On symbols and terminology

-----Ursprüngliche Nachricht-----From: Michael Schmiechen

Sent: Thursday, May 18, 2017 4:18 PM

To: Marco Ferrando

Cc: Jinbao Wang; Moon Chan Kim; Tom Dinham-Peren

Subject: 28th ITTC: Terms of Reference reviewed

A Contribution to the work of the 28th ITTC Quality Systems Group

Dear Marco Ferrando,

having studied the 'General Terms of Reference' and the 'Terms of Reference (ToR)' for the 28th ITTC Committees, Special(ists) Committees and your Quality Systems Group I noticed, that all of the ToRs are overloaded with detailed, very intricate tasks, which cannot possibly be taken care of in-depth.

Further the Reports of all groups are required only in very general terms to include a section on "The need for R&D for improving methods of model experiments, numerical modelling and full scale measurements." According to my understanding this is the primary concern of the ITTC.

Having over the past decades developed quasi-steady methods of model and full scale powering tests, I have of course noticed with satisfaction, that the ToR for the Propulsion Committee 'at last' requires to "12. Monitor the use of and, if possible, develop guidelines for quasi-steady open water and propulsion model tests." I still have to study the implications of the second half of paragraph 4.

In the ToR for the Specialists Committee on Performance of Ships in Service there are of course more paragraphs related to my work (3: b, c, k; 4, 5: a). In the ToR for your Group I have of course noticed the 'standard' requirement 5. And having served on the Symbols and Terminology Group for five terms and produced the ITTC SaT List 1993, I claim, that this is another extremely difficult task, not to say 'impossible' to be dealt within one term.

In that ITTC SaT List 1993 I have already explicitly stated, that the current type of lists of concepts provides only half of the languages necessary for professional work. As an example of an adequate list, not only with rule driven symbols, rules explicitly stated, but explicit conventions, I attach the one I needed to develop for advanced powering trials and monitoring on model and full scale.

Similar lists will be necessary and will be developed in future for other problem areas. Thus the problem of the Quality Systems Group is already now, how to deal with such dedicated formal languages.

This is evidently not a problem to be solved by inexperienced naval architects or engineers in general, but by meta-physicists. Though the terminology for the basic concepts will remain the traditional, their rational, 'implicit' definitions and operational interpretations will be different from the traditional.

As a consequence the values of the 'magnitudes', alias 'quantities' or 'variables', identified will differ by definition, though maybe very little, as e. g. in the 'model' trial I have investigated. These facts have of course to be 'accounted' for in the symbols, in order to avoid further endless nonsensical discussions.

The naive belief in 'objective' facts, in particular those produced by the incoherent traditional conventions, ignores the fact, that all our theories are conventions, based on axioms, i. e. principles, on prejudices as Mark Twain noted precisely.

Already two hundred years earlier Goethe explicitly referred to this fact. And finally philosophers are now correctly talking about 'intersubjective' facts, based on shared conventions. According to the rules of the ISO et alii these conventions may be standardised, even if they are incoherent as ISO 15016, not meeting the state of the research.

In view of this situation not only the Quality Systems Group faces the dilemma, how to accommodate up-to-date, non-traditional conventions, urgently required to meet current [and future] requirements.

So much, so fast, as always (still) in a hurry, with best regards to my friends at Genova yours,

Michael Schmiechen.