

*February 28, 2007*

**Comments of the United States on Council Directive 80/181/EEC  
on the Approximation of the Laws of the Member States  
Relating to the Units of Measurement**

The United States appreciates this opportunity to provide comments on the update for EU Council Directive 80/181/EEC on the approximation of the laws of the Member States relating to the units of measurement (commonly known as the Metric-Only Directive).

The United States commends the European Commission for reconsidering the deadline on the prohibition on supplementary indications, and applauds the Commission for conducting this public consultation process. We welcome this process as a step towards providing a more meaningful opportunity for stakeholder input in the ongoing European Union (EU) deliberative process, and we urge the Commission to provide meaningful consideration of, as well as a response to, all substantive written comments it may receive from interested parties in respect of this consultation.

Directive 80/181/EEC (Directive) defines the units of measurement for use in the EU and requires the use of the International System of Units (SI) or metric system whenever a quantity is stated. The Directive allows supplemental units (e.g., the customary inch-pound units used in the United States) to be shown in combination with metric units until December 31, 2009. However, Article 3 of the Directive will require manufacturers and others to label all products marketed in the EU, with few exceptions, exclusively in metric units, beginning on January 1, 2010. As such, the current EU practice of permitting the use of supplemental units of measurement, in addition to metric labeling, would be eliminated. Because the Directive requires the use of SI units in most aspects of life in the EU considered essential for the purposes of public health, safety, and trade, the potential impact of this modification is very broad.

The United States is keenly interested in this Directive because any action to halt the acceptance of dual-unit measurements on such items as product labels, catalogs and brochures, instruction and user manuals, blueprints, and advertisements would impose substantial and unnecessary costs on stakeholders, on both sides of the Atlantic. It would end the flexibility that transatlantic producers have for meeting consumer needs and preferences under current U.S. and EU labeling policies, increase production and marketing costs, and disrupt U.S.-EU trade flows in consumer and capital goods. This is because the impending EU metric-only rule would be incompatible with the current U.S. dual labeling environment: under the Fair Packaging and Labeling Act (FPLA), the United States requires labeling in both metric and inch/pound units (dual-unit labeling) for consumer products subject to federal regulation.

The potential incompatibility between EU and U.S. labeling rules raises serious concerns for U.S. and European industry. Companies engaged in transatlantic trade would have to create separate packaging, labeling, product manuals, and information, and perhaps maintain separate warehousing and inventory systems, for metric and non-metric markets. Thus, the EU metric-only requirement would impose substantial costs. A 1999 survey conducted by the Transatlantic Labeling Alliance projected that annual transatlantic trade in excess of \$250 billion in consumer and capital goods potentially could be impacted by the EU's metric-only labeling requirement. At the time, the Alliance estimated compliance costs conservatively in excess of several

hundred million dollars. Such additional costs, which could lead some small and medium-sized enterprises to exit the transatlantic market, would likely be passed onto U.S. and EU consumers without any corresponding benefits. There is no indication that the practice of dual labeling is causing problems and, thus, this change is unnecessary. In fact, continued use of supplementary information on packaged goods is a mutually beneficial practice for business and consumers.

It is therefore no surprise that leading U.S. and EU industry organizations, such as the Transatlantic Business Dialogue (TABD), UNICE, Orgalime, and the National Association of Manufacturers (NAM), support amendment of the Directive to permit the continued use of dual labeling so that producers may retain the ability to use the same packaging and labeling in both the EU and U.S. marketplaces. EU and U.S. manufacturers also desire to maintain the status quo given the complexity of current global supply chains where sometimes manufacturers do not have control over the final destination of their products. Further, prohibiting the use of well-understood and accepted systems of measurement, such as wire gauges, could increase public safety risks in sectors such as construction and electrical equipment.

The Commission's staff working document (December 22, 2006) frames the consequences of imposing metric-only labeling in clear, simple terms (pages 6 and 7):

“To the credit of the US authorities there has been a large increase in states that accept metric-only labeling in the United States. . . . A metric-only EU would force U.S. exporters to relabel all products they export to the EU. This would be a strange way of thanking the US for adapting their state and federal laws to conform to international standards. By requiring metric-only labeling the EU would be imposing a new barrier on trade to products from the US.”

We concur that such an action by the EU would impose an unnecessary new barrier.

The United States further notes, as referenced in the Commission staff working document, that it is committed to promoting the use of the metric system. The U.S. government sponsors programs focused on federal procurement practices, public education and outreach efforts that promote conversion to the metric system. There are recent positive results: for example, in January 2007, the National Aeronautics and Space Administration (NASA) decided to use metric units for all operations on the lunar surface when it returns to the moon, which will bring the metric system into wider use by hundreds of aerospace manufacturers and suppliers. Moreover, all 50 U.S. states permit wholesale (non-consumer) packages to carry metric-only labeling, and all but four U.S. states (Alabama, Hawaii, New Jersey, and New York) allow metric-only labeling on retail consumer packages of products regulated solely by the states.

Even so, in certain sectors some of the measurement units used remain non-metric as they have gained wide acceptance over time. One such example is measurements for ophthalmologic surgery instruments where "G" represents gauge to reflect diameter of solid and/or hollow lumens and tubes. Another is the calorie (a non SI unit), provided on labels of food packages, which is very important for nutritional information. We expect other such examples to be brought to the Commission's attention during the consultation process and we encourage the

Commission to balance the potential costs that may be imposed by the upcoming prohibition with its potential benefits.

Accordingly, based on our review of the likely adverse impacts of an EU metric-only rule, the United States wholeheartedly agrees with the Commission's working document conclusion that, "[i]t would seem that there is reason to indefinitely extend the period of allowing supplementary markings on products in the EU market."

In the spirit of ongoing efforts to enhance transatlantic regulatory cooperation, and the EU's "better regulation" initiative, we urge the EU to indefinitely extend the period for accepting supplementary marking so that labeling and packaging can be adapted to consumers' needs and preferences, production and marketing costs can be reduced and packaging waste can be held to a minimum. Indefinitely allowing supplementary indications would also minimize potential mistakes in safety and health applications and ensure that the vast U.S.-EU trade in consumer and other goods can continue uninterrupted and without being burdened by unnecessary regulations. We encourage the Commission to publish a decision to extend the acceptance of supplementary markings before 1 January 2008 in order to avoid needless uncertainty for transatlantic stakeholders over the next few years.

## **USG responses to additional questions from the EC consultation document:**

### **1. Should the “katal” be introduced into Directive 80/181/EEC?**

The responsibility for interpreting the International System of Units (SI) for the United States has been delegated to the Director of the National Institute of Standards and Technology (NIST).

The “katal,” for catalytic activity will be recognized in the next edition of NIST Special Publication 330 “The International System of Units (SI)” which is in preparation at the time of this comment and is tentatively scheduled for publication by the end of 2007.

The 2007 edition of NIST Special Publication (SP) 330 will conform with the English text in the Bureau International des Poids et Mesures (BIPM) SI Brochure (8th Edition, 2006). A notice of its publication will be issued by the Secretary of Commerce in the Federal Register. We believe that the “katal” should also be introduced into Directive 80/181/EEC in order to harmonize with the BIPM SI Brochure.

### **5. Should the exemption in Article 2b be maintained in Directive 80/181/EEC?**

The Directive’s scope currently does not extend to the units of measurement used in air, sea and rail transport, which have been laid down in international conventions or other agreements binding the Community or Member States [Article 2(b)]. This exemption should remain for the air transport sector in the interest of upholding public safety, maintaining the efficiency of the international air transport system, and avoiding disruptions in global aerospace commerce.

The basis for the exemption appears to be Annex 5 of the Chicago Convention on International Civil Aviation, which provides for dual units of measurement in aviation. This is particularly pronounced in air navigation, where non-metric units for speed, altitude, and distance are specified in dual units of measurement. These units of measurement are used commonly in many of the world’s largest air transport systems, including those of the United States and Europe. Transition to the metric system in Europe would raise safety issues from an operational point of view and cost issues from the need to adapt or add technology to aircraft in international air transport. In addition, air crews on both sides of the Atlantic would need to be retrained in the use of both systems. As 40 percent of international aviation is between the United States and Europe, this would represent a significant cost. We wonder whether any benefits of moving to metric-only in air transport in Europe would outweigh (a) the potential reduction in operational safety and (b) the increased cost of adapting aircraft and retraining crews that serve the EU market. In any case, given the global nature of the industry and the world-wide applicability of the Chicago Convention, it seems more appropriate to address units of measurement in air transport at the International Civil Aviation Organization.

Beyond air navigation, there is widespread use of metric and non-metric units worldwide by the aviation industry, including manufacture, maintenance, repair, and training related to aircraft, engines, parts, supplies, and manuals. In design and certification of aircraft, engineers and certification specialists are trained in both units of measure, but, in practice, they will work in the dominant system in their market and make conversions when shipping products for global use.

Maintenance activities are more predominantly influenced by the use the dominant units of measure in a particular market. Such flexibility is facilitated by the fact that aeronautical products, components, and parts usually have both metric and non-metric labels for ease of global use. Switching to metric-only would potentially cause supply and system efficiency problems since users that prefer non-metric units would seek out at least dual-labeled products and avoid metric-only products.

From a human factors point of view, changing from a familiar unit of measure to an unfamiliar unit of measure poses a safety problem. Humans may misread measurements or incorrectly calculate the conversions between units of measurement when those measurements involve more than simple linear or volumetric conversion. The potential is real for errors in position determination operationally or in fuel computations. Consider the 1983 case of a Canadian large transport aircraft, the first in a carrier's fleet to measure fuel volume in metric units. Used to measuring fuel in terms of weight in non-metric units, the ground and flight crews miscalculated the fuel taken on board, and the large transport aircraft landed out of fuel far from its destination as a glider. The safety risk is real when switching from one unit of measure to another.

Another safety risk to consider is that of the regulations, advisories, and directives that govern the safe design, maintenance, and operation of aircraft. Product and operational manuals, airworthiness directives, service bulletins, guidance, etc. are frequently written using a mixture of metric and non-metric units depending on the market for those products. In addition to being costly to republish past documents in metric only, changes in units of measure in such regulatory documents can always open up the possibility of a miscalculation that could result in reduced safety from unintentional errors. The U.S. Federal Aviation Administration publishes safety information such as airworthiness directives and safety advisory information bulletins using both metric and non-metric units when the product is known to have worldwide usage. (We note that the European Aviation Safety Agency provides both metric and non-metric units in its regulatory materials, at least for now.) Operational manuals and service bulletins frequently indicate both metric and non-metric units of measurement for aircraft that may operate worldwide.

The global air transport system functions effectively through the use of metric and non-metric units of measure, facilitating air transport operations and aeronautical products around the world. The 2006 worldwide aviation accident record was the lowest in history while transporting the most passengers. To maintain the safety and efficiency of international air transport, we urge the Commission to maintain the exemption in Article 2b in Directive 80/181/EEC and to do so indefinitely.