

# 2 Effectiveness of Participation in Standardisation



**Many of the readers of this journal participate** in standardisation activities or they are in the position that they delegate others to participate. Experts may enjoy joining a standardisation committee and sharing insights with others interested in the same topics. But is this participation effective in the sense that business interests are met? This paper provides some thoughts and lessons on how to enhance effectiveness of participation.

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### 1 Cooperation or Competition

Large parts of our country, The Netherlands, are below sea level. Windmills and nowadays electric pumps are used to keep these polders dry and all dikes and watercourses have to be in good shape. It was and is a common effort to achieve this. Due to these circumstances, the Dutch developed a tradition to cooperate for common goals, the so-called 'polder model'. It was in line with this tradition that the national organisation of industrialists and the national organisation of engineers founded, in 1916, the Dutch national standards institute (nowadays called NEN). Common standards should be developed for common benefits.

However, it is not self-evident that standards serve common benefits. The benefit for one company can be at the cost of another company. Shapiro and Varian [6] talk about standards wars: different standards competing for acceptance in the market. Also within a standardisation committee there can be competition: a quality level may be high or low which affects market position depending on whether a company is able to produce a high-quality product, an interface specification fits or does not fit to a company's product which may be decisive for a company's possibilities to deliver its product in future, etc.

For a participant in standardisation it is quite a difference whether the committee is characterised by cooperation or by competition. Moreover, this is not a situation of black or white, there may be in-between situations and the intentions may differ per participant. Standards development as such is a combination of a design process (determining the contents of the standard) and a decision-making process (resulting in approval of the standard). The more conflict of interest, the more difficult both are and the more difficult it is to contribute in an effective way. Below we will discuss the possibilities for a participant to contribute, starting with the situation of common interests.

## 2 Methods for Standards Development

Mostly, standardisation committees just sit around the table trying to agree on a standard, often by discussing a proposal presented by one of the participants. This habit may cause the committee to be 'locked' in points of view that prevent them from finding better solutions. This lock-in effect is reinforced by the social mechanism of 'group polarisation': a reinforcement of initial opinions resulting from group discussions between people that share this opinion. This may lead to an accentuation of opinions, ending in more extreme points of view. This mechanism undermines one of the basic principles of formal standardisation, namely that its procedures are directed at balancing the needs of all interested parties.

In general, the more diversity there is in ideas and points of view, the more difficult it is to achieve consensus. Then, open exchange of opinions and interests at an early stage is a prerequisite for finding common solutions. This is in accordance with the findings in game theory, where it is beneficial to the negotiation process if all parties involved have received the same information. Skipping such debates may lead to delays at later stages.

To create good standards, open discussions alone are not enough. It can be elucidating to regard standards as products. In general, designing products by simply sitting round the table and discussing what they should look like is not going to be fruitful. However, this is the way most standardisation committees work, and the sometimes dubious quality of the resulting standards is therefore not surprising. Designing products, in general, is an activity for which creativity has to be combined with logic. Some lessons learned from product development can be applied to standardisation.

Beitz [1] does this in the form of a systems approach in which he distinguishes three phases in standards development. Each phase consists of systems studies, systems synthesis, systems analysis, systems elaboration, systems decision, and systems construction planning.

Preferably this should be done in the committee but it can also be part of the participant's own preparations. More about methods for standards development can be found in [2, Chapter 13].

Phase	Activities
1 Systems phase	- Analyse requirements.
	- Search for possibilities to fulfil functions.
	- Develop alternative directions to meet these functional requirements.
	- Analyse and evaluate these alternatives.
	- Establish and decide on concepts of solutions.
2 Design phase	- Work out concepts of solutions.
	- Evaluate concepts.
	- Come up with and decide on preferred solutions.
3 Drafting phase	- Optimise sub-solutions and solutions.
	- Draft the standard in detail.
	- Evaluate the draft standard.
	- Gain approval.

Table 1: Phases in standards development [1]

### 3 Stakeholders and Stakes

In case of diversity in interests, a first thing you can do is to map the different stakeholders and their stakes, both those represented in the committee and those not represented. A method for tracing and characterising these stakeholders has been developed [4]. Per stakeholder, you should try to estimate the interests: does he support the development of a standard or does he dislike any standard, no matter its contents? Does this organisation have specific interests concerning the standards contents? To which extent are there common interests and, on which issues do the stakeholders disagree? Which stakeholders share the interests you have, which ones do not? Is it feasible to join forces with those who have the same interests? How strong will your coalition be compared to the other coalitions? Strength of a stakeholder may depend on, for instance, size, market share, knowledge, or IPR (Intellectual Property Rights) position. Are there any parties who have no specific interest at all and might be asked to cooperate with you? Can stakeholders who are in favour of your position and so far are not represented in the committee be persuaded to join so that the balance in the committee shifts in your direction?

### 4 Negotiating

The process of coming to an agreement with other parties can be seen as negotiating, so you can profit from general negotiation lessons [5]. In addition, some remarks can be made related to the specific situation of standardisation. First: discussions in standardisation take place by bringing up arguments. Arguments are more convincing in case these are based on undisputable facts, e.g., verifiable test results. Sometimes you can prepare for a meeting by collecting 'evidence' for your point of view, or you can offer the committee to use your test facilities to better underpin your viewpoints on the standard – it is difficult for the other participants to refuse such an offer.

A second characteristic is that standardisation committees tend to have a series of meetings. Being present in each meeting is essential for keeping track of the developments in the committee, getting the right sense about what is possible and what is not, and establishing relationships with other participants. The latter may include an 'investment' in informal contacts as well, e.g., by having dinner together or, by contacting other members between committee meetings. Convenors and secretaries of committees can have strong influence, e.g. in setting the agenda, leading discussions and editing texts. It can be a strategy to invest in getting such key positions.

Most standardisation organisations, especially formal standardisation organisations such as the International Organization for Standardization (ISO) work according to predefined procedures. These procedures are available for all participants but often they do not make the effort to study them. This is a wrong policy: if you know the contents of these procedures you are in a better position to make proposals concerning possibly the next steps in the standards development process or to enhance your chances for a favourable decision by using techniques such as credibly delaying the voting when your side is in the minority by e.g. insisting on more experimental evidence for which time is needed, thereby avoiding an untimely and undesirable decision.

## 5 'On Behalf Of'

Participants represent their company or another organisation, e.g., an industrial branch, a business organisation or an association of users. In the ideal case, the representative reports to his organisation about the progress in the committee and this organisation 'feeds' him with comments so that he knows what to do: what does the organisation want to achieve, what is the 'second-best' option, which freedom does the representative have to deviate from this during a meeting, in which cases does he have to consult his principal, etc. In practice, however, the communication between organisation and representative often is weak. The representative then might shift towards a 'double commitment' - not only to his own organisation but also to the committee in which he participates. Achieving a common result in this committee binds the members of this committee together and most participants dislike to disturb this process. Thanks to this mechanism, standardisation committees manage to reach consensus also in cases where one would not expect this, given the divergence in interests of the organisations represented in the committee. For the company, however, it can be questionable to which extent its representative has represented his company. Therefore, good communication between representative and organisation is one of the prerequisites for effective participation.

## 6 Quality of Participants

From the above it will be clear that success in participation stems from a combination of factors and, therefore, delegates preferably have a combination of several qualities:

- Academic level, at least the ability to make decisions without first having to ask others;
- Technical expertise, especially in those committees that draft the standards (working groups), and the ability to judge whether the contents of the standard are beneficial or harmful to the interests of the company;
- Strategic vision, especially in those committees that determine the direction of standardisation activities (technical committees, steering committees);

- Knowledge of standardisation procedures;
- (Where applicable): Understanding the relations between standardisation and regulation;
- Mastering the methods and skills, necessary in the making of standards;
- Language knowledge. English is a prerequisite but knowledge of other languages, e.g. French (second official language of ISO and IEC and language of many countries in Africa) or Spanish (main language in Central and South America, Mexico and Spain) is an advantage, especially in getting support from delegates from countries with a Romanic language;
- Have a sense of different cultures;
- Negotiation skills; and
- Character, e.g.:
  - Be patient: it can be a long process for which many meetings are needed. Delay can even be a tactic: 'avoid voting at an early stage'.
  - Be a consensus builder: try to get favourable results for your own organisation, but don't show off when having achieved ultimate victory. Give your opponents the feeling that they are not losers.
  - Be flexible in your tactics and stable in your strategy.

## 7 Education

From the above it will be clear that it is not self-evident that participation in standardisation will be effective but that good preparation can make the difference between success and failure. Standardisation education is a major element of this preparation. Information on standardisation education can be found in [3] and at <http://www.euras.org/education.htm>.

## 8 References

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