منظمة الأغذية والزراعة للأمم المتحدة | 联合国粮食及农业组织 | Food and Agriculture Organization of the United Nations | Organisation des Nations Unies pour l'alimentation et l'agriculture | Organización de las Naciones Unidas para la Agricultura y la Alimentación

COORDINATING WORKING PARTY ON FISHERY STATISTICS

Twenty-first Session

Copenhagen, Denmark. 1-4 March 2005

DEFINITION OF VESSEL LENGTH OVERALL

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Definition of vessel length overall

For the purpose of maritime legislation the technical information to be presented by the owners and or builders varies considerably according to the needs of administrations. The terms Length Overall (LOA), Registered Length, Length Between Perpendiculars (LBP) and Length[1] are all different. There are also differences in the way length, breadth and depth are measured depending upon the material of construction. Furthermore, the terms GT, GRT and NT are no less confusing when two sister-fishing vessels can have different tonnage measurements.

Notwithstanding the apparent anomalies, the differences are usually associated with the provisions of International Conventions that are incorporated in the national laws and regulations of a Party to the Convention.

Conventions that apply in one way or another to fishing vessels are:

- Safety of Life at Sea (SOLAS)[2];
- The International Collision Regulations[3];
- The International Convention on the Tonnage Measurement of Sips 1969[4];
- The Agreement to Promote Compliance with Conservation Measures by Fishing Vessels on the High Seas (Compliance Agreement).

The Compliance Agreement uses the same definition of length as The Tonnage Convention (in force) and the basic provisions require reporting on vessels of 24m in length and over 24m. That figure, however, can be reduced under certain conditions for the application of the Agreement. The GFCM is a case in point and if the Agreement comes into force, the lower limit for the Mediterranean would be 15m (or between 17 and 18m in length overall).

With regard to national legislation, the requirements for the licensing and or registration of a fishing vessel vary greatly. Some countries register on the basis of length, some by GT and others by NT. But all have to acknowledge LOA with regard to the International Collision Regulations, therefore, apart from normal shipbuilding practice, an administration is duty bound to record the overall length of a vessel.

It is also the practice to measure open boats, such as lifeboats, by cubic capacity with the inside measurements of the hull taken for the purpose of the formula.[5]

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[1] As defined in the International Tonnage Convention, the Compliance Agreement and Torremolinos. The Code of Safety for Fishermen and Fishing Vessels gives a different formula for the calculation of Length.

[2] Based on tonnage but Length is a different measurement than that obtained using the definition in the Tonnage Convention.

[3] Based on Length Overall.

[4] Applies to ships of 24m (79 feet) and above based on the definition of length given in Article 2 (8) of the Convention.

[5] The exception being wooden planked lifeboats, not much different from many forms of small open fishing boats, where the method of measurement is very much in line with the standard practice for wooden boats and in line with the method of calculating the Cubic Number,.

Where no International Conventions apply for the safety of fishing vessels and their construction, national legislation often relies on the Cubic Number[6] as the basis for the establishment of the *scantling numeral* and this is common in the case of small vessels. FAO has long promoted the use of the Cubic Number and it is the reference point used in the design of small fishing vessels and transport vessels associated with fisheries. In such cases, it is essential to know the LOA.

Most international agreements are directed towards the industrial fleets with scant reference to the greater proportion of vessels that constitute the world fleet. Even the Collision Regulations have limitations. On the other hand, the Standard Specifications for the Marking and Identification of Fishing Vessels, endorsed by eighteenth session of COFI[7] simplified the question of application by using the length overall as the reference point.

The length overall is the usual criterion with regard to small vessels, whether decked or undecked. In these cases the LOA[8] and installed power will certainly be the minimum required by administrations and may even suit the needs for the estimation of fishing effort provided that the craft fall into identifiable categories (pirogues for example). In addition, it would be acceptable for any researcher to apply an agreed multiplier to the length should it be required to estimate the cubical capacity of the hull (as if it had a deck).

An FAO consultant who is an expert in the field, John Fitzpatrick, has proposed the following definition of "length overall" (LOA):

> *Length overall is defined as the distance measured in metres in a straight line on a line parallel to the design waterline between the foremost point of the bow and the aftermost point of the starn. For the purpose of this definition:*
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> *a) the bow is taken to include the watertight hull structure, the forecastle, stem and forward bulkward, if fitted, but not to include bowsprits and safety rail.*
>
> *b) the stern is taken to include the watertight hull structure, transom, poop, trawl ramp and bulwark, but does not include safety rails, bumkins, propulsion machinery, rudders and steering gear, and divers'ladders and platforms.*

CWP-21 may wish to consider adopting the above definition of length overall.

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[6] The Cubic Number is the product of the length overall, the maximum breadth and depth.

[7] Endorsed for adoption on a voluntary basis. Recognized in the UN Agreement, Article 18 Paragraph 3d.

[8] It may still be necessary to define LOA to limit the length measurement to the hull and to exclude appendages that can be readily removed, such as a bowsprit.