



# A chronology of the metric system

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## Important dates in the history of the modern metric system:

**1585**

In his book *"The Tenth"* Simon Stevin suggests that a decimal system should be used for weights and measures, coinage, and divisions of the degree of arc.

**1670**

Authorities give credit for originating the metric system to Gabriel Mouton, a French vicar, on about this date.

**1790**

Thomas Jefferson proposed a [decimal-based measurement system](#) for the United States. France's Louis XVI authorized scientific investigations aimed at a reform of French weights and measures. These investigations led to the development of the first "metric" system.

**1792**

The U.S. Mint was formed to produce [the world's first decimal currency](#) (the U.S. dollar consisting of 100 cents).

**1795**

France officially adopted the metric system.

**1812**

Napoleon temporarily suspended the compulsory provisions of the 1795 metric system adoption.

**1840**

The metric system reinstated as the compulsory system in France.

**1866**

The use of the metric system made **legal** (but not mandatory) in the United States by the [\(Kasson\) Metric Act of 1866](#) (Public Law 39-183). This law also made it unlawful to refuse to trade or deal in metric quantities.

**1875**

[The Convention of the Metre](#) signed in Paris by 17 nations, including the United States. The *Meter Convention*, often called the *Treaty of the Meter* in the United States, provided for improved metric weights and measures and the establishment of the **General Conference on Weights and Measures (CGPM)** devoted to international agreement on matters of weights and measures.

**1889**

As a result of the [Metre Convention](#), the U.S. received a prototype meter and kilogram to be used as measurement standards.

**1893**

These metric prototypes were declared "fundamental standards of length and mass" in the [Mendenhall Order](#). Since that date, the yard, pound, etc. have been officially defined in terms of the metric system.

**1916**

The **Metric Association** formed as a non-profit organization advocating adoption of the metric system in U.S. commerce and education. The organizational name started as the

**American Metric Association** and was changed to the **U.S. Metric Association** (USMA) in 1974.

**1920**

The Metric Association published its first metric style guide. [Its current edition is now available as [Guide to the Use of the Metric System \(SI\)](#)]

**1954**

The **International System of Units** began its development at the 10th CGPM. Six of the new metric base units were adopted.

**1958**

A conference of English-speaking nations agreed to unify their standards of length and mass, and define them in terms of metric measures. The American yard was shortened and the imperial yard was lengthened as a result. The new conversion factors were announced in 1959 in the *Federal Register*.

**1960**

The **meter** was redefined in terms of wavelengths of light by the 11th CGPM, and the new metric system was given the official symbol SI for the *Système International d'Unités*, the "modernized metric system".

**1964**

The National Bureau of Standards (NBS) made the metric system its standard "except when the use of these units would obviously impair communication or reduce the usefulness of a report."

**1968**

Public Law 90-472 authorized a 3-year [U.S. Metric Study](#), to determine the impact of increasing metric use on the U.S. This study was carried out by the National Bureau of Standards (NBS).

**1971**

The [U.S. Metric Study](#) resulted in a *Report to the Congress: A Metric America, A Decision Whose Time Has Come*. The 13-volume report concluded that the U.S. should, indeed, "go metric" deliberately and carefully through a coordinated national program, and establish a target date 10 years ahead, by which time the U.S. would be predominately metric.

**1973**

The UCLA/USMA/LACES/STC and other professional groups **National Metric Conference**, the largest ever held, totaling 1700 registrants, took place at the University of California, Los Angeles in September. It took place as a result of USMA's recommendation. USMA coordinated and directed the event. One of the speakers was the U.S. Secretary of Commerce.

Also, the **American National Metric Council (ANMC)** formed as a not-for-profit, non-advocative trade organization to plan and coordinate SI implementation by U.S. industry.

**1974**

The [Education Amendments of 1974](#) (Public Law 92-380) encouraged educational agencies and institutions to prepare students to use the metric system of measurement as part of the regular educational program.

The initials "U.S." were added to the Metric Association name by the Board of Directors. The organization is now known as the "U.S. Metric Association, Inc." with the initialism "USMA".

**1975**

The [Metric Conversion Act of 1975](#) (Public Law 94-168) passed by Congress. The Metric Act established the **U.S. Metric Board** to coordinate and plan the increasing use and voluntary conversion to the metric system. However, the Metric Act was devoid of any target dates for metric conversion.

**1976**

The [National Council of Teachers of Mathematics \(NCTM\)](#) started the [National Metric Week](#) tradition, with the first one during the week of 10 May 1976, the year after the [Metric Conversion Act of 1975](#) was enacted.

**1979**

The Treasury Department's Bureau of Alcohol, Tobacco, and Firearms (BATF) requires [wine](#) producers and importers to switch to metric bottles in seven standard [liter and milliliter] sizes.

**1980**

The Treasury Department's Bureau of Alcohol, Tobacco, and Firearms (BATF) requires [distilled spirits](#) (hard liquor) bottles to conform to the volume of one of six standard metric [liter and milliliter] sizes.

**1982**

President Ronald Reagan disbanded the **U.S. Metric Board** and canceled its funding. Responsibility for metric coordination was transferred to the Office of Metric Programs in the Department of Commerce.

**1983**

The **meter** is redefined in terms of the speed of light by the 17th CGPM, resulting in better precision but keeping its length the same.

**1988**

The [Omnibus Trade and Competitiveness Act of 1988](#) (Public Law 100-418) amended and strengthened the [Metric Conversion Act of 1975](#), designating the metric system as the preferred measurement system, and requiring each federal agency to be metric by the end of fiscal year 1992.

**1991**

President George H. W. Bush signed [Executive Order 12770, Metric Usage in Federal Government Programs](#) directing all executive departments and federal agencies implement the use of the metric system. The Executive Order is also available as an appendix to: [Interpretation of the SI for the United States and Federal Government Metric Conversion Policy](#)

**1994**

The [Fair Packaging and Labeling Act \(FPLA\)](#) was amended by the Food and Drug Administration (FDA) to require the use of dual units (inch-pound AND metric) on all consumer products.

**1996 April 15**

All four **Canadian Stock Exchanges** began decimal trading, the first exchanges in North American to abandon the old "pieces-of-eight" trading system and welcome the new decimal system. The old tradition of trading stocks in increments of one-eighth of a dollar, or 12.5 cents, dates back to when the Spanish mille dollar was divided into "pieces of eight".

**1996 July**

All surface temperature observations in National Weather Service [METAR/TAF](#) reports are now transmitted in degrees Celsius.

**2000 September 30**

This deadline that all agreements, contracts, and plans processed by individual states for **federally-funded highway construction** be in metric units was canceled by Congressional action, leaving metric conversion as voluntary but still recommended to comply with the [Omnibus Trade and Competitiveness Act of 1988](#). Several State Departments of Transportation continue to use the metric system despite the deadline being rescinded. See [Did You Know That](#) for more details on this topic.

**2001 April 09**

**U.S. Stock Exchanges** finalized the change to **decimal trading**. The [Securities and Exchange Commission](#) has ordered that all stocks must be quoted in dollars and cents

rather than fractions by this date. The switch to decimal trading brought the U.S. in line with the rest of the world's major exchanges. This follows the change of the Canadian Stock Exchanges to decimal trading in 1996.

**2004 July 08**

UK Metric Association (UKMA) issued a comprehensive report, [A Very British Mess](#), on the need to complete UK metrication.

**2005 January 20**

Speed limits in Ireland were converted from miles per hour to kilometers per hour (km/h). To accompany this, new cars have kilometers as the primary speed displayed on their speedometers. Wind speeds in weather reports were also changed to kilometers per hour. See the Irish Department of Transport announcements at <http://www.transport.ie/viewitem.asp?id=5861&lang=ENG&loc=1801> and <http://www.gometric.ie/>

**2007 January 08**

Metric Moon: NASA has decided to use metric units for all operations on the lunar surface when it returns to the Moon. See the NASA announcement at [http://science.nasa.gov/headlines/y2007/08jan\\_metricmoon.htm?list864576](http://science.nasa.gov/headlines/y2007/08jan_metricmoon.htm?list864576).

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## Future metric deadlines:

**Before the end of 2009**

The U.S. should allow **metric-only packaging** by amending the [Fair Packaging and Labeling Act \(FPLA\)](#). This would be a good step towards meeting EU requirements for SI-only labels in 2009.

**2009 December 31**

**All products sold in Europe** (with limited exceptions) will be required to have **only SI-metric units** on their labels. Dual labeling will **not** be permitted. Implementation of the labeling directive, previously **1999 December 31**, was extended by the *EU Commission* for 10 years, giving more time for companies to comply and for U.S. regulations to allow metric-only labeling on consumer products. See [Did You Know That](#) for more details on this topic.

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See also USMA's list of [Metric-system-related events and anniversaries](#)

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Back to [USMA home](#).

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