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FOR PARTICIPANTS ONLY

INTERNATIONAL CONFERENCE ON
TONNAGE MEASUREMENT, 1969

Technical Committee

PROVISIONAL SUMMARY RECORD OF THE FOURTEENTH MEETING

held at Church House, Westminster, London, S.W.1,
on Monday, 9 June 1969, at 2.35 p.m.

Chairman: Mr. F. SPINELLI (Italy)

Secretary: Mr. Y. SASAMURA

A list of participants is given in TM/CONF/INF.1/Rev.1

N.B. Corrections to be incorporated in the final summary record of the meeting should be submitted in writing (two copies in French or English), preferably on the provisional summary record, to the Documents Officer, Committee Room 2 and after the Conference to the IMCO Secretariat, 22 Berners Street, London, W.1, not later than 8 July 1969.

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AGENDA ITEM 3 - CONSIDERATION OF MATTERS AS INSTRUCTED BY THE CONFERENCE (TM/CONF/6; TM/CONF/3; TM/CONF/C.2/2; TM/CONF/C.2/3; TM/CONF/C.2/WP.14; TM/CONF/C.2/WP.19 (continued) TM/CONF/C.2/WP.10; and Add.1)

Mr. PRIVALOV (USSR) expressed his delegation's appreciation of the selfless work done by the Working Group on gross and net tonnage. In connexion with the formula for gross tonnage, he believed that the results produced fully satisfied the terms of reference stipulated by the Conference; the next step clearly was to determine how the variable coefficients could be adopted to give regulations of the required accuracy.

As regards the net tonnage formula, he regretted that no substantial results had been achieved and that there was still a considerable divergence in the figures arrived at on the various formulae considered, even where the coefficients had not been determined for the entire fleet but with the exclusion of certain categories of vessel. The Technical Committee had, nevertheless, to implement the decision of the Plenary session to determine the basis for calculating net tonnage, but at the present interim stage of discussion it could not proceed without more specific data and conclusions before it.

Gross tonnage

Mr. ROCQUEMONT (France) also extended his congratulations to the Working Group. He noted that from a comparison of the first column of results given in Annex I to TM/CONF/C.2/WP.19, (calculated for a constant coefficient), with the second and third columns, (both calculated for a coefficient as a function of the volume but with different constants), it

was clear that the former gave results which were substantially as valid as those obtained for the latter, particularly as regards the standard deviation of the net tonnage. For reasons of simplicity, therefore, his delegation favoured adoption of the constant coefficient postulated by the Working Group.

Mr. PROHASKA (Denmark) recalled that in introducing the Progress Report of the Working Group, its Chairman had stated that its results and conclusions were only provisional; it was premature, therefore, to assume that the constant coefficient was as good as any other solution.

In that connexion too, he pointed out that the first column of results had been calculated from a computer programme with a coefficient which was designed to give the lowest minimum deviation possible, whereas the other columns had been calculated simply from studies of graphs of data available with no conditions imposed on the coefficient. If the figures used in the last two columns were changed in the formula by only 3%, the deviation about the mean would then be appreciably lower than for the first column.

Mr. MURPHY (USA) also applauded the Working Group and noted that the three columns of results gave fairly close results. His delegation, however, gave tentative preference to the third solution, since it dealt rather more equitably with the smaller ships.

Mr. GUPTA (India) observed that when the Working Group came to re-consider the figures it had used in its provisional calculations, it should take a constant coefficient of 0.3, rather than 0.296, since that would greatly simplify calculations and yet make little difference to the final result.

Mr. WILSON (UK), supported by Mr. NOZIGLIA (Argentina), said in principle his delegation agreed with the views expressed by the United States delegation; a final opinion was, however, not possible until the graphs of the data used for the results were available for study.

Mr. ROCQUEMONT (France) agreed that the Committee needed to have a curve to indicate the basis for the values of the coefficients used in the second and third columns of results.

The CHAIRMAN suggested that it would be useful to have a graph of the total volume, as abeissa, versus the gross tonnage, as calculated from the formula, in each case.

Mr. GREGORY (UK), Chairman of Group II of the Working Group, explained that copies of the United Kingdom graphs and one for thirty-two ships of the Netherlands fleet were available and could be circulated to delegations; plots of the United States data could also be made if required.

Mr. PROHASKA (Denmark) pointed out that the final choice of formula would have a great effect on all ships. Adoption of the formula GT = aV would have serious repercussions on the future design of large container ships which currently had light cargoes and large freeboard, with a freeboard to draught ratio of around 2.4. The first formula would, however, assign them enormous gross and net tonnages and thus encourage designers to decrease the freeboard and provide for more containers on deck, with grave consequences in respect of safety. Likewise, the old open shelter-deckers, currently operating with no deck openings, would have such high gross tonnages that they would become uneconomical to run.

It was for those reasons that the Danish delegation had submitted the proposal contained in TM/CONF/C.2/WP.10, TM/CONF/C.2/WP.10/Add.1 to introduce a correction to the proposed

factor, for inclusion in the gross tonnage formula, defining the ratio of maximum designed draught to maximum draught obtainable for full scantling vessels. His delegation considered that such a simple addition to the formula would make it much easier for owners to allocate the right ships for the type of trade in question.

Mr. DE JONG (Netherlands) observed that since gross tonnage was to be dependent on displacement, a definition of the uppermost deck was needed to avoid designers incorporating as many open spaces as possible. His delegation favoured introduction of a reduction factor in the formula: i.e. some such coefficient as a constant, plus another constant multiplied by a logarithmic function of the volume; the whole to be multiplied by the ratio of designed draught to maximum draught.

Since, however, the Committee had not been instructed to investigate such a solution it would have first to revert to the Plenary session for a re-formulation of its mandate.

Net tonnage

Mr. WILSON (UK) explained that the list of ships given in the table on page 1 of Annex I of TM/CONF/C.2/WP.19 did not necessarily show the proper balance of the different numbers of vessels of any given type in the world fleet; they were, in fact, based on data obtained from a previous IMCO exercise. He pointed out, however, that the latest figures presented in TM/CONF/3 represented a careful attempt to show a reasonable balance for the different types of ship.

Mr. ROCQUEMONT (France) pointed out that the results calculated for the proposed net tonnage formula with both non variable and variable coefficients /columns (i), (ii) and (iii)/ showed a considerably higher mean deviation ratio and standard deviation than those for gross tonnage.

The CHAIRMAN noted that the figures indicated that some allowance should be made for passenger spaces since column (ii), where all types of passenger ships and ferries were excluded, showed an improvement in standard deviation of about twenty per cent.

Mr. PROHASKA (Denmark) agreed that some term to take account of passenger space or number would greatly improve the formula, but the results, whichever the formula used, will not be as close as possible to existing values because there is no criterion in existing figures for net tonnage.

Mr. GREGORY (UK) said that the original point had been that the exclusion of passenger ships under column (i) would reduce the standard deviation. The Working Group was examining other formulae, including a constant related to displacement plus a passenger number to be applied to passenger ships.

Mr. MURPHY (USA) agreed with the Chairman's conclusion on the need to pay more attention to passenger ships under column (i). As to the problem of bulk and oil carriers under column (iii), his own conclusion was that a simple formula would not produce results close to the figures applying to existing fleets which took into account the fact that fleets included different types of ships used for different purposes. It would be better to wait for the remainder of the Working Group's report.

Mr. ROCQUEMONT (France) said that he agreed with the Chairman's comments but doubted that satisfactory results could ever be obtained. He wondered whether the corrections were worthwhile.

Mr. MUENCH (Israel) said that without the background data and without a diagram it was difficult to assess the respective values of the formulae. It was clear that by eliminating passenger ships and moving from column (i) to column (ii) the standard deviation would be reduced. It was odd, however, that eliminating bulk and oil carriers and moving from column (ii) to column (iii) should produce so little difference. He shared the French representative's doubts on the likelihood of obtaining better results, since there seemed to be no relationship between displacement and existing net tonnage figures which could readily be incorporated into any formula.

He suggested that the Working Group should be instructed that, should it prove impossible to reduce standard deviation below a stated level, it should be free to explore other possibilities: it might transpire that the Committee's instructions had not provided the right basis for obtaining a formula as close as possible to the existing system.

The CHAIRMAN said that, with the elimination of passenger spaces, even a 20 per cent reduction of standard deviation would greatly reduce the deviation for each passenger ship. It should not, therefore, be assumed that correction was worthwhile for a difference of 20 per cent.

Mr. PROHASKA (Denmark) said that he did not agree with the French representative that a simple formula would produce better results. In the case of an existing ship with a displacement of 20,000 tons, for example, the simple formula of displacement x times 2.7 would produce a net tonnage of 6,000, when the actual net tonnage was 7,500. That was a considerable reduction.

Although it had been agreed that there would be no great harm if passenger ships competing with airlines obtained a reduction, reductions of the kind he had instanced would be too high for the port authorities. The Working Group had discussed the possibility of a formula taking account of passenger ships, but it might welcome further directives from the Committee.

He was opposed to the suggestion by the representative of Israel, because even if the lowest possible standard deviation was obtained, half of the existing passenger ships might find their net tonnage increased. The difficulty was that passenger accommodation differed from ship to ship.

The CHAIRMAN said that there was nothing to prevent the Committee from requesting the Working Group to explore other possibilities. The Committee could not take a decision until it had seen the Working Group's complete report; the present discussion was merely to facilitate a decision.

Mr. PROSSER (UK) said that the Working Group had submitted a valuable interim report, but the most important part, concerning the possibility of obtaining an acceptable net tonnage formula based on displacement with water ballast allowance, was still to come. With the limited time that remained, he doubted the wisdom of deferring a decision until the full report had been received.

There was a clear division of opinion in the Committee. One group supported Proposal C (gross volumetric tonnage plus displacement), while another group, comprising countries with large fleets, opposed it. There was no possibility of an agreed solution unless the gap could be bridged: the time had come for a compromise. The United Kingdom delegation

had always considered Proposal C as the best solution and had understood that it would not come into force too soon for existing ships. It was prepared, however, to make concessions to meet the views of the majority. Any of the three formulae analyzed by the Working Group would serve as a basis for the gross tonnage parameter. His delegation would prefer the solution giving a greater allowance for small ships, which was broadly based on Proposal C. He did not agree with the Danish representative's argument that it would lead to the building of less safe ships, since ships had to comply with many regulations and requirements other than those of tonnage measurement.

The question of net tonnage was more difficult, since every one was aware of the difficulty, if not impossibility, of finding a displacement formula embodying water ballast allowance and giving results not too far from the existing system. True, the Working Group might produce a viable formula. Meanwhile, however, in order to save time, the Committee might consider a possibility of asking the Plenary Conference for authority to reconsider the proposal in document TM/CONF/9/Add.1, verbally amended by the Norwegian representative, in order to include all cargo and passenger spaces, irrespective of their location, but allowing for the introduction of a coefficient which would reflect the change from open to closed shelterdeck condition in ships.

Mr. PROHASKA (Denmark), while not opposing the United United Kingdom representative's suggestion that the matter be referred to the Plenary Conference said that the Working Group's formula should be ready for discussion the following morning. He demonstrated by means of a diagram that the Norwegian proposal in document TM/CONF/9/Add.1 would penalize safety by influencing design toward less safe ships. Moreover, measurement of total volume would make it impossible for ships to operate economically since manning was based on gross tonnage in most countries.

Mr. QUARTEY (Ghana) expressed his concern at the Committee's lack of progress. He supported the United Kingdom representative's proposal that all possible avenues should be explored and that the Working Group should pursue its efforts to find a satisfactory system.

Mr. FILIPPOVICH (USSR) said that his delegation, too, was concerned that at the present late stage in the proceedings, the Committee had not even decided on the method of establishing a second tonnage parameter. If a satisfactory solution were not found within a short time, the Committee should accept the United Kingdom representative's proposal.

Mr. ROCQUEMONT (France) said that his delegation had come to the Conference expecting to return home at the end with a draft Convention duly signed and shortly to be ratified. It was time to put an end to the vast variety of tonnage measurement systems. Like the United Kingdom delegation, the French delegation was ready to make concessions. It could not, however, accept a compromise that meant challenging decisions already taken by the Plenary Conference and based on the views of Member states which had matured over the past year. The only possibility of achieving a Convention by the end of the Conference may lie in maintaining such decisions.

Mr. GUPTA (India), in the light of the United Kingdom proposal and the present situation, proposed that the Committee should consider very seriously whether it was necessary to have more than one gross tonnage. Difficulties with new concepts occurred only in the transitional period and the people concerned would soon adjust themselves to a single tonnage.

Mr. CHRISTIANSEN (Norway) said he was gratified by the willingness of the United Kingdom to compromise. Norway had given ample proof throughout the preparatory stages of its own

readiness to participate in give and take and was prepared to compromise further by accepting the three formulae respecting gross tonnage put forward by the Working Group.

On the question of net tonnage, however, it was unable to compromise and, hence, welcomed the United Kingdom suggestion that the matter should be re-opened, in the hope that agreement would be reached on the basis of its own proposal in document TM/CONF/9/Add.1. His delegation's main object was to arrive at a convention that could be ratified in the near future rather than twenty years hence.

Mr. ENDO (Japan) said that his delegation endorsed the United Kingdom proposal and also the suggestion made by Ghana, i.e. that the Working Group should study all possible ways of measuring net tonnage, including the use of volume as the basic parameter. If necessary, the Conference should be asked to consider revised terms of reference for the Technical Committee to that effect.

Mr. ERIKSSON (Sweden) recalled that his delegation was among those preferring a convention based on Proposal C. It would, however, support the United Kingdom proposal as the best procedure in the circumstances.

Mr. MILEWSKI (Poland) said that his delegation also supported the United Kingdom proposal but thought that a further report from the Working Group should be awaited before taking any final decision.

Mr. FOTIADIS (Greece) strongly supported the United Kingdom proposal for the reasons already adduced. Tonnage had to be related to earning capacity and hence had to be measured in terms of volume. Moreover, to get a simple and acceptable system as was generally desired, the proposal on net tonnage contained in document TM/CONF/9/Add. 1 would have to be reconsidered.

Mr. BONN (Canada) said that the results obtained by the Working Group in relation to gross tonnage certainly appeared adequate; a suitable solution was available within the formula proposed. As to net tonnage, his delegation would have preferred measurement on the basis of displacement, but agreed that the point in time had been reached where some compromise was necessary. The United Kingdom suggestion was therefore deserving of every consideration.

Mr. PEREIRA (Brazil) considered that a system as proposed by the United Kingdom would embody the main disadvantages of Proposal C and the main disadvantages of the Norwegian proposal. His delegation would therefore prefer the solution proposed by India, i.e. one parameter only.

Mr. MURPHY (USA) fully endorsed the United Kingdom suggestion but agreed that it would be useful, before taking a final decision, to consider first the further report expected from the Working Group. In view of the pressure of time, he would also support the idea that only the single decision concerned should be reviewed, the more so as the original Norwegian proposal, which represented the summation of all the preparatory work done for the Conference, undoubtedly offered a solution.

Mr. RUSSEL (South Africa) agreed with the United Kingdom that a compromise was necessary. Having regard to the decisions already taken by the Conference, however, he was of opinion that the concept of net tonnage being based on displacement should be retained. In that regard, he recalled the suggestion that a recommendation should be annexed to the prospective Convention to the effect that ports should base their dues on the net tonnage formula evolved by the Conference. He would suggest that, instead, the recommendation should propose dues on the basis of actual displacement, i.e. actual weight in metric tons. That would mean that every ship would, as today, have to have a displacement scale; the maximum of the scale would be the displacement corresponding to the summer load line and the minimum would be the lightest safe ballast condition.

The system in question would offer the following advantages: retention of the advantages under the shelter-deck concept and their extension to all other types of ship; fixing of the load line at the highest position allowed by the International Load Line Convention of 1966; dues at any given time based on pay load, i.e. on actual earnings from freight carried at that time; no dues payable on water ballast except in the light condition, which would be the exception rather than the rule. Dues would of course have to be paid on the weight of steel used to contain water ballast but that was a disadvantage also shared by ice-strengthened ships; and, lastly, all existing difficulties would be resolved.

Mr. OVERGAAUW (Netherlands) pointed out that, in practice, the measurement of net tonnage was not so simple a matter as it might appear, now that the time of the dry cargo sailing ship was past. He was not therefore in favour of the physical measuring of cargo and passenger spaces and would prefer that net tonnage should be a fixed percentage, say 60%, of gross tonnage.

Mr. GUPTA (India) thought that time might be saved by requesting the Conference to meet in plenary session the following day in order to give the Technical Committee guidance in the light of the discussion which had taken place. New terms of reference were certainly needed.

Mr. DE JONG (Netherlands) said the difficulty facing the Committee was to reconcile its term of reference as they now stood. It was impossible in principle to arrive at figures approximating to existing gross and net tonnages on the basis of the criteria laid down. The alternatives open to the Committee were either to set aside the objective of approximate figures, in which case Proposal C would stand; or, to maintain that objective in which case the solution for gross tonnage would have to take account of the open shelter-deck concept and net tonnage could be based on displacement. In the case of net tonnage, it was his opinion that no system would meet the said objective.

Mr. ERIKSSON (Sweden) thought the time was past for introducing further new proposals. The need for compromise along the lines suggested by the United Kingdom was generally recognised. Sweden had originally favoured Proposal C but, in the interest of arriving at an acceptable Convention, it was prepared to accept in principle gross tonnage on the basis of Proposal C and net tonnage on the basis of the latest Norwegian Proposal.

Speaking as Chairman of the Working Group, the Committee might be assured that the Working Group was willing to investigate further the question of water ballast; there seemed to be some doubt, however, whether that work would serve any useful purpose.

Mr. PROHASKA (Denmark), speaking as a member of the Working Group, thought a continuation of the work would prove of value; much would depend on the availability of computer facilities.

Mr. ROCQUEMONT (France), restating his delegation's position, agreed that no perfect solution existed. He saw great danger, however, in engaging along new lines at that stage, and would have thought the more logical course would be to await the further report of the Working Group before taking any such decision.

Mr. MURRAY SMITH (UK) explained that the United Kingdom, in making its proposal, had had no intention of stultifying or criticising the work of the Working Group. Indeed, it still hoped that the Working Group's investigations would lead to a satisfactory solution on the lines laid down by the Conference. It was merely the fear that a generally acceptable answer would not be forthcoming that had led his delegation to suggest that the Committee should have in mind an alternative position to fall back on. And the basis of that position might be the Norwegian Proposal (TM/CONF/9/Add.1) as amended orally by the Norwegian representative and amplified by the introduction of a coefficient to reflect the present trend seen in ships to change from open to closed shelter-deck condition.

The coefficient - on which his delegation was at work - would be a factor of the displacement to the minimum freeboard load line mark and the displacement to a mark chosen by the owner for a period of time; or, alternatively, a relationship between draughts to those two marks or between freeboards to those two marks. It was already accepted that none of the three ratios would give the differences in tonnage which were at present enjoyed under the Tonnage Mark scheme.

The United Kingdom recognised the problems inherent in adopting that method, problems deriving from measurement of total passenger and cargo spaces, for which reason it still hoped that the Working Group might provide an answer that would avoid such complications and the problems of interpretation arising therefrom. It was not, therefore, pleading the case for that particular method but simply pointing out that it might be the only alternative open to the Committee.

The CHAIRMAN said that, if a further report from the Working Group was available by that time, the Committee would continue its work the following morning; otherwise, a decision might be taken respecting the United Kingdom suggestion.

The meeting rose at 5.25 p.m.