on the way to metric

from the editor's desk

By the best estimates available, it would cost the United States between $10 billion and $20 billion to convert entirely from the system of measurements based on the English units to one based on metric units. Admittedly, this is a range through which one could drive a truck of considerable size. But until firm data are available, the impact of conversion will remain subject to just such speculation.

The House of Representatives—after nearly three years of unforgivably inane dawdling—has finally approved authority for the Department of Commerce to conduct the study that will develop the data, but has refused to finance it. Action by the Senate and approval by the President should be automatic. And special funds or no special funds, the Commerce Department's National Bureau of Standards is eager to do the study. Mandatory conversion will be up to the Congress, which sooner or later must vote to join the rest of the world, allowing the necessary decade or two to make conversion feasible.

The problems of conversion are considerable, ranging from the rewriting of books to the retooling of entire industries. Some U.S. industries have already adopted metric units, and some professional publications have taken the plunge as well, as many of our readers have urged us to do.

It is a direction in which we have been moving, though there will continue to be limits to our consistency, limits dictated by our role as a news magazine rather than a professional journal.

There will be situations, for example, in which English units may be so natural to the subject being reported as to virtually dictate their use. And in such circumstances we feel it would serve no purpose to translate from English to metric. When the U.S. Congress, for instance, insisted on limiting construction of a new laboratory to beyond a 50-mile radius of Washington, D. C., it might have been educational to remind the reader that the radius is really 80.45 kilometers. It also seemed unnecessary.

Conversely, it seems just as unnecessary to declare that a completed five-meter section of a cryogenic accelerator is really 16.405 feet long.

Although most of our readers live in the non-metric United States, all of them are either scientists or are scientifically sophisticated enough to be familiar with the metric system.

For such a body of readers, the more common units in either system require no conversion. Other units will not be made more meaningful by it. It does not seem to help, for instance, to declare that an angstrom is either a ten-billionth of a meter or 3.937 millionths of an inch.

There will continue to be occasions, however, where the material being reported involves obscure units. Indian farmers, for instance, persist in measuring bulk grain by units like the maund, despite the Indian adoption of the metric system. And where those and such units as the barn and the parsec come up, they will continue to be converted.

Our use of the metric system, by and large, will be dictated by the fact that we deal with science and its applications. Our inconsistency is dictated by the fact that we, as well as U.S. science at least, must continue to exist in an environment dominated by English units.

We can foresee a time when the use of English units will have eroded in the United States. As that erosion progresses, so should the residue of English units begin to disappear from our pages.

Warren Kornberg