CONCLUSIONS

Third party certification means that a product has been tested and verified by independent third party body that it meets the criteria of a specific environmental standard. Third party certification is not an attribute of the product itself, so does not meet the definition of an attribute. This is because an attribute is defined as an inherent feature of the product itself. Attributes already approved by the Joint Group on Environmental Attributes include low VOC, energy efficient and water conserving. Rather, third party certification is a "procedure that assures a product or service conforms to a standard or specification."[12] However third party does meet the criteria established by the Joint Group to be an environmental attribute. These criteria include clear policy priority, clear definition and clear cost benefit.

There is a clear policy priority. The use of third party certification is strongly supported by federal policies and procedures including the Environmental Protection Agency's *Guidance on Acquisition of Environmentally Preferable Products and Services* published in 1998.

There is a clear definition. The Environmental Protection Agency applies the existing International Standards Organization criteria to determining which third parties can be accredited to certify products for environmental preferability. As a result, DLA will not be forced into the situation of making subjective decisions regarding which organizations to recognize and which to reject. Other government organizations will

[12] American National Standards Institute, American National Standards for Certificaton-Third Party Certification Program, New York, New York, p. A-7.

provide this information, and DLA will be in the position of compiling a definitive list, based on the work of other government organizations.

There is a clear economic benefit. Third party certification organizations using voluntary consensus standards to evaluate the environmental preferability of products will save the government money in terms of reduced waste management costs, need for pollution prevention, and greater reuse/recycling of materials and products. Studies demonstrate that the cost of handling and disposing of environmentally harmful materials exceeds the initial cost by 2 to 3 times. At the local level, the true costs for each purchase are divided among different accounts among different organizations and are difficult to individually quantify.

Because third party is not an attribute, but does meet the criteria for "environmental attribute", DLA may wish to consider implementing third party in a slightly different way than other attributes. A product can possess several attributes that can be combined into an overall measure of environmental benefit. Third party organizations such as Green Seal are performing this function using agreed upon consensus standards that include a number of attributes that are considered collectively and result in an overall life-cycle based rating.

IDA recommends DLA implement third party as a Master Requirement Code in FLIS, which gives its equal status to an ENAC. This gives products with third party certification two designations: an ENAC for its attribute, and an EPPC-Environmentally Preferred Product Certification indicating whether evidence that it satisfies this attribute comes from an independent third party or from the vendor or manufacturer. An icon can be created for EPPC for use in FEDLOG that will distinguish the product as having received certification. The Green Tree indicating the product has an environmental attribute will accompany the third party certification icon. The special designation of third party in FLIS will highlight that a vendor has gone through the certification process for their product. This recommendation can be implemented with the existing DLIS system structure. As the use of third party expands nationally and internationally, additional third party organizations will be recognized.

A second option for third party certification is to treat it in FLIS as another attribute. Products that have been third party certified will receive an ENAC for third party. The product will appear in FLIS with the green tree designation and the two digit alphanumeric code for third party and the relevant attribute code. IDA does not recommend this as the preferred solution.

IDA recommends the Joint Group on Environmental Attributes accept all products certified by the South Coast Air Quality Management District as third party certified for Low-VOC content. These products would receive the Low-VOC ENAC code as well as the third party certification designation of EPPC in FLIS.