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### The Consensus principle in standardization

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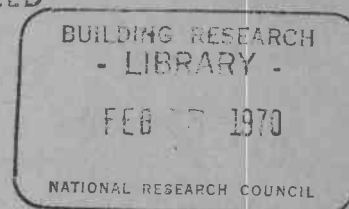
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# THE CONSENSUS PRINCIPLE IN STANDARDIZATION

ANALYZED

BY  
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## LE PRINCIPE DE CONSENSUS DANS LA STANDARDISATION

### SOMMAIRE

Le principe de consensus dans la préparation des normes est respecté notablement pas ASTM dans tous ses travaux et préconise l'établissement de comités qui sont bien représentatifs. Ceux-ci sont formés par des membres représentant les consommateurs, les manufacturiers et les membres ayant un intérêt général afin qu'une opinion représentative puisse être obtenue sur les normes qui sont préparées. Le principe exige également qu'une attention particulière soit donnée à tous les votes négatifs et on essaie autant que possible d'atteindre l'unanimité ou une unanimité presque complète avant qu'une norme soit publiée. Ceci donne une stature spéciale aux normes qui sont préparées en fonction de ce principe.

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In almost all branches of technology, one can clearly see ahead what can only be called an explosion in the demands for new standards—for materials, methods and methods of test.

Demands for the control of the quality of consumer products alone will call for an expansion in the number of existing standard test methods that staggers the imagination. Industrial demands likewise will be almost certainly on a scale such as has not yet been seen.

These pressures will strain existing standards-writing facilities to the limit. There will probably be a corresponding impatience with the inevitably slow standards-preparing process and quite possibly a desire to cut corners in the attempt to get needed standards quickly.

Already, some signs of efforts are evident along this misguided direction. Members of ASQC need no reminder of the absolutely vital necessity of having standards that are sound in every way; in many cases a poor standard is worse than no standard at all when it is to be used for the control of quality. How can this essential high quality of national standards be ensured?

Fortunately there is available a clear-cut answer to this important question from the highest levels of American industry. It was early in 1963 that then Assistant Secretary of Commerce Dr. J. Herbert Holloman appointed a special Panel on Engineering and Commodity Standards and directed it to study the broad requirements for standards and related activities in the U. S. and to make recommendations. The panel consisted of eminent representatives of industry, government and standards bodies. Dr. A. Allan Bates (NBS) was the panel's secretary. The chairman was Dr. Francis L. LaQue, vice president of International Nickel Co.

The panel presented its report on February 2, 1965. Appropriately, it became known as the LaQue Report, shortened from the formal title, "Report of the Panel on Engineering and Commodity Standards of the Commerce Technical Advisory Board" to the Assistant Secretary for Science and Technology, U. S. Department of Commerce, February 2, 1965.

### Implementation Needed

Progress has been made in applying the important findings of this report but there is much that has not yet been implemented and that might well be reviewed again, and applied, if standardization is

# The Consensus Principle In Standardization

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to progress in the U. S. as it must, in the service of industry and government.

A major finding of the report is the disclosure of "a need for better understanding and broader use of the consensus principle in the development, adoption and recognition of voluntary standards. This applies particularly to the need for guidance of those engaged in standardization activities as to procedures that can be expected to avoid conflict with, and prosecution under, the laws on restraint of trade."

In describing how a proposed new institute (now USASI) should operate, the panel states "the procedures that would qualify a standard for recognition as a 'USA Standard' should have as an essential distinguishing feature, adherence to the principle of voluntary national con-

sensus of producers, users and general interests with full opportunity for open expression of the views of those affected in arriving at the required consensus.

"The prescribed procedures should be defined in consultation with the Department of Justice so as to serve as a guide to individuals and standards generating bodies in avoiding conflict with, and prosecution under, the laws on restraint of trade and should be characterized and recognized in the Charter of the Institute as having this quality."

The second specific recommendation to the institute (USASI) is that it should "review and streamline the normal procedures used by ASA, to accelerate and encourage recognition and designation of existing standards as 'USA Standards,' with special reference to those of the

national standards writing organizations which provide balanced consumer-producer representation and whose voting procedures assure that their standards represent a national consensus."

Consensus is a word that has been used a great deal in recent discussions about standards on this continent. It is one of the key words of the American Society for Testing & Materials (ASTM) and probably betokens one of the reasons for the international stature of that society. This can be said in the light of many discussions, far beyond the shores of this continent, in which one has been asked, always appreciatively, what is the secret of ASTM that has made its standards known and respected around the world and not only in English-speaking lands.

The complex process of preparing a new standard must not be forgotten: appreciation of the need, detailed study of all available information, painstaking research to establish new facts, reporting of all such progress in the form of papers and symposia, detailed discussion that points the way to still further inquiry, drafting of the first approach to a standard and its critical assessment by experts in the field, redrafting and steadily improving the initial attempt and, finally, promulgation of the standard through the due process established by the responsible society after all concerned have had a chance to be heard.

And just as soon as a standard is published, its review in service begins, leading to its regular revision through a repetition, with some variants, of the original drafting process.

This process is not peculiar to ASTM. It is followed by many industries for the development of their own internal standards. Industrial associations follow a similar path in the preparation of their own excellent industrial standards. Federal and state governments use a similar approach for their own special needs. Specialized societies are just as active in the preparation of standards for their own special fields as is ASTM in its broad coverage. The result is a great collection of useful standards, industrial, specialist or governmental, that serve a variety of purposes.

### The Consensus Principle

What makes ASTM standards "unique" is that they are all prepared by, and under the regular surveillance of, expert committees, the membership of which *must* be balanced between producers and non-producers, be they general-interest members or consumers. And with the ready

agreement of industry, the producers of products served by so many of its standards, no producer may be the chairman of a main ASTM technical committee. These are among the most basic policies of the society.

It is the joining of the views of this delicate and exact balancing of interests that is so appropriately called the consensus principle in the preparation of standards and which is so strongly recommended in the LaQue Report. In actual operation, it means that every main technical committee must have more general-interest and consumer members than producer members so that producers shall never dominate proceedings.

In addition, true consensus must be achieved within these balanced and expert groups by the most careful consideration of all negative votes when the proposed standard is ready for ballot. If unanimous agreement is not possible, as sometimes happens, every effort must be made to resolve the opposing views. Informal discussion will usually achieve this desirable end. Any unresolved negative votes should relate, in so far as is practicable, to matters of detail only, such that the main technical content of the standard has unanimous support.

The result will be a document that represents the consensus of the best current technical thinking on the subject involved, taking into account the views of both producers and consumers and with virtual or actual unanimity of agreement. The confidence that such a document can generate is well shown by the wide use to which ASTM standards are put throughout North America, and indeed far beyond these shores.

The emphasis that the LaQue Report placed upon the principle of consensus can now be better appreciated. It answers the question of how to achieve technical excellence in standards. One can hope, therefore, in line with the LaQue recommendations, that it will not be long before all U. S. standards can qualify under these stringent but eminently desirable requirements.

In Canada, the same goal is in view for standards that will probably be designated as Canada Standards by the Standards Council of Canada, soon to be established. The LaQue Report's influence already is felt far beyond the borders of the U. S.

The LaQue Panel recorded its concern over possible conflict between some types of standards-writing activity and the laws on restraint of trade. The consensus principle so faithfully followed by ASTM

fortunately has been vindicated by the courts. A few years ago, ASTM unwittingly was involved in a lawsuit. Although exonerated, the society, upon completion of the trial, appealed for a ruling upon its position in the case with special reference to anti-trust legislation.

The judgment of the court, after a careful review of all details of the society's procedure, stated (in part): "Because of the balance of interests represented on ASTM committees, and because of the detailed and scrupulously observed procedure which governs their operation, it is most unlikely that the views of one member or one group of members could predominate over the consensus of opinion of the committee as a whole. The technically qualified, balanced membership of ASTM committees, and the democratic procedure governing their operation, make it likely that the results reached by them will be scientifically sound and will represent the general interest."

In its conclusions of law, based upon the recited facts, the court stated (*inter alia*): "There is a strong public policy in favor of protecting ASTM's standardization work. . . . Because ASTM's work depends upon the participation of its members, and free and open discussion among them, there is a strong public policy in favor of protecting the right of those members to come to the society and express their viewpoints without fear of anti-trust prosecution . . . [and] because of the heavy reliance of federal, state and municipal governments upon ASTM for specifications, the society may be regarded as an essential arm or branch of government and its acts may be entitled to immunity from the anti-trust laws accorded governmental acts."

The court also stated: "The courts will be available for the protection of ASTM in its fine work on a case-by-case basis until such time as the legislature provides more definite rules for application of the anti-trust laws to its work."

The principle of consensus in the writing of standards could not have a more emphatic endorsement. Well proven in practice, recommended strongly by leaders in industry and government, endorsed by the courts of this land, the consensus principle should, therefore, be the hallmark of all technical standards in public use and, whenever possible, of all standards used within industry.

Such standards will provide a firm base for sound technological advance, for the operations of industry and—as a vital part of industrial activity—for the control of quality.