Sea Fish Industry Authority

Marine Services

An Evaluation of the Re-measurement of the Community Fishing Fleet in Units of Gross Tonnes (EC/3259/94, 95/84/EC, 97/S161-103655)

Interim Report

Confidential Report No. CR 158 March 1999

Executive Summary

The Sea Fish Industry Authority (Marine Services Department) is currently undertaking a contract, awarded by the Commission of the European Communities, to evaluate the procedures adopted, and progress made, by each maritime member state to comply with the provisions of Council Regulation (EC) 3259/94 (amending Regulation 2930/86) and Commission Decision 95/84/EC. This Regulation (and the associated Decision) introduced a unified system for the tonnage measurement of fishing vessels throughout the European Union based on the technical provisions of the London Convention (ITC'69).

This confidential report is intended to describe the progress made to date in the performance of the contract, to outline the external expenditure incurred (which the contract specifies is to be reimbursed at cost), and to support the Authority's invoice for the intermediate payment.

Progress has centred on the following activities: setting up a sampling methodology, establishing contact with the relevant member state authorities, and undertaking a programme of missions to the administrative centres. In addition missions to representative ports in two member states have also now been completed, but the results are not yet available.

Co-operation from member states administrations has normally been excellent, with three notable exceptions – France has declined to take part in this evaluation exercise absolutely (and therefore the Authority have referred the matter back to the Commission), Spain has reservations concerning the intellectual property rights of vessel designers, and therefore appears unwilling to allow physical access to vessels for checking, and Italy has been very tardy in agreeing dates for ports visits. All other member states involved have been very co-operative.

Table of Contents

Page No.

1. Overview

The first technical activity undertaken, beyond ensuring that the team involved had a common understanding of the project objectives, and interpretation of the requirements of both Annex 1 of the London Convention, and of the EU tonnage system (meeting held 12 February 1998, summarised in 4.2 below), was to define a sampling methodology. Originally (see 4.1 below) it had been intended that Seafish would receive a complete copy of the current Community Fishing Vessel Register for each member state, however this proved impossible for confidentiality reasons (see 4.3) and various alternates explored. The final agreement was for a copy of the register to be supplied - without vessel identifiers (as per 4.4 below) – from which Seafish would draw a target sample, based on the geographical areas chosen for the port missions, and the distribution of vessels (in terms of numbers, tonnage and power) in each of the length/age groups defined by EC legislation, of twice the size eventually required. DGXIV would then provide – for this sample only – a list of vessel identifiers which could be passed to the member states to define the target vessels for investigation. Of course it was accepted that a success rate of no larger than 50% was expected – the list being twice as long as the final target sample size desired - and that it could well be much lower, with substitute vessels being found on the basis of their availability for physical inspection in port. All the copies of the community register for each member state, and the identified sample "long lists", have now been received from the Commission.

Full details of the results of the administrative centre missions are given in the draft mission reports reproduced in sections 3.1 to 3.12 below, however a short initial summary for each country follows, based solely on information given to the mission team. Therefore any conclusions are obviously subject to change, once detailed examinations of sample vessels have been completed.

Italy

Few details of the techniques of tonnage measurement employed were obtained, as all this work is subcontracted to the Italian classification society – RINa. However from the dossiers examined (and the visit to Civitaveccia) it appears that superstructure and deckhouse volumes may be being totally omitted from the volumetric calculations. The Directorate General of Fisheries did not appear to be aware of the detail of EU legislation – *e.g.* the eventual requirement to undertake a full volumetric calculation for all vessels over 15m.

UK

Although existing small (under 15m) vessels appear to have had their GT values calculated correctly, those GT provided to the Commission for new (post July 1994) small boats appear to have been underestimated by using the wrong depth with the a_1 formula. A programme is in place to re-measure all vessels over 15m, with priority being placed on largest vessels because of their relatively high contribution to the aggregate total.

Belgium

A programme of re-measuring all over 15m vessels to has recently been completed, with the results being forwarded to DGXIV at the time of the mission. There are very few under 15m vessels, whose tonnage had been calculated using the a_1 formula, but the source of the length,

breadth and depth parameters used was unclear. Open superstructures are included in full volumetric calculations.

Netherlands

Not only does the Netherlands apply ITC'69 to all vessels over 24m, but it has in place programmes to re-measure all 15 to 24m boats (replacing the a_3 formula estimates), and even those under 15m (to, unnecessarily, replace estimates for existing vessels based on a_2, with recalculations based on a_1). There is some resistance by owners to these programmes.

Germany

The German authorities appear to be applying the Community system of tonnage measurement exactly as specified, including superstructure and erection volumes for those vessels subject to full volumetric measurement, with a re-measurement programme in place for 15 to 24m vessels. The sole exception is their treatment of the two decimal places required by the FV Register Regulation – these are omitted (in common with some other Member States' practice).

Denmark

Although the Fisheries Directorate had applied the a_3 formula for existing 15 to 24m vessels, all other calculations were undertaken by the Danish Maritime Authority. Many vessels still only have national (GRT) tonnage available, especially those built prior to 1982, and new legislation is in hand to incorporate the provisions of EU regulation into national law. It appears that many superstructure and erection volumes are ignored in the full volumetric ITC'69 tonnage calculation undertaken on vessels over 24m built since 1982.

Ireland

There appears to have been no progress made at all to date to provide GT figures for the Irish fleet. Discussion of the EC formulae was limited to a critique of the a_3 coefficient for Ireland, and only approximately 30% of vessels over 24m appear to have been measured to the London convention requirements. As the EU Regulations have not been transcribed into national law, owners are taking no action. Ireland appears also to have failed to take any administrative action to apply the three EU formulae administratively to the national fleet register to provide estimates *pro tem.*

Spain

Despite reservations with regard to design confidentiality and Member State *vis-à-vis* community legal competence, the Spanish authorities agreed to explore a compromise based on forwarding copies of dossiers for vessels over 15m subjected to full volumetric ITC'69 tonnage calculations, and potentially Seafish personnel accompanying official measures for vessels under 15m. All vessels over 24m have already been measured to ITC'69, as have new (post July 1994) 15 to 24m boats. A re-measurement programme is in place for existing vessels 15 – 24m boats, but estimates for this group have been made using a_3 and (corrected) national length, breadth and depth. There appears to be some confusion about estimates for existing under 15m boats, but a re-measurement programme for this class was also under way.

Greece

A full programme of fleet tonnage re-measurement is in place, with all vessels over 24m completed to ITC'69 specifications, re-measurement of 15m to 24m boats taking place (although no comment on the use of the a_3 formula is yet available), London Convention depth and breadth being used as the basis for tonnage calculations of new under 15m vessels, and re-measurement of Oslo parameters for existing under 15m vessels under way. There does however appear to be some small confusion, as the guidance document specifies a depth measurement which is slightly greater than that defined by the London convention.

Sweden

Although a system of compliance with the EU system, with GT derived from the a_1 formula for vessels under 15m, and a full volumetric calculation being performed for vessels over 15m, was described, there also appear to be different regulations applied to vessels above and below 12m. Although Oslo parameters were available for existing under 12m vessels (allowing the a_2 formula to be applied), owners had been asked to re-measure their own boats. Volumetric GT calculations also appear to be made for 12 to 15m vessels, but it is unclear if these are reported to the Community register.

Finland

There is no intention to comply with the EU system for vessels under 15m (which comprise the majority of the fleet) at all. Vessels under 12m have a GRT assessed using a Finnish national system, while a full volumetric GT calculation (as opposed to the application of the a_1 and a_2 formulae) is being undertaken for vessels between 12 and 15m. It appears that internal volume may be being used as the basis of GT calculations for older vessels.

Portugal

The Portuguese authorities appear to be applying the Community system of tonnage measurement exactly as specified, with but one exception – their interpretation of superstructure and erection volumes requires full enclosure, and spaces without closures are ignored (contrary to the requirements of Annex 1 to the London Convention).

France

The French administration has so far refused co-operation with this evaluation programme, as has been already reported to the Commission.

One or two general conclusions also appear to be emerging. Firstly, where full volumetric tonnage calculations are being undertaken, the mathematical processes employed appear to be accurate. However there do appear to be some differences of interpretation, especially with regard to the treatment of superstructures and deckhouses with open ends, ranging from including absolutely all the volume if the erection contains fish handling equipment, to ignoring spaces completely if closing appliances are not fitted. Secondly there are differences with regard to accuracy of reporting (as opposed to calculation) with many Member States failing to report the two decimal places required by the Community FV Register Regulation, and instead applying the IMO guidance (which only applies to vessels over 24m engaged in international voyages) by truncating GT to integer values only. This could result in a seriously underestimated aggregate tonnage for countries with a high

proportion of the smallest vessels. Some countries appear a little confused as to which breadth, and more importantly, depth to use with which formula (a_1, a_2) for vessels under 15m. The basis of power recorded appears to range from simply accepting the owner's declaration, through to examination of test bed certificates and checks against manufacturer's catalogue data.

2. External Expenditure

2.1 Travel and Subsistence for Period to 31 March 1998

Marine Services Manager – C.E. Tucker

19 January 1998 – 29 January 1998
Hull – Brussels – Hull
Meeting with DGXIV EU Tonnage

12 February 1998 – 12 February 1998
Hull – Edinburgh – Lockington
Meeting held in Marina Hotel.

11March 1998 – 12 March 1998
Hull – Brussels – Hull
Meeting with DGXIV EU Tonnage. Total £809.14

Senior Marine Surveyor – W.S.G. Ritchie

11 March 1998 – 12 March 1998
Edinburgh – Brussels – Edinburgh
Meeting with DGXIV EU Tonnage Total £541.36

Marine Surveyor – Peterhead – B.F. Wilson

11 February 1998 – 12 February 1998
Peterhead – Edinburgh – Peterhead
Meeting held in Marina Hotel. Total £91.66

Marine Surveyor – Hull – A.E. Copeland

11 February 1998 – 12 February 1998
Hull – Edinburgh – Hull
Meeting held in Marina Hotel. Total £104.66

Marine Surveyor – Plymouth – R.J. Watts

11 February 1998 – 13 February 1998
Brixham – Edinburgh – Brixham
Meeting held in Marina Hotel. Total £428.72

£1,975.54

2.2 Travel And Subsistence for Period from April 1998 to February 1999

Marine Services Manager – C.E. Tucker

27 April 1998 – 28 April 1998
Hull – Brussels – Hull
Meeting with P. Hopkins, M Thai to discuss EU Tonnage Contract.

31 May 1998 – 5 June 1998
Hull – Luton – Rome (Return)
EU Fleet Re-Measurement Contract.

29 June 1998 – 30 June 1998
Interviewing candidates for Marine Survey posts.

14 July 1998 – 15 July 1998
Hull – London (Return)
Meeting with MAFF/MCA to discuss EU Tonnage Contract.

10 August 1998 – 13 August 1998
Hull – Belgium – Hull
EU Fleet Re-Measurement Contract.

6 September 1998 – 8 September 1998
Lockington – Schipol – Copenhagen – Schipol (Return)
EU Re-Measurement Contract.

20 September 1998 – 23 September 1998
Hull – Stevenage – Luton – Madrid – Luton – Hull
EU Re-Measurement Contract.

13 October 1998 – 16 October 1998
Edinburgh – Brussels – Lisbon – Brussels – Leeds – Hull
EU Re-Measurement Contract.

9 November 1998 – 10th November 1998
Hull – Grange Over Sands – Hull
Marine Survey meeting 50% of costs attributed to EU Re-Measurement Contract.

22 February 1999 – 23 February 1999
Interviewing candidates for Marine Survey posts.

Total £3,041.59

2.2 Travel and Subsistence for Period from April 1998 to February 1999 (Continued)

Senior Marine Surveyor – W.S.G Ritchie

14 July 1998 – 15 July 1998
Edinburgh – Luton – London (Return)
Meeting with MAFF/MCA to discuss EU Tonnage contract.

31 May 1998 – 5 June 1998
Edinburgh – Luton – Rome (Return)
EU Re-Measurement Contract.

25 August 1998 – 28 August 1998
Edinburgh – Hull – Rotterdam (Return)
EU Re-Measurement Contract.

31 August 1998 – 2 September 1998
Edinburgh – Amsterdam – Hamburg (Return)
EU Re-Measurement Contract.

9 September 1998 – 11 September 1998
Edinburgh – Dublin (Return)
EU Re-Measurement Contract.

20 September 1998 – 25 September 1998
Edinburgh – Newcastle – Athens (Return)
EU Re-Measurement Contract.

9 November 1998 – 11 November 1998
Edinburgh – Grange Over Sands – Edinburgh
Marine Survey meeting 50% of costs attributed
to EU Re-Measurement Contract. Total £2,993.87

2.2 Travel and Subsistence for Period from April 1998 to February 1999 (Continued)

Marine Surveyor – Edinburgh – A.R. Thomson

25 August 1998 – 28 August 1998
Edinburgh – Hull – Rotterdam (Return)
EU Re-Measurement Contract.

31 August 1998 – 2 September 1998
Edinburgh – Amsterdam – Hamburg (Return)
EU Re-Measurement Contract.

5 October 1998 – 8 October 1998
Edinburgh – Gothenburg (Return)
EU Re-Measurement Contract.

12 October 1998 – 15 October 1998
Edinburgh – Helsinki (Return)
EU Re-Measurement Contract.

9 November 1998 – 11 November 1998
Edinburgh – Grange Over Sands – Edinburgh
Marine Survey meeting 50% of costs attributed
to EU Re-Measurement Contract. Total £2,540.45

Marine Surveyor – Peterhead – B.F. Wilson

10 August 1998 – 13 August 1998
Peterhead – Hull – Belgium (Return)
EU Re-Measurement Contract.

25 August 1998 – 28 August 1998
Peterhead – Edinburgh – Hull – Rotterdam (Return)
EU Re-Measurement Contract.

13 October 1998 – 16 October 1998
Peterhead – Edinburgh – Brussels – Lisbon (Return)
EU Re-Measurement Contract.

9 November 1998 – 12 November 1998
Peterhead – Grange Over Sands – Peterhead
Marine Survey meeting 50% of costs attributed
to EU Re-Measurement Contract. Total £1,287.19

2.2 Travel and Subsistence for Period from April 1998 to February 1999 (Continued)

Marine Surveyor – Hull – A. E. Copeland

6 September 1998 – 8 September 1998
Hull – Schipol – Copenhagen (Return)
EU Re-Measurement Contract.

22 September 1998 – 25 September 1998
Hull – Newcastle – Athens (Return)
EU Re-Measurement Contract. Total £1,237.24

Marine Surveyor – Hull – L.R. Webb

21 September 1998 – 23 September 1998
Luton – Madrid (Return)
EU Re-Measurement Contract.

12 October 1998 – 14 October 1998
Hull – Helsinki (Return)
EU Re-Measurement Contract.

9 November 1998 – 10 November 1998
Hull – Grange Over Sands – Hull
Marine Survey meeting 50% of costs attributed
to EU Re-Measurement Contract. Total £1,227.28

Marine Surveyor – Plymouth – R.J. Watts

14 July 1998 – 15 July 1998
Brixham – London – Brixham
EU Tonnage meeting.

9 September 1998 – 11 September 1998
Brixham – Bristol – Dublin (Return)
EU Re-Measurement Contract.

5 October 1998 – 8th October 1998
Brixham – Bristol – Gothenburg (Return)
EU Re-Measurement Contract.

9 November 1998 – 12 November 1998
Brixham – Grange Over Sands – Brixham
Marine Survey meeting 50% of costs attributed
to EU Re-Measurement Contract. Total £1,181.34

Total **£13,509.56**

2.3 External Costs for Period January 1998 – February 199

Translation Costs	£1,041.22	
Miscellaneous Expenses	£198.71	
M. Calvo acting as an Interpreter Edinburgh – Madrid (Return) September 1998	£791.49	
	Total	**£2,031.42**

2.4 Summary of Total External January 1998 to February 1999

Travel & Subsistence to 31 March 1998	£1,975.54	
Travel & Subsistence from 1 April 1998 – 28 February 1999	£13,508.96	
Translations/Interpreters/Miscellaneous	£2,031.42	
	TOTAL	**£17,515.92**

Approximate equivalent in Euro, as per OJ C.80 (23.3.99) rate of 1 Euro = £0.6677 is **Euros 26,233.22.**

3. Draft Administrative Centre Mission Reports

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Italy, 31 May 1998 - 5 June 1998
C.E. Tucker & W.S.G. Ritchie

Sunday, 31 May 1998

W.S.G .Ritchie travelled to Luton by air, and C.E. Tucker travelled to Luton by road.

Monday, 1 June 1998

C.E. Tucker and W.S.G. Ritchie travelled to Rome (Ciampino) by air. The Excel data covering the current status of the Community Fishing Vessel Register with respect to the Italian active fishing fleet, Italian ports of registry, and the data communicated to the Commission on the Italian re-measurement programme, all as supplied by the Commission, were reviewed and translated into the SPSS statistical package. This was then used to prepare tables of numbers of vessels by port and size group, and, for those vessels where and estimated or measured GT had been reported to the EC, tables of numbers of vessels by port and estimated~measured GT. This exercise showed the Commission were aware of some 16,000 active vessels, distributed across nearly 300 fishing ports, and that only some 155 re-measured tonnages had been reported to the Commission.

Tuesday, 2 June 1998

The tables prepared using SPSS were reviewed, using an Italian atlas/gazetteer, to determine those areas which Seafish would wish to make subjects of the main (coastal) inspection visits, with Mazara del Vallo (Sicily) and the Adriatic coast from San Benedetto del Tronto to Termoli the areas of choice. Also the numbers of vessels registered at ports close to Rome (Civitavecchia, Fiumicino and Anzio) were investigated to see if a visit there could be productive within the current mission, and the EC sponsored Regional Socio-Economic Studies (to define regions highly dependant on fisheries) for Italy reviewed.

An initial meeting between Fabrizio Boccoli, Italian Directorate General of Fisheries and Aquaculture, Viale dell Arte 16, Rome, C.E. Tucker and W.S.G. Ritchie was held, as summarised below.

- It seemed likely that end July/August would be a suitable time frame for the coastal visits.

- That Termoli had been chosen by the Directorate of Fisheries as a typical port with a mixture of vessels, and that 5 specific vessels had been chosen for Seafish to examine, had it been possible to extend the current mission over the weekend.

- C.E. Tucker explained the objectives of the study, *i.e.* to check the accuracy of tonnage (and to a lesser extent power) being supplied to the Commission for a sample of individual vessels, and pointed out that, although under 24m vessels this would involve a physical

examination, it was hoped that for vessels over 24m, this could be accomplished by inspecting vessel drawings alone.

- F. Broccoli explained that RINa (the Italian Classification Society) was entirely responsible for all the technical aspects of tonnage and power certification, and that he hoped to arrange a meeting with RINa Rome for the following day. He followed on by describing the system of RINa coastal surveyors, each covering a section of coastline, and that the collection of data from them was only accomplished using a paper system. He pointed out that the costs associated in re-measurement were carried by the fishing industry, for which they received no direct benefit. RINa had also been responsible for the development of the estimating formula employed by Italy.

- Seafish stated that they wished the coastal visits (probably of 6/7 days each, and starting mid-week) to be centred on the Adriatic coast around Pescara, and the Mazara del Vallo area. Seafish also stressed that individual vessel confidentiality would be maintained, and that this needed to be fully explained to the fishermen. So far as power was concerned, Seafish would just be visually examining engine installations (e.g. make, type, label, *etc.*) and thence checking against certified power on documents and manufacturers' specifications, and then offering an expert opinion only.

- F. Boccoli explained that RINa were also trying to establish typical (realistic) power ranges for each type of engine, and that de-rating was recognised as a problem for Italy. He continued by describing the system of Italian port administrative offices, based on the "Capitaneria di Porto". There are some 48 principal offices, each responsible for an area and with a Naval Officer in charge, and is manned by Coastguards, who, in co-operation with the Italian Navy, undertake at sea inspections of fishing vessels and their documentation, and by Fishery Officers. There are also sub-offices, within the jurisdiction of these principal offices, distributed around the coastline, manned by administrative military officers and Fisheries Officers. These Fisheries Officers are responsible for maintaining a dossier for each vessel, containing, for example, data on technical improvements, copies of safety and other certificates issued by RINa (from their port offices), fishing licences, crew lists, *etc.*, plus compilation of statistical information from log sheets and landings declarations. Information is currently only passed to DG Fisheries (Rome) in the form of paperwork, but an electronic data transmission network is currently being developed, with an expectation that it will become operational in 1999.

- The next meeting was fixed for the following morning, where it was hoped that a RINa representative could attend, and that a port visit to Anzio was a possibility, if this could be arranged in time. Also F. Boccoli would arrange for some sample vessel dossiers to be available for Seafish perusal.

  Before leaving the building, C.E. Tucker and W.S.G. Ritchie were introduced to F. Boccoli's "Chef", and on the way, Massimo Spagnollo, (IREPA, Salerno), who had been invited to Rome because of the Seafish mission, joined the party. F. Boccoli explained the purpose of Seafish's mission to these two gentlemen, and it was confirmed that the brief did not extend to any general fisheries management issues (e.g. fishing methods/gear, area

of operation, *etc.*), nor to any review of the Multi-annual Guidance Programme requirements *in toto*, but was solely restricted to the accuracy of the reported characteristics of individual vessels, and an investigation of the system by which these characteristics were derived. Seafish were handed a copy of "Specialisation and Concentration in the Italian Fishing Fleet", prepared by IREPA.

Wednesday, 3 June 1998

The re-measurement Excel file, prepared by the Commission, was re-examined, and it was noted that all the GT estimates therein had been communicated to the Commission on 31 December 1994, followed by all the re-measured GT on 31 July 1995. It was noted that these GT figures were expressed as integers only (with no decimal places) even though the Community Register Regulation (EC/109/94) requires 2 places of decimals, and the Annex to ITC'69 referred to by Regulation EC/2960/86 makes no comment on required accuracy for the expression of GT.

A further meeting was then held with F. Boccoli, and three example vessel dossiers (approximately 30m, 14m, and 9m length overall) examined.

- The relevant documentation for the largest vessel consisted of an ITC'69 International Certificate in standard form, but annotated with the characteristics as determined by Italian national law and those required by Regulation 2930/86 (including power). This Certificate had been issued by the Capitaneria di Porto, on the basis of information provided by RINa. It was noted that no erections or superstructures appeared to have been included in the volumetric calculations (*i.e.* only underdeck spaces considered). Also available was a RINa engine power certificate, showing engine manufacturer, engine type, cylinder number, bore and stroke, and continuos flywheel/shaft power. It appears that these details are obtained from tests conducted on a manufacturers prototype, and RINa undertakes some checks that on board installation conforms to this prototype before issuing this certificate.

- For the two smaller vessels the relevant documentation consisted of a declaration from RINa of the vessel characteristics determined in accordance with the provisions of 2930/86 and 3259/84 in simple form, and an certified extract from the local register of fishing vessels issued by the Capitaneria di Porto reporting RINa's declaration of characteristics according to national definitions.

- It appears that the distinction between the two systems employed (large/small) vessels is determined by safety survey requirements which take effect in the range 20m to 24m (i.e. have a tonnage basis), with separate registers being maintained in the ports. The other contents of these centrally maintained dossiers included fishing licences, vessel ownership records, *etc.*, with further technical information only being held by the Capitaneria di Porto. Seafish were promised photocopies of the six sample tonnage, power and register extract documents discussed above, as examples.

- It was agreed to meet again the following morning, with the objective of meeting a RINa representative and/or undertaking a port visit to Fiumicino.

- F. Boccoli had no knowledge of the number of surveyors RINa had available for the re-measurement programme.
- Acknowledging that there was no benefit for fishermen in re-measuring, as discussed the previous day, the system for enforcing re-measurement was then discussed in detail.

    - Prior to July 1995, fishing licences had been valid for 4 years, but thereafter Italian law extended this to 8 years.

    - Therefore, it was now a requirement for a re-measurement to be undertaken if any licence details (e.g. ownership, skipper, area of operation, fishing method, etc.) altered, prior to the re-issue of a licence.

    - Running in tandem with this licensing oriented system, RINa are undertaking compulsory re-measurement at the time that safety surveys are undertaken. This tactic has been adopted to minimise costs for the industry, but the safety regime does not apply to vessels over about 7m - 8m.

    - It was unclear if re-measurement was compulsory upon expiry of a licence which had not required changes, for vessels not subject to the safety regime, but a programme for the smallest vessels was being negotiated with RINa.

    - F. Boccoli stated that about 2,000 licence modifications were being processed each year, (exceptionally some 4,000 in 1997), so that already some 5-6,000 vessels had been re-measured, although the results had not yet been communicated to the Commission. It was hoped that a new registration system would be finalised by October, and would become operational in 1999, thus reducing the delays inherent in the paper system which could be some 2-3 months.

    - Apparently the Directorate General for Fisheries plans to monitor the progress of re-measurement (in conjunction with RINa) during 1999. The expectation is that this will show that Italy will manage to complete re-measurement of the whole fleet by the final target date of 31 December 2003. (No comment with regard to the completion of the under 15m segment by 31 December 1998 was offered).

    - There are some minor problems with a few large vessels which (illegally) potentially fish international waters, and have not visited an Italian port for a number of years.

- The situation with Italian fleet register as a whole (which is the subject of a Bi-lateral working group between the Italian Authorities and the Commission) was described. There are not only the 16,000 nationally registered vessels in existence, but there are also some 2-3000 very small (4m-7/8m) artisanal fishing vessels, which have traditionally operated under regional permits only. Italy is seeking an adjustment to their MGP to cater for this situation.

- F. Boccoli pointed out that RINa are employing two types of formulae - *viz.* estimation and re-measurement, and he is not aware of the details, but understands that RINa have had some difficulties with the parameters used in the EU formulae, which has been the subject of correspondence bi-laterally between RINa and DGXIV.

- Finally, Seafish's desired sampling methodology was discussed. It was emphasised that the co-operation of fishermen was essential, and therefore Directorate General for Fisheries would organise these visits through the local fisheries syndicates/associations/ co-operatives/*etc.*, emphasising that Seafish's brief was to check on the work of DG Fisheries and RINa, and therefore would ensure confidentiality for individual fishing vessels, with the results of the inspections not being passed on to the Italian administration. The Excel files received from the Commission were shown to F. Boccoli, and it was explained that these would be used by Seafish to identify a potential sample of vessels, which would then be transmitted to the Italian authorities (i.e. a "long list"). For the larger vessels on this list, for which drawings should be available, their production should be organised in advance. For smaller vessels, for which a physical dimension check would be required, a "sample of opportunity" - based on those vessels on the long list in port at that time - would be employed. A similar "sample of opportunity" would be employed to visually check engine installations.

- The meeting closed with a confirmation that a further meeting should take place the following morning, with the objectives of collecting the photocopy documents as above, undertaking a local port visit, and, most importantly, meeting a RINa technical expert.

- Thereafter, an initial draft of the first part of this report was prepared on the basis of notes taken during the above activities.

Thursday, 4 June 1998

C.E. Tucker and W.S.G. Ritchie met with F. Boccoli for a third time, and were handed the photocopies of the documents described above as promised.

- However Seafish were informed that it had finally proved impossible to organise a port visit to Fiumicino, as only two RINa surveyors were based there, and that they were busy on other work. Furthermore it was disclosed that RINa's main offices (where the technical experts responsible for developing the GT formulae used by Italy were likely to be based) were in Genoa, not Rome.

- Therefore, F. Boccoli undertook to meet RINa the following week, with three objectives:

    - To explain the objectives of the project (to assist this a copy of pages 1 to 4 of the Seafish tender was provided), and outline the methodology Seafish are employing on behalf of the Commission;

- To confirm where the technical information (record of the details of the GT calculation, lines plan, general arrangement drawing, stability booklet/hydrostatics) of each individual vessel are held (e.g. RINa port office, RINa headquarters). (Seafish explained the contents of this documentation to F. Boccoli, and a photocopy of this explanation was provided);

- To request RINa to forward directly to Seafish, a letter explaining the GT tonnage measurement methods/formulae employed by them on behalf of the Italian Directorate General of Fisheries.

- In discussing the availability of this technical documentation, F. Boccoli felt that this would only be in existence for over 24m vessels, and was surprised to be informed that it would also have been needed for all new (*i.e.* keel laid post 18 July 1994) 15m to 24m vessels in order to meet the requirements of Regulation EC/3259/94 (Article 1.2(b)), of which he was unaware, so a photocopy of the English language version was organised.

- In order to explore whether individual fishermen would require higher or lower tonnages and powers than those which would result from a strict interpretation of the regulations, the uses of these two parameters in Italy were discussed. National tonnages are used to control access to specific fisheries (defined maxima), licence transfers (from old to new, i.e. replacement vessels), safety regime, and some miscellaneous matters such as social contributions. GT is only used for the calculation of Community payments. Therefore, the impact should be for individual fishermen to attempt to overstate the GT of their vessels, and as a result of the licence transfer system overstate the power of the old vessel and understate the power of its replacement.

- The meeting closed with Seafish thanking F. Boccoli for his time and co-operation, looking forward to receiving some further information from RINa, and hoping that the port visits would result in a sample of around 100 vessels of various sizes and types.

C.E. Tucker and W.S.G. Ritchie then travelled to Civitaveccia by train, and visited the fishing port area. Initially some half a dozen very small fishing vessels (4m-6/7m approx.) were observed, apparently fishing with gill nets, of which only three were displaying registration letters and numbers (CV 1918, CV 2139, CV 2093) - presumably the others being unregistered vessels, fishing under Regional permits, as previously described by F. Boccoli. Also in port were two seiners of approximately 12m, just fitted with wheelhouses, and open shelters (CV 2184 and 3 PA 612). A fleet of about 10 small wooden stern trawlers, approximately 15m-20m, all fitted with a full width superstructure extending from the aft end of a small foc's'le to approximately amidships (with an open after end in way of the trawl winch), inset wheelhouse, and significant hatchways/engine room casings, were observed entering port between 17:00 and 18:00 hrs. The registration numbers of some of these vessels were also recorded: CV 2148, CV 2081, CV 1998, 1 CV 2107, CV 2182, CV 2022, CV2147, CV 2088, CV2168; together with two slightly larger (maybe 20m-23m) vessels of the same general arrangement: CV 2031 and CV 2032. All these vessels also had heavily raked, almost clipper, bows with considerable flare forward, and counter sterns, some nearly vertical. Also observed was a steel stern trawler, of about 20m-22m, with three quarter length extended foc's'le shelter deck (fitted with two small side openings) - 1 PT 1189 "Papa Guiseppe" .

Also four small (8m-12m) gill netters, just fitted with a wheelhouse, were observed (CV 220, CV 217, CV 2209, CV2102). Seafish considered that useful information would be provided by examining the GT calculations (estimations or measurements) undertaken by RINa on these 21 vessels, especially the 12 stern trawlers, particularly with regard to spaces included in the volumetric calculations. Photographs were also taken.

Friday, 5 June 1998

The draft visit report was completed.

C.E. Tucker and W.S.G. Ritchie returned from Rome to Luton by air, with C.E. Tucker returning to the Hull area by car, and W.S.G. Ritchie to Edinburgh by air.

C.E. Tucker,
Marine Services and IT Manager

W.S.G. Ritchie,
Senior Marine Surveyor

DRAFT ADMINSITRATIVE CENTRE MISSION REPORT

UK, 14 July 1998 - 15 July 1998
C.E. Tucker, W.S.G. Ritchie and R.J. Watts

Tuesday, 14 July 1998

C.E. Tucker, W.S.G. Ritchie, and R.J. Watts, travelled to London from their respective base offices. During the evening, Excel data covering the current status of the Community's Fishing Vessel Register in respect of the UK active fishing fleet was reviewed, and imported into the SPSS statistical package. The table of numbers of vessels by size group and tonnage type reported to the Commission thereby created is reproduced below:

Number	**Tonnage Measurement Type**			
Length Group	Measured GT	Estimated GT	GT Unknown	**Total**
Under 15m LOA	6190		702	**6892**
15 - 24m LBP	26	1009	68	**1103**
24m LBP & over	106		162	**268**
Total	**6322**	**1009**	**932**	**8263**

Wednesday, 15 July 1998

The Seafish team attended the Ministry of Agriculture, Fisheries and Food (MAFF) offices in Nobel House, for a pre-arranged meeting.

Present at the meeting:-

Bill Hall	-	Head of Fisheries Statistics, MAFF
Mr. Pamenda	-	Structural Policy Division, MAFF
Colin Clifford	-	Licensing Policy Division, MAFF
John Downie	-	Maritime and Coastguard Agency (MCA)
C.E. Tucker	-	Seafish
W.S.G. Ritchie	-	Seafish
R. Watts	-	Seafish

An apology for absence had been made by Andy Walker, CEFAS, Lowestoft, who was indisposed.

C.E. Tucker gave a brief resume of the consultancy contract awarded to Seafish by the Commission of the European Communities, which was intending to check the progress of all member states towards meeting the new EU vessel parameter measurement and reporting requirements. He indicated that although Seafish Marine Survey had been authorised as official measurers for UK fishing vessels of less than 24.4m registered length by MCA, the current project was an entirely independent activity concerned with progress and accuracy.

The timescale for this project was 2 calendar years, although in practice 18 - 20 months would probably see a conclusion, as a draft final report was required by the Commission, prior to the commencement of MAGP mid-term review negotiations with member states starting September/October 1999. The work for all EU states will be conducted in as a consistent a way as is possible, the basic programme is based on an initial investigation and visit to each country to make contacts and explain procedure, followed by one or possibly two further visits (port/coastal missions) to undertake the actual checks required on sample vessels. During these missions it is hoped that normally a Seafish marine surveyor will accompany the local inspectors and measurers during their normal activities. The aim is a total EU wide target of approximately 800 vessels for checking, with probably 30 to 40 vessels for the smaller states, rising to approximately 100 for those countries with the largest fleets. The UK fleet sample is intended to consist of approximately 70 fishing vessels - which will be a mixture of under 15m vessels, 15 to 24m vessels and over 24m vessels, with the numbers checked in each of these 3 categories reflecting the number of vessels in each of these size ranges, and their relative contribution to aggregate fleet tonnage and power.

The basic objective is to investigate the accuracy of information provided by each country and the progress they are making towards meeting the re-measurement targets. The results of the investigation will only be reported to the Commission, and not to other member states. The prime objective is establish the methodologies employed to measure tonnage (GT) and the accuracy achieved, with a secondary objective to give some opinion concerning reported engine power (kW). Of course, individual vessels will not be identified in any of the reports submitted.

B. Hall asked who will carry out this work for Seafish and was informed that all staff will be drawn from a pool of seven Marine Surveyors directly employed by Seafish. No sub-contracted staff will be used. Mr. Hall indicated that the UK have nothing to hide and that UK base vessel information was provided by the Registry of Shipping (RSS) based at Cardiff and also the Maritime and Coastguard Agency whose head office is in Southampton. He anticipated that accurate information had been provided and expected the UK report would reflect this. The information that is provided to EC is derived from RSS, to which additional (non-Registry) data is added by MAFF. MAFF indicated that they use UK fishing vessel registry details for all fishing vessel licensing purposes, *i.e.* details such as vessels name, port of registry, official number, length overall, breadth, power and tonnage (along with its basis). Detailed rules for licence transfer (from old to new vessels) include:

- no increase in engine power (kW)
- no increase in tonnage (on a consistent basis, *i.e.* all calculations in either GT, or estimated GT (15-24m), or national GRT - part 1 definition, or national GRT - part 2 definition, but not a mixture)
- penalties on Vessel Capacity Units (VCU = LOA (m) * Breadth (m) + 0.45 * Power (kW)), of (in general) 10% for single licence transfers, 20% where two licences were aggregated onto a single vessel, and 30% where there were 3 or more donor vessels.

The additional details, which MAFF calculate from data provided by RSS, include GT figures for vessels under 15m LOA, and the estimates of GT for existing 15-24m vessels. Besides being passed to the Commission, these parameters are also used for licence transfer calculations.

C. Tucker indicated that, as the main concern of the investigation is the accuracy of information forwarded to Brussels for the EC Register and MAGP target monitoring, details that Seafish might obtain directly from RSS would not be used, but that the sampling frame would be the national portion of the EC register. A random sample would be drawn from this complete vessel list (which did not contain vessel identifiers). Checks would be performed on a basis of both drawings and physical measurement, with some cross-checks using both methods where possible. With regard to checking the UK sample specifically, it was noted that Seafish are not requesting accompanying MCA's tonnage measurers in all cases and will therefore make some of their own contacts. C. Tucker agreed to discuss port visit arrangements with Mr. D. Snowball of the Sea Fisheries Inspectorate later after the meeting. Draft notes would be submitted to both MAFF and MCA prior to their being incorporated in the final report to be issued to the Commission for their comments and agreement as necessary.

B. Hall stated that the information on the UK Fishing fleet has been provided to MAFF by the MCA, *via* RSS who is relied upon to provide accurate information. From these figures calculations are carried out by MAFF and passed on to the Commission, GT calculations for fishing vessels of 15 to 24m and less than 15m LOA are carried out exclusively by MAFF. Mr. Hall also stated that the figures provided to Seafish from the Commission using a 31 March 1998 dump were not accurate, however the situation had now been corrected. (The corruption being between the fields GT, Oslo GRT, and other tonnages). The details were: the files submitted in September 1997 had been corrupted the following month, so updates sent February and March 1998 had failed to take effect properly, so the data was re-submitted to the Commission in May/June 1998. He also pointed out that, *pro tem*, the 24m LBP cut-off was being approximated in the UK by 27m LOA.

J. Downie indicated that a program of re-measurement was now in place based on vessel size: *i.e.* the largest vessels to be measured first *i.e.* over 24.4m Registered length to be re-measured according to ITC'69 by 31 December 1998 and thereafter with target dates for various length bands, aimed at completing all over 15m LOA vessels by 31 December 2003. Legislation exists currently for fishing vessels above 24m in length which were supposed to be measured using this method by 18 July 1994, but due to a number of reasons has not been completed. All fishing vessels owners with vessels above 15 metres length overall would be contacted soon and informed of the phase-in dates for re-measurement. The penalty for non-compliance would be de-registration of the vessel - which would then be able to proceed to sea to fish (and could potentially result in the - valuable - licence being lost). Mr. Downie indicated that there is a daily up-date of Registry details available to MAFF and MCA. As the fleet is re-measured new Certificates of Registry will be issued which will show the new GT figure (as required by Community legislation). The UK now will dispense with its current national GRT for registration purposes for vessels over 15m LOA. Vessels over 24m will be issued with an International Tonnage Certificate (showing both ITC'69 Gross and Net tonnages). For vessels less than 24m it was proposed that the net tonnage figure shown would

continue to be the old UK single Gross/Net figure, thus data produced by both measurement systems would be co-existing on certificates, but the gross and net tonnages would not relate to each other at all.

B. Hall added that the policy is for the UK to establish accurate information, and to have an audit trail in place to cover the re-measurement process. On vessel length, it is planned that LBP will replace "Registered Length" (national definition) on the UK register during the re-measurement process - for vessels over 24m, London Convention length, breadth and depth are already being used for registration purposes under the provisions of SI 1988/1909.

J. Downie pointed out that Seafish's observation of the UK's re-measurement would be affected by the programme just being implemented, emphasised that new boats between 15 and 24m would have their Gross tonnages measured to ITC'69 and their Net estimated using UK Part 2 rules, and undertook to provide Seafish with copies of the relevant legislation for the purposes of this project.

B. Hall commented that the effort component of MAGP IV was putting real pressure on the UK's pelagic and beam trawl segments.

A series of discussions then took place detailing existing legislation and practice, and the forthcoming legislation, against the 5 categories of vessel, *i.e.* - 1 - new vessels under 15m, 2 - existing vessels under 15m, 3 - new vessels between 15m and 24m, 4 - existing vessels between 15m and 24m, and 5 - all vessels over 24m.

1. It was confirmed that the GT figures calculated by MAFF for existing under 15m vessels had been based on the a_2 formula, and were based on the LOA, Breadth and Depth information held by RSS Cardiff, which were believed to be a close approximation to the Oslo definitions. All such vessels had been assigned a measurement date of 30 April 1995. It was pointed out that Seafish would need to include some of these vessels in their sample to check that the correct dimensions had been used as the basis for calculation, and that the formula had been correctly applied.

2. For new (keel laid post July 1994) under 15m vessels, MAFF had been using the a_1 (new boat) formula correctly, but had incorrectly based its application on the same RSS LOA, Breadth and Depth (Circular 1664, not ITC'69, definitions) as for existing vessels, as UK registry regulations had not been changed. Although there was no impact on National tonnage, the GT values reported to the Commission for this group (of maybe 700 small vessels) may have been under-estimated by an average of 10 to 15%. There is potential for a larger underestimate if vessels have attempted to manipulate their depth measurement to obtain a low UK tonnage figure as a result of licence transfer rules however. Two issues for consideration by the UK administration were therefore raised - how the backlog of new vessels could be re-estimated (perhaps by application of the a_2, existing boat, formula, which is based on the smaller, Oslo, depth definition); and the future treatment of this class of vessels (which would require further changes to UK registry regulations to obtain ITC'69 Breadth and Depth). MAFF and MCA agreed to consider these issues, and report the results of their

deliberations back to Seafish, but pointed out that their current priority was ensuring all over 24m vessels are properly measured to ITC'69, on the basis of this group's relatively large contribution to the total fishing mortality generated by the UK fleet.

3. There were of course two systems in place for existing 15 to 24m vessels - estimates based on dimensions and year of construction, and an ITC'69 re-measurement programme. The estimates, which had been undertaken by MAFF on the basis of data provided by RSS Cardiff (*i.e.* LOA, UK registered Breadth and Depth - which approximated to the Oslo definitions - and Year of construction - where a few missing values had been estimated as equal to the year of first registration) using the a_3 formula. The re-measurement programme, implemented by Statutory Instrument (SI), will be starting early in 1999, and will be completed by December 2003. Basically the programme is organized starting with the largest vessels, and requires between 45 and 47 vessels to re-measure each quarter (with owners penalised by de-registration and the subsequent loss of their licence if they do not comply). The UK is aware that it has already missed the first (33%) target, and will miss the second (55%) one also, but the programme is designed to ensure compliance with the third (77%) and final (100%) targets. By measuring the largest vessels first, progress in GT terms will be ahead of these vessel number targets. London Convention definition Breadth and Depth values are also to be recorded during the re-measurement process. It was pointed out that where a vessel had left the UK fleet, re-measurement would not be possible retrospectively.

4. The re-measurement programme is also to cover any existing over 24m LBP vessels which have not yet re-measured to ITC'69, but with an absolute deadline of 31 January 1999. However, the vast majority of vessels in this group, *i.e.* those over 24.4m Registered length (UK definition), are to be completed by 31 December 1998.

5. New boats over 15m will all be required to be measured to ITC'69 standards as soon as the new SI comes into force, with vessels built between July 1994 and that date being covered by the re-measurement programme for existing vessels.

The source of measured GT data was then discussed. Where a vessel was imported from abroad with a valid International Tonnage Certificate (London Convention), that would be accepted, but if under 24m a UK Part 2 combined Gross and Net measurement would also be required. All the information on full volumetric GT communicated to the Commission to date had either originated from classification societies, or from foreign administrations, or, in a very few cases, from MCA's own measurements and calculation. For the new re-measurement programme, measurements will be undertaken by bodies to be authorized by MCA, on the basis that they have auditable systems (maybe ISO 9002), and are technically competent. For vessels over 24m, authorisation would be restricted to classification societies, but other bodies would be authorized for vessels under 24m, as the classification societies were not interested in measuring these smaller vessels.

C. Tucker described the sampling methodology being adopted, with a long list randomly selected from a copy of the Community Register, from which it was hoped to achieve a 50% sub-sample, based on opportunity (vessels being available in port, or suitable records/ drawings being in existence). The UK administration pointed out that such data was not held centrally, but was distributed in individual measurers - either the classification societies or private naval architectural consultancies, and that vessel owner's consent would be required to examine such records.

A wide ranging discussion was held covering the sampling approach to be adopted in the UK, and the associated issue of powers of inspection, (which was also continued after lunch in a smaller group). C. Tucker described the situation in other member states, where Seafish would often either be accompanying an official measurer during his normal duties, or would be assisted by a local fisheries inspector. However Seafish's unique position of having already established contacts with the UK industry was acknowledged.

It was confirmed that Bill Hall would remain the contact point for the UK Fisheries Departments (and would therefore forward relevant documentation to Robin Wetherston at the Scottish Office), while John Downie would continue to be the MCA contact (and would similarly forward information to Tim Hughes at RSS, Cardiff).

The group then broke for lunch, during which informal discussions were held on a range of subjects. These included the issue of the number of decimal places to be used in GT reporting. UK legislation currently requires truncation to the integer value below the full calculation (as is normal merchant ship practice), whereas the EC fishing vessel register regulation requires two decimal places. B. Hall acknowledged that rounding down could produce a severe underestimate of fleet aggregate GT in countries with a high proportion of small vessels, and pointed out that there was a certain amount of mis-information about GT in circulation - particularly the notion that one could recognise a GT by its lack of decimal places!

After lunch, G. Ritchie and R. Watts commenced their journeys back to their respective home bases, while C. Tucker returned to MAFF offices for an afternoon meeting with B. Hall and Dave Snowball of the Sea Fisheries Inspectorate. This was to cover the issue of attempting to clarify arrangements for sample inspections, continuing the discussions immediately preceding lunch. Points raised included:

a) The ownership of vessels is in the public domain in the UK, and is available through RSS, Cardiff, therefore Seafish has a right to obtain this information without recourse to any official powers of inspection. (MAFF could be able to add vessel base district information if required).
b) Options could include Seafish contacting owners directly, or contacts could be established through the Sea Fisheries Inspectorate (SFI, England) and the Scottish Fisheries Protection Agency (SFPA, Scotland).
c) Using the SFI/SFPA route, and/or having SFI/SFPA inspectors present during checks, could reduce industry co-operation.

d) UK Fisheries departments need to establish their policy with regard to this study, as to whether they will insist on having their inspectors present during inspections. Seafish staff should therefore inform SFI / SFPA of their plans.
e) Where checks are to be made on the basis of plans *etc.* not held by the owner, his written permission to examine same would need to be obtained, and Lloyds Register approached. MAFF agreed to request their assistance if required.
f) The question of who had powers, should industry refuse co-operation, was raised, and it was pointed out that MCA had the responsibility to ensure the accuracy of Registry data.

This meeting ended with a firm statement of MAFF policy, in that their prime objective with regard to the project was to ensure that the UK produced a good sample - indeed they saw this as in the national interest, as not to do so could jeapardise any future UK negotiating position. C. Tucker then also returned to home base.

R. Watts
Marine Surveyor

C.E. Tucker
Marine Services and IT Manager

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Belgium, 10 August 1998 - 13 August 1998
C.E. Tucker and B.F. Wilson

Monday, 10 August 1998

B.F. Wilson travelled to the Seafish's offices in Hull by road from Peterhead and collected C.E. Tucker, following which they proceeded to the car ferry terminal for the onward journey to Zeebrugge. Whilst on board the ferry, Excel data covering the current status of the Community's Fishing Vessel Register in respect of the Belgium active fishing fleet and Belgian Ports of Registry was reviewed together with the data communicated to the Commission on the re-measurement programme and thereafter translated into the SPSS statistical package. This was then used to prepare a table of numbers of vessels by port and size grouping and for those vessels where an estimated or a measured GT had been reported to the Commission. This exercise showed that the Commission were aware of some 148 vessels which were active within the Belgian fleet, with 130 measured GTs having been reported to the Commission and only 18 estimated GTs. The tables prepared using SPSS were reviewed and it was decided that due to the compact nature of the Belgian fleet, Seafish could cover the whole North Sea coast in it's area visit to follow, this would cover all major Belgian fishing ports.

Tuesday, 11 August 1998

Disembarked the car ferry to travel to Ostend by road. As there was time in hand before the 10am meeting it was decided to look at the Port of Blankenberge. Some 29 small fishing vessels between 3m and 10m were observed, apparently rigged for shrimp trawling. None were displaying national registration letters or numbers. Photographs were taken of the fleet before travelling on to the pre-arranged meeting at the offices of the Ministry of Middle Class and Agriculture in Ostend.

Present at the meeting:-

C.E. Tucker	-	Seafish
B.F. Wilson	-	Seafish
R. De Blieck	-	Ministerie Van Verkeer
Luc Maertens	-	Director, Ministry of Middle Class and Agriculture
Marc Welvaert	-	Seafisheries Officer, Ministry of Middle Class and Agriculture
J-Fr Verhegghen	-	Seafisheries Inspector, Ministry of Middle Class and Agriculture

The meeting commenced at approximately 10.15am, with C.E. Tucker clarifying the purpose of the visit and the objectives Seafish would hope to achieve. He also explained the objectives of the study Seafish were undertaking on behalf of the Commission *i.e.* checking the accuracy of the tonnage being supplied to the Commission from a sample of individual vessels from all member states. This would involve a physical examination of some vessels in the sample, while others could be accomplished by inspecting the vessel's drawings and documents only.

A second objective was to check vessels' power, but this would only include a visual check on engine type and its declared power. This study was not to check compliance with MAGP *etc.*, it was only to check that tonnage and power measurement and reporting was undertaken satisfactorily.

Luc Maertens asked if Seafish were a commercial company, if not, how were they funded, and how they had been selected to carry out this project on behalf of the Commission?

C.E. Tucker explained the background of Seafish as a semi-autonomous authority promoting the consumption of sea fish (*i.e.* marketing), training and development (all of which is funded by a levy on fish sales), with his own department, Marine Services, consisting of Kingfisher, Engineering Services, Marine Survey and also the Seafish IT groups. Marine Services is on a more commercial footing than the remainder of Seafish and its work was mainly focused on safety in the fishing industry. He explained that Seafish had submitted a quotation to undertake this project on behalf of the Commission. Seafish had therefore competed against the classification societies, consortia of consulting naval architects, *etc.* The Commission awarded the contract to Seafish due to the way Seafish intended to undertake the study, with a single team of Marine Surveyors who would cover the whole project, thus giving continuity in work and reports.

Luc Maertens said that ITC'69 was a well proven system of tonnage measurement and asked what problems were anticipated?

C.E. Tucker replied that although the ITC'69 tonnage measurement of ships was clearly defined, there was some evidence to show that the rules were not being correctly interpreted. His own findings have shown that some tonnage certificates only included an under-deck volume and no superstructure. Some fishery authorities have accepted these certificates and not queried or checked them. He went on to detail the proposed method of checking the Belgian fleet. It was the intention of Seafish to supply a list of some 60 vessels but they would only be looking for 30 for checking. Whilst the checking of the vessel was in progress, Seafish would need access to the vessel's tonnage file in order to check the vessel's under-deck volume. The checking of the vessel's superstructure would normally be by a physical measurement.

R. De Blieck commented as to why a list of 60 vessels was to be submitted when only 30 were in fact required?

C.E. Tucker explained that this gave the team undertaking the checks the opportunity to select vessels that would be in port at any given time. Thus, the project would not interfere with the fishing fleet's activities. This sampling method had been agreed with the Commission. (100 vessel checks was the target for Member States with larger fleets.) The target of 30 vessels for the Belgian fleet is only partly related to the fleet size. He also explained that the Community system creates 5 groups of vessels *i.e.* 15m and under - existing, 15m and under - new, 15-24m - existing, 15-24m new and over 24m. It was hoped we could select a cross section of these vessels with 5 or 6 in each group of vessels.

R. De Blieck noted that all the vessels in the under 15m group were existing vessels and there were very few new vessels above 15m (about 1 vessel per year) so those remaining were existing vessels. He asked if the inspection would be in depth?

C.E. Tucker confirmed that it is not the Seafish's brief just to be critical of any particular Member State but only to be honest *i.e.* we are to report positive as well as negative findings. Also, for instance we are neither checking the administration of the Common Fisheries Policy *per se*, nor the 221kW for fishing vessels within a 12 mile limit *etc.* If we visit a vessel we will only check on the engine plate to confirm the kW there recorded, but if we find on checking the supplier's catalogue that the engine was not likely to be capable of supplying that power, this would have to be reported back to the Commission. Also, gear box ratio and shaft size could be checked.

R. De Blieck stated that if the gear box and shafting were checked, we should also check the propeller for the size and the pitch and this could not be carried out unless the vessel was on the slip or in dry dock. Most of the Belgian fleet are fitted with nozzles.

C.E. Tucker confirmed that trying to check delivered power using this method would be very difficult as some vessels have CP propellers and some have fixed propellers, our expert opinion was all that would be offered.

R. De Blieck advised that all propellers, nozzles and gear boxes are checked by his Inspectors.

C.E. Tucker advised that some Member States have an excellent audit trail but on the other hand, others do not. Some States depend solely on classification societies. He also stated that the size of the shaft depends on the material specification. If de-rating of the engine is carried out the shaft might be de-rated also, to provide control.

The de-rating question had to be addressed. Does one believe, when fishing, all fishing vessels are producing the correct kW that are shown on the licence/permit, or are there pressures on the system to record a lower kW on paper than is in fact fitted to the vessel? There are many vessels running at 80/85% of the engine's maximum power ability in order to achieve a longer engine life.

Luc Maertens commented as to why the power was being checked if the focus of the project would be on tonnage and how confidential are the reports on the project?

C.E. Tucker stated that the project focuses around tonnage, power being a secondary objective and any information we collect on the vessels will be commented on. All information obtained during our visits will be strictly confidential, we will not be naming vessels in our reports but only state that we examined a certain number of vessels and a percentage of them conform with the Commission's requirements. We will not pass any report from one country to another. Seafish staff are not permitted to pass on information of a commercially sensitive nature - in fact it would be a criminal offence if we did so. Seafish do not design vessels and therefore, when examining plans, we understand that these are the property of the designer and as such are classed as commercial information.

Luc Maertens then made his apologies and left the meeting due to other commitments.

The Belgian delegation then described the development of their system of tonnage measurement for fishing vessels. The original national system was similar to the Oslo convention, but, as Belgium ratified ITC'69 in 1982, from 1983 all vessels over 24m had to be measured or re-measured to ITC'69 as did new under 24m boats. A national tonnage certificate showing GT was supplied to vessels under 24m. Existing (pre 1983) under 24m boats could retain their national GRT measurement until such time as they were re-built. Until recently there had therefore been some 15 or 16 15-24m vessels with estimated GT, but these had recently been re-measured (using funds provided by the administration) and their new data was currently being forwarded to the Commission, as well as being shown on a new national tonnage certificate. The estimates of GT for these vessels, forwarded to the Commission on 16 December 1994, had been based on coefficients from the technical expert meetings held previously, but these had since been updated by estimates produced using the a_3 formula in line with Decision 95/84/EC, however these estimates may have been (erroneously) based on London Convention B and T instead of Oslo as required. A sheet summarising sample calculations was tabled.

The application of the above system had therefore left the handful of under 15m vessels with either a full ITC'69 GT calculation, or an old Belgian GRT (if they were pre '83 and unmodified). Therefore, their tonnage had been estimated from the a_1 formula of Decision 95/84/EC, but the source of the L, B & T parameters used for this calculation was not discussed. The GTs so calculated had not been issued to the boats concerned, but simply forwarded directly to the Commission.

Belgium introduced fishing vessel licencing in February 1988. Originally this had been simply based on power, but now a tonnage limit has been introduced also. Licence aggregation is permitted, up to an overall maximum of 883kW (1200 HP), and the tonnage (GT) of a new boat is not to exceed 0.44 x kW. Within these limits, it was felt that the system of EC construction grant aid might encourage an over statement of GT.

C.E. Tucker asked who paid for the re-measurement of the Belgian fleet?

R. De Blieck confirmed that the costs had been met by the Belgian Government.

C.E. Tucker enquired as to whether a member of the Seafish team could accompany an Inspector on a re-measurement of a vessel?

R. De Blieck confirmed that all the Belgian fleet has already been re-measured. One new vessel had joined the fleet 3 weeks ago and there was a new vessel being built in Holland and this would be ready for measurement in approximately 2/3 months time.

C.E. Tucker requested to be informed of the date of the measure to enable a member of Seafish to accompany the Inspector on that date.

The rounding down of tonnage was mentioned *i.e.* dropping 2 decimal places. This may not affect the Belgian fleet significantly but fleets made up of mainly small vessels could well be affected as this would reduce the tonnage by a large percentage.

R. De Blieck suggested that this was written into the ITC'69 Convention and it was the Belgian practice to round the tonnage down.

C.E. Tucker enquired as to what procedures are followed when a vessel has no lines/drawings to enable the tonnage to be calculated.

R. De Blieck replied that the vessel was physically measured when in dry dock or on the slip-way. When the dimensions of the vessel have been taken, a lines plan is drawn up and the tonnage calculated thereafter.

C.E. Tucker enquired as to the whereabouts of the records of the vessels, were they held in the offices of Ministerie van Verkeer en Infastructuur or are any vessels measured by the Classification Societies?

R. De Blieck advised that all the vessel records on tonnage were held at his office and no Classification Societies are engaged to measure any of the Belgian fleet.

The Seafish personnel were then invited to the office of R. De Blieck for demonstration of Belgian tonnage calculation procedures.

C.E. Tucker accepted his kind offer and after thanking R. De Blieck and the remainder of those present for their much appreciated assistance, arranged to meet after lunch in the offices of J-Fr Verhegghen. A copy of a list of tonnage and power for all Belgian fishing vessels was handed to the Seafish team.

After the departure of all other parties, leaving only J-Fr Verhegghen and Marc Welvaert together with C.E. Tucker and B.F. Wilson a short informal discussion then followed.

Messrs. Tucker and Wilson enquired as to why the vessels which had been observed in Blankenburge by themselves prior to the meeting had no State fishing numbers thereon.

They were informed that these vessels were classed as sport fishing vessels and as such are not required to be held on the Belgium Fishing Register. It was further stated that under no circumstances are these vessels permitted to catch fin fish. The Seafishery Officers inspect the vessels to ensure they only trawl for shrimps, but on one occasion an officer found a propane gas cylinder with the bottom removed and full of Sole which would appear to prove that the vessels are inspected regularly.

The meeting finished at 13.30 hours.

Tuesday, 11 August 1998 - 1445 hours

Meeting commenced as arranged at the offices of R. De Blieck

Seafish were informed that the rounding down of tonnage came from an IMO interpretation of terms (IMO/Circular 78 paragraph 51). At this point Messrs. Tucker and Wilson were introduced to F. Derinjnmck, a newly promoted chief tonnage surveyor. Mr. De Blieck gave a demonstration on how the lines plan is plotted on to the computer. Approximately 700 points were plotted around the hull and watertight poop-deck, the computer then calculated the total volume of the hull. The volumes of the superstructure were calculated by hand, using rectangular, trapezoidal or Simpson's Rule integration as appropriate, after on-board checks. The final tonnage figure was calculated from the total volume.

The program used was originally written by Leitcher Offshore Design (for an Apple IIe) and adapted for IBM by Mr. De Blieck. Linear interpolation was used as the basis for area and volume calculations. Checks were made against hydrostatics prepared by naval architects for stability purposes and volumes were found to agree within about 1%. Corrections for thruster tunnels, sea chests, sonar wells. anchor pockets etc. were made to the hull volume, and all small hatchways etc. included.

R. De Blieck produced the tonnage certificate and drawings of a stern trawler for Seafish to check *i.e.*

Under-deck volumes

Hull plus water-tight focs'le	=	1061.76
Forward focs'le and bulbous bow	=	22.20

Above-deck volumes

After winch-house FR 6/17	=	5.40
Wheelhouse upper and lower *etc.*	=	130.06

J-Fr Verhegghen had previously arranged with the owner of the this vessel for Seafish to measure the vessel that afternoon. C.E. Tucker and B.F. Wilson were then escorted to the harbour for this purpose. Seafish then undertook to measure the vessel's superstructure above the main deck *i.e.* wheelhouse, after shelter, hatches and funnel, breadths and overall length of the vessel. During this check it was noted that one of the hatches mentioned on the original tonnage had been removed and the space plated over. Also, some discussion took place as to the after open shelter *i.e.* winch-house. As this area had an open after end, should this be treated by coming in half the breadth and thus reducing the size of the space which in turn would reduce the vessel's GT? Mr. De Blieck had the opinion that the whole space should be included, as it contained fish handling machinery. All the measurements were taken with the intention of then being able to move on to the next vessel but by this time the crew of this

vessel had locked up and left. Arrangements were therefore made with the owner to check this vessel on the morning of 12 August 98.

C.E. Tucker and B.F. Wilson returned to the hotel to check the tonnage of the vessel measured. The official under deck volume was used and the superstructures were independently calculated by Seafish. The Seafish GT equalled 322.81, the tonnage held on the Belgian file equalled 336.00.

Thursday, 12 August 1998

Meeting held in the offices of J-Fr Verhegghen

All the information requested by Seafish was handed to them (copy attached).

C.E. Tucker and B.F. Wilson were introduced to Lieben Richard, a Fisheries Controller who undertook to accompany them to the harbour to assist with arrangements for check measurements.

The second vessel to be subjected to a superstructure volume check was a large beam trawler. During this process, R. De Blieck, who was attending on board, expressed some reservations concerning the team's work. He felt that the team was investigating individual vessels in too great a detail, as he considered the Commission's brief simply to cover examining the procedures employed in each member state, with only simple vessel checks (effectively of main dimensions only, in a similar manner to those provided for under Article 12 of the London Convention itself). He also felt that the desired final sample size (30 vessels) was excessive for the small national fleet; pointing out that Belgium was not a developing country, and claiming (with some justification) that their administration was technically competent. C.E. Tucker acknowledged that there was a possibility that Seafish were mis-interpreting their brief (although he believed this to be unlikely) and therefore attempted, unsuccessfully, to contact DGXIV (Messrs. Samaras, Roitmann or Hopkins) by telephone to confirm (or otherwise) Seafish's interpretation. As this proved impossible, as the officials concerned were all on leave until 3 September 1998, he therefore undertook to note R. De Blieck's reservations (in this report) and to seek clarification of Seafish's brief.

The party then proceeded to the slipway, with R. De Blieck returning to his offices. At the slipway Lieben Richard arranged for them to undertake a full hull and super-structure check on a small old beam trawler. Once Lieben Richard had made these arrangements Seafish were left to complete their task. The vessel was then measured on 8 stations over its length, taking a average of 8 measurements per station and measuring up all super-structures above the deck.

It had been arranged for C.E. Tucker and B.F. Wilson to return to R. De Blieck's offices for a short meeting, but due to the late hour (16:15 hours) apologies were given to R. De Blieck due to the fact that it would be necessary to proceed to the ferry terminal for the homeward journey.

Onboard the ferry, C.E. Tucker wrote a program for the computer to enable all information collected on this third vessel to be loaded and the vessel's tonnage calculated. The result was most encouraging, with the Seafish computation agreeing exactly with the Belgian record (to the limits of accuracy implied by dropping 2 decimal places). B.F. Wilson commenced compiling this report.

Thursday, 13 August 1998

C.E. Tucker and B.F. Wilson disembarked the ferry and travelled to the Hull office. The computer program was checked and the information printed out. A short meeting was then held with John Tumilty, Technical Director, Seafish, C.E. Tucker and B.F. Wilson to discuss the outcome of the visit to Belgium. It was decided that it had been a very productive visit despite highlighting a few problems.

B.F. Wilson left the Hull office for the onward journey to Peterhead.

C.E. Tucker
Marine Services and IT Manager

B.F. Wilson
Marine Surveyor

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Netherlands, 25th August 1998 - 28th August 1998
W.S.G. Ritchie, B.F. Wilson and A.R. Thomson

Tuesday 25th August 1998

B.F. Wilson left Peterhead at 0700 hours and travelled to Seafish HQ in Edinburgh. He arrived at 1000 hours to join W.S.G. Ritchie and A.R. Thomson for the journey down to Hull by car to meet the overnight ferry to Rotterdam. Prior to boarding the ferry, W.S.G. Ritchie called in at the Seafish Hull office to pick up a copy of the Netherlands Fleet Statistics (1). A meeting was held on board the ferry to review the statistics and gain an understanding of the size and diversity of the current fishing fleet in the Netherlands. Examination of the statistics revealed that from a total of 1046, vessels actively engage in fishing activities; 447 had GRT only; 275 had GT only and 324 had both GRT and GT measurement records available. From the fleet statistics it appeared that whilst a large proportion of the vessels over 15m in length had GT measurement, only a relatively small number of the vessels below 15m had been re-measured to date. The number of vessels in the fleet appeared to be approximately evenly split between the 3 class sizes, *i.e.* Under 15m (33.3%), 15m to 24m (33.8%) and Over 24m (32.9%). 100% = 1046 vessels. Just over half the fleet is less than 20 years old.

Wednesday 26th August 1998

Note: Numbers in brackets following quoted documents refer to the documentation list in Annex I.

Disembarked from car ferry and travelled to the offices of the Ministerie van Verkeer en Waterstaat Directoraat - Generaal Scheepvaart en Maritieme Zaken Scheepvaartinspectie in Rotterdam.

Present at the meeting were:

C.H.M. van Schie	-	Scheepvaartinspectie
P. Roos	-	Ministry of Agriculture, Nature Management and Fisheries
A.G.T. Lemkes	-	Ministry of Agriculture, Nature Management and Fisheries
W.S.G. Ritchie	-	Seafish
B.F. Wilson	-	Seafish
A.R. Thomson	-	Seafish

The meeting started at approximately 1030 hours with W.S.G. Ritchie going over the purpose of the visit and the objectives, *i.e.* checking the content and accuracy of tonnage measurements (GT) supplied to the European Commission by taking a sample of individual vessels from all Member States. There would also be checks carried out on engine power, although these would not be as comprehensive as for GT.

C. van Schie stated that all vessels over 24m have been measured to ITC'69 and have GT records available. Practically all vessels 15m to 24m have GT measured in accordance with EC regulations, even though phased completion of re-measurements does not have to be achieved before 31st December 2003. Under 15m vessels have to be re-measured by 31 December 1998 and the Netherlands are in the process of carrying out GT measurement now, with approximately 150 vessels to measure. (Note: see later comments on Fleet Statistics). C. van Schie supplied an Organogram for Scheepvaartinspectie, see Annex II.

C. van Schie and P. Roos explained the procedure for checking and certification of fishing vessel powering. Inspectors attend the engine manufacturer's premises to witness the engine on test, the engine power is recorded and the engine settings sealed at the engine works. The engine manufacturer's certificate stating power is checked by Scheepvaartinspectie. This information is then passed to the Ministry of Agriculture and a copy of this certificate is also available on board the vessel.

C. van Schie stated that sample re-examinations of some 14/15 vessels at sea disclosed a number of engine power discrepancies with respect to declared power and actual power. Whilst there were prosecutions as a result of these sample audits, the verdicts were later overturned and fines had to be repaid on a technicality (the definition of maximum continuous rating used for the sample audit having been disputed).

W.S.G. Ritchie asked if it would be possible to view examples of ITC'69 GT calculations and C. van Schie replied that we would meet later with staff from the Scheepsmetingsdienst who were responsible for all EC and ITC'69 tonnage measurement in the Netherlands (for all ship types, not just fishing vessels). He also confirmed that all tonnage and powering documentation and calculations were held at the office there in Rotterdam. Information concerning any changes on re-measurements to individual vessels were advised by Scheepvaartinspectie to the Ministry of Agriculture, and were then passed on to Brussels.

C. van Schie commented that he did not think that GT gives a good measure of fishing vessel capability, although this is what it is being used for. A better measure, in his view, would be to record vessel length and power. He is concerned that GT is now affecting the design of new fishing vessels in a way which may adversely affect safety and working conditions on board. For example, some designers are now putting crew accommodation below deck and fish processing operations are located within open focsle's, and winches are being positioned on open deck rather than in enclosed winch houses in order to reduce the GT.

The meeting then moved to a conference room from C. van Schie's office so that some examples and actual vessel drawings and GT calculations could be discussed with the Ship Measuring Department (Scheepsmetingsdienst). C. van Schie introduced L. Dubbeldam and J.P. Baalbergen from Scheepsmetingsdienst, and left the meeting with P.Roos.

L. Dubbeldam explained that his department consisted of approximately 30 in number people carrying out tonnage measurement in the Netherlands. They provide this service for all ship types, and fishing vessels account for only about 10% of their total effort. No other agency or private company or classification society is permitted to issue tonnage certificates. They also

carry out draft surveys on commercial vessels. The cost of tonnage measurement is borne by the vessel owner. (Fees are dependent on ship type and size(2)).

The meeting then went on to discuss the methods of tonnage measurement and calculations adopted by the Netherlands (L.Dubbeldam, W.S.G. Ritchie, B.F. Wilson and A.R. Thomson).

L. Dubbeldam stated that their surveyors usually had a background in shipbuilding, and it usually took around 2 years of experience before they were considered to be fully competent.

For calculating the underdeck volume, it is preferable to have lines drawings for the hull available. The accuracy of any lines plan is always confirmed by surveyors checking dimensions and sections physically on board. Once this is done then the lines/body plan is digitised into their naval architectural computer system ("SIKOB" or "Seasafe") which then generates a full size 3-D model of the hull and allows the volume enclosed by the hull and tonnage deck, focsle, poop, *etc.* to be calculated by the system automatically. Digitising is carried out to an accuracy of approximately ±10mm (full size).

For smaller vessels (less than 30m in length), with no lines plans available, a more comprehensive ship check and measurement regime is carried out - usually requiring the vessel to be slipped. Normally, 2 surveyors to carry out the measurement check, then a single surveyor can perform the calculation back at the office. The ship check normally takes about a day, and may typically consist of a series of offset measurements taken on main bulkheads (Aft Peak, Engine Room, Midships End, F Peak). They would **never** accept a naval architects lines as correct without making a physical check first. Digitising is usually completed within the space of one day by personnel skilled in the use of the SIKOB system. Once the hull form is generated (and providing KG is available) this also allows checking of intact/damaged stability for the smaller, older vessels, which is a useful additional benefit.

Measurement of the above deck enclosed volumes is usually carried out by the tonnage surveyors physically on board and then added into the total tonnage calculation. Then final certificate is generated directly from the computer.

L. Dubbeldam confirmed that tonnage measurements do not include decimal places and are always rounded down (except for very small vessels under one tonne GT which would then have a tonnage measurement of zero).

Enclosed spaces less than $1m^3$ are not recorded for the purposes of GT measurement unless they are connected to, or form part of, a larger deckhouse or erection.

W.S.G. Ritchie, B.F. Wilson and A.R. Thomson were given the opportunity to examine the GA and Lines Plan for the vessel "CAROLIEN", a 126m freezer trawler. The digitising process using the "SIKOB" system was also demonstrated, as was the procedure for the calculation of GT. The International Tonnage Certificate (3) for this vessel was copied and handed to A.R. Thomson. When digitising from paper prints of lines plans, the scale on the plans is always checked using the digitiser to prevent any inaccuracies arising out of shrinkage of the paper due to humidity. A printout of the SIKOB output was handed to A.R. Thomson as well as a body plan generated for the "CAROLIEN" (4).

Seafish also received copies of the following:

(a) Tonnage Certificate (5) for the vessel "WILHELMINA" (UK 224), NLD 1901000951 length 32.15m dated 24th March 1980 and measured under the Oslo Convention.

(b) International Tonnage Certificate (1969) (6) for the same vessel (as (a) above), undated, re-measured to ITC'69.

(c) A specimen Special Tonnage Certificate (7) for the vessel "DE OUWE LOEGE" (VD 65), NLD 196100614 length 13.95m.

Note: GT measured under the Oslo convention for "WILHELMINA" was 266.2 register tons and this went up to 291 under ITC'69 when the vessel was re-measured, alterations are included in the re-measurement.

ITC'69 does not actually strictly apply to vessels under 24m in length, (EC regulations are applicable) and it is for this reason that the Netherlands use the title "Special Tonnage Certificate" (7) for smaller vessels. This certificate quotes EC 2930/86 for length and ITC'69 for breadth and moulded depth. Oslo parameters are not used, so the formula for V uses the a_1 factor where:

$$a_1 = 0.5194 + 0.0145 \times LOA$$

a_2 and a_3 are no longer used in GT calculations for any size or class of vessel.

L. Dubbeldam passed over a copy of a page from the Official Journal of the European Communities No L339/13 dated 29 December 1994 from which they calculate GT for vessels under 15m. This is enclosed in Annex IIIA. It was noted that this slightly differs from the same document held (in English) by Seafish (although has the same effect), see Annex IIIB.

L. Dubbeldam confirmed that the following regulations applied to tonnage measurement in the Netherlands:

(a) International Convention on Tonnage Measurement of Ships, 1969.

(b) TM 5/Circ 5 Annex: Interpretations of the Provisions of the International Convention on Tonnage Measurement of Ships, 1969 (copy supplied to A.R. Thomson by L. Dubbeldam).

(c) Council Regulation (EEC) No 2930/86, dated 22nd September 1986.

(d) Council Regulation (EC) No 3259/94, dated 22nd December 1994.

L. Dubbeldam stated that vessels cannot be registered without tonnage and power data being entered. For smaller vessels even outboard engine power is recorded.

T. Lemkes from the Ministry of Agriculture joined the meeting to discuss the fleet statistics. He reviewed the statistics Seafish had tabled, and remarked that they were reasonably accurate (1 to 2 weeks out of date). T. Lemkes is shortly to update Brussels with new statistics as the seagoing fleet of 1000 - 1100 vessels is checked every year and the lists updated. Owners must give evidence each year that they have received revenue from fishing activities - if not, then the vessel is removed from the register. It can be problematic getting such information from owners of smaller vessels.

T. Lemkes was confident all under 15m vessels would have GT measurement by end 1998, saying 150 have been measured out of 163 in total (total may rise to approximately 200 once fishing returns have been analysed). Owners who have not obtained GT measurement are identifiable from the Ministry's database.

Note: This is not reflected in the fleet statistics and the figures should be examined at the second visit, but may be explained by inclusion of the inshore vessels.

T. Lemkes explained that in the Netherlands a distinction was made between seagoing and inshore fishing vessels, and all vessel statistics went to Brussels. It appeared that no GT measurements were made for inshore vessels. Inshore vessels were defined as boats fishing within the 3-mile limit, or on inland waters, Lake Ijsselmere, *etc.*. There are about 250 Mussel/Oyster/Cockle vessels and around 80 vessels fishing on the Ijsselmere or from the beach which are classed as inshore vessels. The GRT figures in the Fleet Statistics will tend to apply to these inshore/inland fishing vessels.

T. Lemkes will be able to advise on suitable port locations for sample measurement purposes for the second visit.

L. Dubbeldam gave some details as to the procedure for vessels flagging in. If they were in possession of an ITC'69 or EC Tonnage Certificate, then a ship check would be carried out and the calculations verified before a new tonnage certificate would be issued. If no certificate existed, more detailed measurement of the ship would be undertaken.

L. Dubbeldam confirmed that for vessel power checks and certification, only engine type, manufacturer and power are noted, no details are required for gearbox, propeller, *etc.*.

A.R. Thomson asked L. Dubbeldam how many hull sections were measured for vessels with no lines plan available. L. Dubbeldam replied that for a typical fishing vessel of around 24m in length, then 6 sections would be measured (more if the hull is highly shaped), and 2 tonnage surveyors could measure 2 hulls of this size in a day. It was always good practice to produce sketches showing all measurements taken, and then draw outline sections to check they are reasonably fair and no major mistake has been made in the measurement process.

W.S.G. Ritchie, B.F. Wilson and A.R. Thomson left the offices at approximately 1500 hours and reconvened at the hotel to review information received against objectives and prepare for the port visit the next day.

Thursday 27th August 1998

A port visit had been arranged for the afternoon at the Maaskant Yard in Stellendam. It was agreed that we would hold a review of the previous day's meeting before driving to Stellendam, as it would be impractical to visit the shipyard and return to Rotterdam for a meeting without missing the return ferry.

0900 to 1000 hours: W.S.G. Ritchie, B.F. Wilson and A.R. Thomson prepared a list of areas still to be resolved from the previous day.

1000 hours: Travelled to Scheepvaartinspectie offices, arriving at 1030 hours. Present at the meeting were:

L. Dubbeldam
J.P. Baalbergen
W.S.G. Ritchie
B.F. Wilson
A.R. Thomson

A.R. Thomson had a number of unrelated issues to examine:

(a) Apart from the usual harbour dues, light dues, *etc.* payable on the basis of GT, were there any other taxes or grant aid initiatives dependent on GT? L. Dubbeldam replied that information was not available there, but obtained the name and address of the government agency involved and a contact:

Hr Veenstra
RIVO-DLO
Postbox 68
1970 AB Ijmuiden

Tel: 0255 564696

(b) Were Scheepvaartinspectie involved in checking ITC'69 Tonnage Certificates of foreign flagged vessels calling at Netherlands ports? J.P. Baalbergen replied that Port State Control inspection required a check of the Tonnage Certificate, but this inspection was carried out by Customs who need to see the certificate for revenue purposes and for the collection of harbour dues.

(c) A further discussion took place with respect to the use of a_1, a_2 and a_3 for the different vessel classes, J.P. Baalbergen confirmed that:

(i) For vessels under 15m:

All new vessels are measured to EC Gross Tonnage using a_1.

Only a small number of existing vessels still have GT estimated using a_2. The Netherlands will attempt to have these all re-measured by the end of 1998, although some owners are reluctant to agree to re-measuring.

(ii) For vessels 15m < 24m:

The Ministry of Agriculture allow estimates of GT using a_3, but all such estimates are to be replaced by re-measured GT by 31 December 2003. Again some owners are reluctant to re-measure.

J.P. Baalbergen explained the reluctance to re-measure was due to a perception that the GT will increase upon re-measurement. J.P. Baalbergen's view was that overall, the EC factors seem to even out any discrepancies across the fleet, but individual vessels may see relatively large differences (plus or minus) after re-measurement.

(d) J.P. Baalbergen handed over a copy of the legislation bringing ITC'69, EEC 2930/86, EC 3259/94 and Pb EC L339 into force (8).

1200 hours: W.S.G. Ritchie, B.F. Wilson and A.R. Thomson left Scheepvaartinspectie offices and travelled to Stellendam with J.P. Baalbergen, arriving at 1300 hours.

Introductory meeting with Maaskant's Sales Manager, L van Koppen. A.R. Thomson and B.F. Wilson then measured LOA, B and D for the fishing vessel "GRIETJE GEERTRUIDA (ARM 14) and LvK supplied the ITC'69 Tonnage Certificate for the ship (9).

W.S.G. Ritchie, B.F. Wilson and A.R. Thomson left Stellendam at 1615 hours to catch the ferry from Rotterdam back to Hull.

Friday 28th August 1998

Disembarked ferry at Hull at 0830 hours and travelled by car up to Seafish HQ, arriving at 1415 hours. B.F. Wilson travelled on up to Peterhead by car.

A.R. Thomson
Marine Surveyor

B.F. Wilson
Marine Surveyor

W.S.G. Ritchie
Senior Marine Surveyor

LIST OF CONTACTS

Name	Organisation	Tel No
P Roos	Head Department Sea Fisheries Regulations Department of Fisheries Ministry of Agriculture, Nature Management and Fisheries 73 Bezuidenhovtseweg PO Box 20401 2500 EK The Hague	+31 703784670
CHM van Schie	Inspecteur Scheepvaartinspectie Postbus 8634 3009 AP Rotterdam Gebouw Prinsenpoort 's-Gravenweg 665 3065 SC Rotterdam	010 2668590
L Dubbeldam	Stafmedwerker Ship Measuring Department (as above)	010 2668573
JP Baalbergen	Adviseur Ship Measuring Department (as above)	010 2668572
L van Koppen	Sales Manager Maaskant Shipyards Deltahaven 40 Postbus 12 3250 AA Stellendam	0187 491477

ANNEX I DOCUMENTATION

(1) Netherlands Fleet Statistics (NLD-MAS1.LST dated 23 August 1998, Seafish Hull Office).

(2) Scale of Fees for Tonnage Measurement.

(3) ITC'69 Tonnage Certificate, "CAROLIEN", Scheveningen, 1997.

(4) SIKOB printout and body plan "CAROLIEN".

(5) Oslo Convention Tonnage Certificate, "WILHELMINA" dated 24 March 1980.

(6) ITC'69 Tonnage Certificate, "WILHELMINA".

(7) Specimen "Special Tonnage Certificate" for vessels below 24m in length.

(8) Netherlands legislation for EC and ITC'69 Tonnage Measurement dated 5 December 1995.

(9) ITC'69 Tonnage Certificate, "GRIETJE GEERTRUIDA" dated 17 February 1988.

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Germany, 31st August 1998 - 2nd September 1998
W.S.G. Ritchie & A.R. Thomson

Monday, 31st August 1998

W.S.G Ritchie and A.R. Thomson flew from Edinburgh to Hamburg, via Amsterdam.

Tuesday, 1st September 1998

0900 hours: Preparatory meeting W.S.G. Ritchie and A.R. Thomson in Hotel Eden.

1000 hours: Taxi from Hotel Eden to Bundesamt für Landwirtschaft und Ernährung (BLE) (Federal Agriculture and Food Agency) at 9, Palmaille, Hamburg.

Introductory meeting held at 1030 hours chaired by Herrn Heinz-W Anton, Federal Ministry of Food Agriculture and Forestry (BHL) and also attended by:

Wolfgang Schultz	-	Tonnage Measurement
Dietrich Weimert	-	Tonnage Measurement
Claus Hadler	-	Germanischer Lloyd
Yvonne Arnelt	-	BLE
Gunnar Wolff	-	BLE

W.S.G. Ritchie outlined the purpose and objectives of the project and the initial missions and gave a brief introduction explaining the need for a follow-up visit to carry out sample tonnage audits, and, to a lesser extent, check power installed.

A programme of meetings to cover the duration of the visit was agreed, and this would consist of a meeting with the tonnage surveyors (W. Schultz & D. Weimert) that afternoon at the Federal Maritime and Hydrographic Agency Tonnage Measurement Section, a visit to Germanischer Lloyd's Mechanical Engineering Department the following morning to discuss power measurement and emissions and a review meeting in the afternoon. Owing to the distances involved in travelling to the nearest fishing port, a visit to measure an actual vessel was not practicable.

Heinz-W Anton explained that the Bundesamt für Landwirtschaft und Ernährung at 9, Palmaille has overall responsibility for all German fishing vessels. The Federal Maritime and Hydrographic Agency handled the measurement of tonnage and the issue of Tonnage Certificates. Germanischer Lloyd (GL) were responsible for the measurement of power and the certification of machinery on board fishing vessels. Although GL could carry out tonnage measurement if required on behalf of the FMHA, this has not happened in practice so far.

Heinz-W Anton and Y. Arnelt tabled the German Fleet Register (1) which gave details of Fishing Number, Name, Port, Community No, Vessel Type, Length, GT, GRT, Power and

Year of Build for all vessels in the fleet. Out of a total of 2310 vessels the majority are vessels in the below 15m class (approximately 2100). It was apparent that all vessels, including small outboard powered craft, had a measured tonnage. Only 4 vessels did not have GRT, and 156 vessels did not have GT. Out of the total of 2310, 148 vessels did not have an entry for power, but as these were all in the size range 3.7m to 6.8m, these were likely to be outboard powered small fishing boats (see comment later).

The requirements for the second visit were discussed and Heinz-W Anton requested that a period of notice would be required to arrange for visits to specific ports/vessels. He explained that as most vessels had already been measured for tonnage, there was no legislative mandate for us to compel owners to make their vessels available for further measurement, and to some extent, we would be relying on goodwill. There are busy fishing vessel ports on both the North Sea and Baltic Sea coasts. For larger vessels, Cuxhaven was proposed as a good location, whilst Buesum would be better for cutters and coastal vessels. Heinz-W Anton will write to W.S.G. Ritchie to suggest a suitable itinerary and dates (he may also be able to make arrangements for accommodation and transport, which would be most helpful). The timing of the visit will depend on when fishing vessels will be available, but some time in November seems likely.

[The Germans describe uncovered fishing vessels as "boats" (although they may have a small enclosed wheelhouse), whilst shelterdeck vessels are termed "cutters"].

A tonnage measurement authority has been in existence in Germany for over 100 years, presently it is the Federal Maritime and Hydrographic Agency, and only this authority can measure and certify German flagged vessels.

Heinz-W Anton confirmed that the ITC'69 Regulations were introduced in Germany in 1975, coming into force on the 18th July 1982. EEC 2930/86 and EC 3259/94 also have a legal basis in Germany for the tonnage measurement of smaller fishing vessels under 24m.

D. Weimert and W. Schultz from FMHA Tonnage Measurement Section confirmed that GT measurements were rounded down to the nearest whole number in accordance with TM.5/Circ.5 - except for vessels with a calculated GT of less than 1.0 when it is rounded up.

GL are responsible for the measurement of power, which should be the engine manufacturer's declared power, although it is often higher. C. Hadler outlined the procedure for power measurement (which would be explained the next day in greater detail). Firstly, GL check the engine manufacturer's submitted drawings of engine and crankshaft (plan approval), and then the manufacturer has to demonstrate that the engine delivers its theoretical (declared) power under test. GL carry out type tests. These are witnessed for GL classed vessels, but not witnessed for unclassed vessels. For all but the smallest engines, a GL Type Test Certificate is then issued.

Within the next 1 to 2 years it will be required that a GL certified engine should be fitted in order to obtain grant aid from the Government. German fishing vessels are required to be fitted with a type approved engine by the Ministry of Agriculture and Fisheries (this need not be witnessed if the vessel is not in class). There is a grant scheme in place for new vessels.

The size of installed power on board a fishing vessel affects the manning levels and qualifications of the crew, so there are factors other than speed and bollard pull which may influence owners to "under estimate" the declared power of their vessels. For these reasons the engine settings are sealed in the factory once power measurement has been completed, using welded seals, which are then photographed and documented. The photographs are printed on the reverse side of the certificate.

The Federal Agriculture and Food Agency instructs GL to carry out random checks on power installed on board vessels in service. This is achieved by measuring torque (by strain gauge) and shaft rpm using portable equipment (see later).

Gearbox, couplings, shaftline and propeller systems are only checked by GL if the vessel is to be classed.

Heinz-W Anton confirmed that the owner paid for any tonnage measurement or re-measurement. However, for vessels below 15m, local port authorities filled out vessel measurements on Data Recording Sheets (LOA, B, D) and submit them to FMHA Tonnage Measurement Section to calculate tonnage and issue the certificate - in order to save costs to owners of smaller vessels. Copies of the forms were made available that afternoon.

For vessels transferring to German flag, the existing certificate is examined and if it was issued by a recognised authority, this is usually accepted. If not, the vessel has to be re-measured.

Port State Control checks are carried out on foreign flag vessels calling at German ports. Both tonnage certificate and power are checked.

Fishing licences cannot be bought and sold as separate entities in Germany. Both the EC Fishing Licence and the National Fishing Licence are fixed to the vessel **not** the owner. If the vessel is decommissioned, or undergoes major structural alteration, or re-engining *etc*, then the old licence must be handed back to the Federal Agriculture and Food Agency and a new one issued after re-measurement. Licences can still be transferred between owners but the vessel has to transfer ownership too.

Meeting adjourned at 1215 hours and re-convened at the offices of the Federal Maritime and Hydrographic Agency at 78, Bernhard-Nocht-Strasse at 1345 hours. Present were Heinz-W Anton, D.Weimert, W. Schultz, W.S.G..Ritchie and A.R. Thomson.

The FMHA employ some 1200 personnel, approximately 800 in the Hamburg office and a further 400 in Rostock.

The Tonnage Measurement Section comprises 19 personnel employed in Hamburg and Bremen.

The meeting then discussed the actual measurement and calculation of tonnage in more detail, and examined some of the tonnage records (which are available for all German flag vessels at FMHA's Hamburg office).

Under 15m:

All the existing vessels on the Fishing Register under 15m, with the exception of one, have a GT measurement. This measurement is taken on the basis of EEC 2930/86 for LOA and Oslo Convention for breadth and depth (depth of fish hold, or top of floors). This is allowed until the end of 1998, but then ITC'69 moulded depth must be used with the a_1 formula. The example Data Recording Sheet for (existing) Small Fishing Vessels is enclosed in Annex I. It clearly shows T_i as the Oslo Convention depth of hold, and the calculation on the reverse side was the a_2 formula. This example is dated 13/08/98, so represents current practice.

All new vessels under 15m are measured using EEC 2930/86 for LOA and London Convention for breadth and moulded depth, see Specimen Data Recording Sheet for New Small Fishing Vessels in Annex II.

(It is recommended that further clarification on the extent of use of a_2 formula and the conversion to a_1 formula for GT for vessels under 15m should be sought at the second visit).

15m to 24m:

This class falls into two categories:

(i) Already measured GT to London Convention
(ii) Estimated GT using Oslo Convention breadth and depth

Those vessels with GT estimated under ECC 2930/86 and ECC 3259/94 will be re-measured to the London Convention by the end of 2003. There are around 150 vessels still to be re-measured according to W. Schultz and D. Weimert. A specimen Data Recording Sheet for existing cutters is given in Annex III; note that it requires Oslo Convention depth parameter.

Over 24m:

All vessels measured to London Convention.

W. Schultz and D.Weimert tabled examples of the different tonnage certificates used for the different classes of vessel. For vessels over 24m in length an ITC'69 Certificate is issued (Annex IV A), and for vessels below 24m a Special Tonnage Certificate is issued (Annex IV B) because EC regulations only apply to the smaller vessels.

W. Schultz and D. Weimert tabled the tonnage measurement files for 4 different vessels and handed over copies of the tonnage certificates:

(i) "DITHMARSCHEN I", length 16.64m, built 1969, Special Tonnage Certificate dated 29th July 1998.

(ii) "KOMET", length 17.50m, built 1978, International Tonnage Certificate - Oslo Convention dated 14th April 1978.

(iii) "ANNA", length 32.77m, built 1996, International Tonnage Certificate (ITC'69) dated 28th August 1997.

(iv) "HELEN MARY", length 109.41m, built 1995, International Tonnage Certificate (ITC'69) dated 2nd July 1996.

Note: "KOMET" is one of the 15m to 24m vessels requiring re-measurement by 2003 to London Convention.

W. Schultz explained that they used a naval architecture programme (NAPA) to generate the volume enclosed by the hull and tonnage deck, poop, focsle, etc from offsets manually measured from lines plans and typed into the computer. Lines plans were always subject to a ship check, whereby measurements were taken physically onboard to verify the lines plans. Accuracy using this method is around ±10mm (full size).

W. Schultz said that **all** enclosed volumes above deck are measured (at ship, or from drawings), but that only after calculation of individual volumes are those enclosures under 1 cu m discarded for the purposes of calculation of GT.

During the meeting on tonnage measurement, the subject of licence transfers was raised again and W. Schultz, D. Weimert and Heinz-W Anton voiced their concerns over the practice of other Member States' fishing companies purchasing German fishing vessels to gain, not just licences, but also grant aid to build new ships. One particular large freezer trawler was cited as an example, which although it was registered in Rostock, it had no economic or social ties with its home port.

W.S.G. Ritchie and A.R. Thomson left the offices of the FMHA Tonnage Measurement Section at 1630 hours and returned to the hotel to review notes.

Wednesday, 2nd September 1998

Left hotel at 0900 hours for meeting with C. Hadler and Heinz-W Anton at the head offices of Germanischer Lloyd (GL), 32 Vorsetzen, Hamburg, at 0930 hours to discuss power measurement. The morning was taken up by a tour of the Mechanical Engineering Laboratory and the Chemistry Laboratory and discussions with some of the technicians working there. The labs form part of the GL Research, Development and Engineering Division.

Power measurement is carried out by GL personnel from the Mechanical Engineering Laboratory on behalf of the Federal Ministry of Transport.

C. Hadler explained the principles behind their method for measuring installed power, which requires an assessment of shaft torque and rotational speed. GL use self contained portable computer controlled measuring and analysis equipment on board vessels to determine power. Shaft torques are measured using strain gauges in full bridge arrangement. From the bridge, an oscillator rotating with the shaft produces a measurement signal, the frequency of which is proportional to torque. This frequency is then measured inductively from a pick up device

adjacent to a coil on the shaft. Shaft speed is measured by a stationary optical pick up located next to shaft and a reflector mounted on the shaft itself. Accuracy of power measurement using the equipment is calculated to be 1.5% (average). A diagrammatic representation of the equipment is given in Annex V.

C. Hadler went on to explain that although proprietary equipment was used to take the measurements, selection of the strain gauges and the correct type of adhesive to band the gauges to the shaft was critical, if accurate results were to be obtained. Careful selection and training of the engineers operating the system was also required.

C. Hadler tabled an example of one of their power measurement certificates which gave the declared type and power for the main engine, gearbox and propeller - and if derated - then the measured value. As previously stated, photographs showing the disposition of the sealing arrangements fitted (welded) to the engine governor were printed on the reverse side of the certificate. The quality of these photographs was good enough for an inspector to determine, at a later date, if the seals had been tampered with. If this proved to be the case, for whatever reason, GL are bound to inform the authorities and power has to be re-measured. GL have carried out power measurements using this method on around 50-60 fishing vessels of differing sizes, so far.

A. R. Thomson asked if measuring the Brake Mean Effective Pressure within the cylinders would be an alternative method for actual power determination. C. Hadler replied that this would be acceptable for large, slow speed engines, but for smaller, high speed engines, too much error would accrue due to resonance in the measurement equipment pipework, *etc.*

GL design, build and calibrate their own power measurement equipment, and are ISO 9000 accredited.

C. Hadler then showed W.S.G. Ritchie, Heinz-W Anton and A.R. Thomson around the Chemical Laboratory where GL have invested huge effort into researching environmental emissions from marine diesel engines. The lab contained sophisticate spectrometers and gas chromatographs to measure the nitrogen, sulphur content and also the constituent elements of particulates gathered from engine exhausts. The procedures for gathering and controlling samples were particularly rigorous.

We were then taken to the Plan Approval Section where GL engineers checked and approved the design of engine components (crankshafts, etc) from drawings submitted by the engine manufacturers.

C. Hadler explained that GL were finding particular problems with the smaller truck-derived diesel engines in that there was a tendency for manufacturers not to supply engines fitted with water-cooled exhaust manifolds (or the necessary insulation in-lieu to keep surface temperature below 220°C) leading to potential fire/explosion risks in the event of an oil spray. There was also a problem with fuel and oil hoses and hose assemblies and connections. Both hoses and installers need to be certified to prevent the risk of fire.

Many diesel engines are now fitted with electronic engine management systems, ie solenoid injectors rather than traditional fuel racks. This presents a sealing problem for derated engines.

C. Hadler explained GL's engine type approval procedure and tabled their Type Certificate for the Caterpillar 3500.

Emissions were discussed again. The new Marpol annex on air pollution, Regulation 13, requires the agreement of 15 states and 50% of the worlds tonnage before it comes into force. Whilst this has not happened yet, it will in time, and it will apply retrospectively to engines built after the year 2000. Sweden already have vessel harbour dues based on environmental emission levels. GL require engine manufacturers to submit for authorisation a technical file for each engine type, for NOx emissions giving the precise definition of the types of components effecting emissions fitted to the engine, as well as details of all engine settings so that they can be checked later by an inspector. It was C. Hadler's view that it is unlikely that power and emissions can be discussed separately from one another from now on.

C. Hadler tabled a copy of GL's rules and regulations: "Part I Seagoing Ships, Chapter 8 - Fishing Vessels (1991)".

Following a review meeting with C. Hadler and Heinz-W Anton, W.S.G. Ritchie and A.R. Thomson left GL's offices at 1515 hours to travel to the airport, and arrived back at Edinburgh via Amsterdam at 2040 hours.

W.S.G. Ritchie
Senior Marine Surveyor

A.R. Thomson
Marine Surveyor

ANNEX VI LIST OF DOCUMENTATION

(1) Fleet Register, Ministry of Agriculture and Fisheries, dated 3rd June 1998.

(2) Data Recording Sheet for Small Fishing Vessels - Example

(3) Data Recording Sheet for New Ships - Specimen

(4) Data Recording Sheet for Existing Ships - Specimen

(5) International Tonnage Certificate (1969) - blank

(6) Special Tonnage Certificate (under 24m) - blank

(7) Copy of Special Tonnage Certificate: "DITHMARSCHEN I"

(8) Copy of Tonnage Certificate (Oslo Convention): "KOMET"

(9) Copy of International Tonnage Certificate (1969): "ANNA"

(10) Copy of International Tonnage Certificate (1969): "HELEN MARY"

(11) GL Report "Power Measurement MV XXXX", Germanischer Lloyd Research, Development and Engineering Division.

ANNEX VII LIST OF CONTACTS

Heinz-W	ANTON	Ministry of Agriculture and Fisheries	
Wolfgang	SCHULTZ	FMHA Tonnage Measurement Section	(040) 3190-7112
Dietrich	WEIMERT	FMHA Tonnage Measurement Section	(040) 3190-7112
Claus	HADLER	Germanischer Lloyd	+49 (0) 40-36149554

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Denmark, 6 September - 8 September 1998
C.E. Tucker and A.E. Copeland

Sunday, 6 September 1998

C.E. Tucker collected A.E. Copeland at 1330 hours and flew from Humberside to Copenhagen via Amsterdam.
(During this journey, C.E. Tucker and A.E. Copeland examined the data available for Greece, and transferred this data to SPSS statistical analysis software).

Monday, 7 September 1998

C.E. Tucker and A.E. Copeland arrived at the offices of the Danish Directorate of Fisheries at Stormgade 2, Copenhagen, for a meeting at 1000 hours.

Present at the meeting:

John Kjersgaard	-	Head of Division, Danish Directorate of Fisheries
C.E. Tucker	-	Seafish
A.E. Copeland	-	Seafish

C.E. Tucker explained the brief of the mission, *i.e.* to verify content and accuracy of tonnage measurements and to establish contact with the Fishery Directorate and Tonnage Measuring Authority, for initial establishment of criteria and method used by Member States, and to arrange for field trips to be carried out at later dates to be arranged in conjunction with Fisheries Authorities.

J. Kjersgaard advised that he had knowledge of the EU tender to carry out this task, and that his department was appreciative of the purposes of the tasks.

C.E. Tucker explained the main roles in the UK of Seafish and the historical link with the EU on the formulation of current tonnage regulations. It was also emphasised that all information provided by each state including information from vessel builders/designers for designs would be held in complete confidentiality in accordance with established Seafish practice. It was also explained that following implementation of new tonnage regulations by the EU, a disparity between member states had been shown.

C.E. Tucker requested if the Directorate were able to show details regarding methods of recording and storage of information of vessel details, and methods and progress of the re-measurement programme in accordance with EU.

J. Kjersgaard advised that all vessel details were held on a database, which had been in use for fifteen years. However, due to difficulties with the structure of the Community Fishing Vessel Register, a change in the IT system was in process at the present time. He then went on to

advise details of the organisation of the Fisheries Directorate under the Ministry of Food, Agriculture and Fisheries (see Annex 1). From the organisation chart, the IT Department with J. Kjersgaard as Head of Section, is responsible for Registry of Fishing Vessels. The register is continually updated by Port Officers from details provided by vessel logbooks and sales notes which are also recorded by his Department. There is also a process for receiving and exchanging information with the Danish Maritime Authority (Søfartsstyrelsen) which compiles the Danish Register of Shipping, and also with Port Fisheries Officer. Two vessel registers are held, one by the Fisheries Directorate showing details of all registered fishing vessels, and the other by the Danish Maritime Authority which shows only those fishing vessels with a length over 6.0m. The DMA register is a more 'public' register, published annually and showing ownership details *etc.* The DDF Fishing Vessel Registry also receives notifications of changes of ownership and vessel sales. All commercial vessels must be registered with the Ministry with a registration number issued by the DMA (SøR). Within the two months preceding this meeting, a new requirement has been in place for vessels below 6.0m LOA to be registered if fishing commercially. Previous to this requirement, there was no registration requirement for these small vessels.

The history of fishing vessel registration is:-

Previous to 1992	-	Vessels below 5 GRT not included in DDF Register.
After 1992 to 1995	-	All vessels over 6.0m LOA included in DDF Register.
From 1995	-	All vessels to be included in Register. These changes added more than 2000 vessels from the below 5 GRT or under 6.0m LOA to the total.

J. Kjersgaard provided a sample DDF registration form (Annex 2) similar to that shown page 206 (Annex) of the 1996 Danish Fisheries statistical report (Fiskeristatistics Arborg), but completed with particular vessel details. After explanation of Fields 101-151 which gave details of owner and location, C.E. Tucker requested a breakdown and explanation of Fields 220 - 247 showing technical details of vessel particulars. J. Kjersgaard also provided a copy of the 1996 Fisheries Statistics (Annex 3) showing tonnage measuring regulations, and statistics of the fleet by length, tonnage and districts.

J. Kjersgaard explained Fields 220 - 247 as follows:-

220	-	Historical length for quota/fishing rights (Original LOA)	- For DDF Register only
221	-	LBP when available (only available for 2% - 3% of cases)	- Communicated to EC
222	-	LOA	- Communicated to EC
223	-	Historical length definition (approx. LBP) Sent to EC as 'Other Length'	- Communicated to EC
224	-	Breadth	- Danish use only
225	-	Depth (SøR definition)	- Danish use only
226	-	GRT	- Communicated to EC
227	-	NRT	- Danish use only

228	-	GT	- Communicated to EC
229	-	NT	- Danish use only
241	-	Engine type	- Danish use only
242	-	Year of manufacture	- Danish use only
243	-	Installation date	- Danish use only
244	-	Renovation date	- Danish use only
245	-	Official maximum power	- Communicated to EC
246	-	Official de-rated power	- Danish use only

(J. Kjersgaard explained at this stage that a study had been proposed to investigate a method of Power/torque measurement at sea, but was subject to sourcing of funding).

247	-	Power of auxiliary engine (If available)	- Communicated to EC

J. Kjersgaard advised that all this data was checked by cross reference with SøR for over 6.0m vessels. Those vessels below 6.0m LOA are measured for L, B, and D by the owner/fisherman and checked within two years by a Fisheries Inspector. New vessels coming onto the register have to report to the Fishery Office. There is also a legal requirement for the owner of any vessel to report any change of particulars within 30 days in order that a new licence may be issued. The tonnage for vessels below 6.0m LOA are calculated by the local Fishery Officer using the L,B, and D supplied by the owner.

A.E. Copeland asked what guidance owners of vessel below 6.0m LOA were given when taking the L,B, and D measurements.

J. Kjersgaard advised that this was taken in the form of approximate dimensions for calculation by the Fishery Officer to a formula introduced in 1995, or possibly to the EC formula. C.E. Tucker requested a copy of the calculation form used to calculate the tonnage of a below 6.0m LOA vessel.

J. Kjersgaard advised that since measurement of these small vessels had been undertaken, it was calculated that a total of 2000 vessels added approximately 1300 GT to the fleet total.

The following measurement criteria applies at the present time.

Existing vessels below 15.0m	- by formula DMA (SøR)
New vessels below 15.0m	- by formula DMA (SøR)
Existing vessels 15-24m (approx. 400 vessels)	- by a_3 formula - reported to Commission.

with inputs from Fields 222/224/225, being LOA, 'K' breadth, 'K' depth, respectively, and carried out by Fishery Directorate.

Vessels over 24m	- Measurement carried out by DMA (SøR) who believe all registered vessels have been completed.
New vessels over 15m	- All measured by DMA (SøR)

C.E. Tucker explained the basis of the statistical target sample spread over 5 vessel groups and comprising some 60 vessels. It was advised that the 60 could be chosen at random from a supplied list of say 120 vessels. It was also explained that a check of engine power would be carried out on each vessel inspected, but by purely visual means, *i.e.* by inspection of engine nameplate *etc.*

J. Kjersgaard advised that there were no national regulations with implication for power excepting for those vessels fishing for Baltic cod being limited to 200 HP. Discrimination between vessels for licencing or quota is dependant on length and not on tonnage.

J. Kjersgaard explained that new builds were allowed by permit after application to the Minister, and are subject to Rules administration by the Directorate of Fisheries. The MAGP allows room for new vessels but the Ministry applies the criteria that tonnage of the new vessel is to be no greater than the tonnage of the replaced vessel plus 10%. The final decision is taken by the minister regarding new build quota and free tonnage allowance after taking advice from Fishery Officers.

Discussions between the DDF and the Danish Industry regarding the allocation of 'free' tonnage are being held at the present time. It was also noted that vessels operating in distant waters would wish for more power, but Ministers will not allow this.

J. Kjersgaard also explained that the 'Structures' department within the Fisheries Directorate administrates funding for exploratory voyages, vessel modernisations, and decommissioning funding based on formula utilising the tonnage of the vessel.

J. Kjersgaard provided two samples of completed registration forms showing a steel vessel of 54.56m LOA, and a GRP vessel of 4.50m LOA (Annex 2 and 4). The form for the steel vessel included the International Tonnage Certificate (1969), and that for GRP vessel the Royal Danish Certificate of Nationality.

The tonnage certificate for larger vessel shows re-measurement to ITC'69 convention, with a notation showing the original tonnage as measured under the Oslo Convention 1947. The certificate for the smaller vessel shows GT as calculated by the Fishery Officer from dimensions supplied by the owner. At the beginning of each calendar year, a computer print-out is sent to each owner in order that any change can be notified.

A.E. Copeland asked if the port of registry could identify the location of a particular vessel. J. Kjersgaard advised that the external number assigned to the vessel would give an indication of the operating area, but was no guarantee as vessels did transfer from port to port depending on fishing methods and quotas.

C.E. Tucker queried if any economic pressure on vessels or owners was enforced by tonnage (*e.g.* by harbour dues on tonnage, or new vessels having tonnage restrictions, *etc.*)

J. Kjersgaard explained that there is no trade in licences, and harbour dues are generally based on landings and not vessel tonnage.

Safety equipment levels are determined by GT and crewing requirements are set by the DMA (SøR) and may be influenced by length/power/or GT. There may also be a crew qualification/education requirement concerning manning of vessels over 20 GT.

The geographical distribution of fishing effort is roughly:-

Baltic cod	-	60% of total
Baltic sprat	-	60% of total
All others (e.g. sand eels)	-	100% North Sea

and on an economic basis:-

Baltic Fishery	-	20%
Skaggerack	-	small
North Sea	-	80%

Finally J. Kjersgaard advised that reporting of 'events' to the EC register was carried out by comparing the DDF Register on one afternoon with the previous afternoon, and scanning for any reportable changes.

The meeting ended at 1330 hours.

C.E. Tucker and A.E. Copeland travelled by train at 1600 hours from Copenhagen to the nearby port of Helsingor, in order to view any fishing vessel that may be using the port. Only two vessels showing registration numbers were noted, being:-

a) m.f.v. "Tina" H 24 - approximately 15.5m LOA with a small aft wheelhouse and open focsle forward.
b) m.f.v. H 106 (No name) being an open type vessel with small wheelhouse.

The vessels, being un-attended, were not boarded by the Seafish team.

It was also noted that several very small vessels *i.e.* below 6m LOA, were fitted with pot/line haulers and various items of fishing gear including anchor strings and lines. None of these vessels carried any identification numbers and it is presumed, therefore, that these vessels are classed for 'sport fishing' and do not land fish for commercial purposes.

C.E. Tucker and A.E. Copeland arrived back at the hotel at 1930 hours.

Tuesday 8 September 1998

Left hotel at 0845 by taxi to the offices of the Danish Maritime Authority (Søfartsstyrelsen) (DMA).

Present at the meeting were:-

Hans C. Christensen	-	Deputy Director
Ole Brucks	-	Head of Division, Registrar of Shipping (Part of DMA but reports to Minister).
Hannah Petersen	-	Measurement Administration
Poul Cartensen	-	Legal Advisor (Safety and Environmental Legislation Division)
Niells Nielsen	-	Ship Surveyor (part meeting)
C.E. Tucker	-	Seafish
A.E. Copeland	-	Seafish

H. Christensen welcomed Seafish to the DMA, and gave a brief outline of the duties of the DMA, being part of Trade and Industry Ministry, providing advice to Ministers and Parliamentary Drafters, and EU legislation advice. Being roughly equivalent to UK MCA, the DMA has approximately 700 personnel in three divisions covering:-

a) Training and education of seafarers.
b) Inspection and measurement services for Denmark, Faroes, and Greenland.
c) Accident investigations, staff administration, finance *etc.*
d)

Registration department is classed under training division, and HC is head of Inspection and Measurement Services.

C.E. Tucker explained the brief of the mission and as with the previous meeting with the Fisheries Directorate, emphasised the prime objective of assessing accuracy of measurement information provided to the EC Register. It was also explained that the purpose of this initial visit was to explain the objectives of the mission, and to plan for port missions/examinations with the measuring Authority.

C.E. Tucker also provided details of the Seafish team process and operating procedures to ensure an even basis of monitoring of all EU states methods and procedures for collection of data submitted.

H. Christensen asked at this stage if we could advise on small vessels which are not on the DMA register, and does this situation apply in other states.

C.E. Tucker advised that it is not the intention to comment on these vessels if they are not measured. However, Seafish are aware that procedures are in hand to identify, measure, and register these particular vessels if they are fishing on a commercial basis. It was emphasised that the Seafish brief included a duty to observe and report on our observations.

H. Christensen advised that difficulty was experienced by DMA with identification of vessel and owners of the substantial part-time fleet, and deciding when a vessel is operating commercially or sport fishing, identifying vessel type, *etc.* especially as there are tax implications for such commercial operations.

C.E. Tucker explained that Seafish, having received no information to date from EC regarding the make-up of the Danish fleet, were not aware of this particular situation concerning small vessels excepting for the data supplied by the Fisheries Directorate at the previous meeting. The proposed method of operation of the assessment was then explained, with the purpose of identifying locations for examinations of vessels and files held.

H. Christensen after discussion with O. Brucks and H. Petersen recommended that Jutland would provide the most suitable spread of sample vessels, with larger vessels being available in the Esbjerg or Hirtshals areas.

C.E. Tucker advised that a selection of some 140 vessels would be identified and forwarded to DDF/DMA for their selection of 60/70 vessels in the five categories.

H. Christensen explained that records for most known ships may be held by the DMA Registry, and most of the selection could be obtained from their files. However, a number of these cases would not have been measured to EU criteria. In addition, some vessels have been measured by Classification Societies or Independent Approved Consultants, and records for these vessels are probably retained by these bodies. The DMA can request these other files as all individual consultants are known and identified for each vessel. It was further explained that these independent Consultants/Authorities, were appointed under legislation introduced in January 1993, and have to meet specific criteria to be eligible to carry out tonnage measurements. (A list of Authorised Consultants and conditions of appointment is shown in Annex 5).

The ITC'69 Convention was adopted and came into force in July 1982. All vessels over 24m are measured to ITC'69 since February 1993. (In addition to the Classification Societies, there is only one Consultant authorised to carry out this measurement on these larger vessels).

For existing vessels below 24m, both above and below 15m, where modifications have not been carried out, the tonnage remains as GRT for these vessels, ($Length_1$ is the length on deck). For vessels 15m and over whose keel was laid after 18 July 1982 the measurement is to be ITC'69, in accordance with the original order of June 1982 and amended order of July 1992 (amended due to Greenland inclusion).

H. Christensen supplied a translation of the 1992 Act (Annex 6). It is noted that due to slight differences between the definitions of L, B, and D shown in this paper, and those required by ITC'69, the volume may differ slightly from that volume obtained by using the ITC'69 dimensions, which may give a slight difference to 'K' when calculated. For vessels below 15.0m L_1, where the displacement 'V' is not available, an 'a_2' value of 0.65 is used (Paragraph 7 of Annex 6).

O. Brucks advised that approximately 500 vessels from 6.0m to 15.0m will require certificates to be revised to comply with EU Rules.

C.E. Tucker requested information as to the status of older vessels *i.e.* pre-1982.

H. Christensen advised that the basic philosophy for these vessels was the Oslo convention, with a simple measurement for open boats. No action had yet been taken over these vessels.

C.E. Tucker requested clarification of apparent 'Break Points' in statistical tables at 5 GT, 20 GT and 50 GT.

H. Christensen advised that the following was responsible for these breaks, being:-

a) Over 5 GT - Technical rules for safety equipment *etc.* apply.
b) Over 20 GT - Crew qualifications required.
c) Over 50 GT - Links to quota systems.

C.E. Tucker then requested information regarding re-measurement of 15-24m vessels.

H. Christensen advised that a technical regulation was in process of formulation, coming into force on 1.1.99. A copy of the proposed regulation, 4 Udkast 3.9.98 (untranslated) was handed over (Annex 7). This regulation puts EC Regulations 2930/86 and 3259/94 directly into effect, and directs the owner/shipyard to contact an Authorised Measurer for re-measurement. Additional guidance notes to owners of vessels 6-15m are to be published in September/October 1998.

O. Brucks and H. Christensen then summarised the Registry particulars with reference to the data held by DMA on vessels under 15m as being:-

DMA Register for Fishing Vessels starts at 6.0m
Vessels up to 20 GT go on DMA "Boat Registry"
Vessels over 20 GT go on DMA "Ship Registry"
Vessels below 6.0m are registered with the Fisheries Directorate (DDF)

H. Christensen explained that completed certificates are submitted to DMA by the Authorised Measurers and that these certificates were the only source of LBD dimensions for vessels over 6.0m. Authorised Measurers must:-

a) Check that the vessel exists, and
b) Carry out dimensional checks according to the measurement instructions given.

A general discussion was then held regarding powering.

H. Christensen explained that on vessels of over 20 GT, the engine power is stated on the Trading Permit (Licence?).

The DMA has the responsibility to measure power on vessels over 20 GT and certify accordingly. This measurement is achieved by:-

a) Declaration of power by owner,
b) Test-bed result from engine manufacturer
c) Consideration of DMA expert opinion of installation.

Where an engine is de-rated, the installation is checked utilising Classification Society guidelines, but as this is a visual check, the DMA are of the opinion that not all cases are accurately verified.

There are no legal restrictions or requirements based on power, other than that a Certified Engineer must be carried where the power is 750 kW and over. However, there may be a restriction on power imposed by the fishing licence or trading permit, in which case, the limitation is noted on the vessel's registration certificate carried on board. All vessels of 5 GT and over, which have limits on power, have the power limit noted in Field 246 of the registration document (Annex 2).

The DMA records the continuous service rating of an engine on the vessel's technical file, which may be noted as a maximum service rating power, or, if a limitation has been placed by licence requirements, as a de-rated power. Where new engines are installed, the DMA requires the manufacturers test bed results, which are compared with the quoted output of the engine. Where the test bed result differs from the quoted output, discussions are held with the installers to ascertain and confirm the reason for any limitation of power.

The meeting was joined by N. Nielsen (DMA Ship Surveyor) who confirmed the information given above, in that the official maximum continuous rating of an engine, shown on the fishing permit and technical register, is derived from the engine test bed result, after adjustment for crew and technical qualification. Where an engine is de-rated, the de-rated figure is recorded in a manual on board, and also advised to the Fisheries Directorate. It is also the duty of an owner to advise the Fisheries Directorate of any changes in power.

N. Nielsen then retired from the meeting.

A general discussion concerning the various Fields shown on the Register from (Annex 2) and definitions of these was then held between all parties.

It was confirmed that Field 222 "Length Overall" is shown on all tonnage certificates, even those certificates prior to legislation of 1982. This length definition derives from a Danish technical regulation, and excludes - bowsprit; fenders, external rudder, and similar.

Field 221, LBP, is the defined convention length for vessels of 20 GT and over. This is shown on the tonnage certificate for vessels over 24m, but for vessels less than 20 GT this information is not held.

Field 223 is the register length to Oslo Convention
Field 224 is the register breadth to Oslo Convention
Field 225 is the register depth to Oslo Convention
and these fields apply to decked vessels of over 5 GRT built prior to 1982.

For vessels built in 1982 and after, the ITC'69 Convention definitions for L, B, and D, are utilised for vessels over 24m, and if under 24m, the DMA Regulation 620 applies (Annex 6).

Field 220 is a historical length used by the Fishery Directorate.

C.E. Tucker summarised the team's understanding that for vessels of 6-15m:-

a) New vessels to be measured using new legislation due on 1.1.99 (Annex 7),
b) Existing vessels (approx. 500 in no.) to be dealt with by administration by DMA or Consultants to calculate new tonnage.

H. Christensen made the suggestion of the possibility that for existing vessels in this size range, vessels built after 1982 could use the 'a_1' formula (LOA, London B & D) and those built pre-1982 could use the 'a_2' formula (LOA, Oslo B & D). However, in the event of utilising these methods, the date of construction will require to be verified, and each file checked for details of any modifications and re-measurements carried out, and what Rule has been utilised for re-measurement.

O. Brucks advised that a vessel may finally posses two certificates, *i.e.* one showing ITC tonnage, and the other for domestic technical purposes.

O. Brucks also pointed out that vessels over 15.0m LOA but below 15.0m L_1, will be covered by the new regulation coming into force on 1.1.99, and as the LOA is on file for all vessels, the administration are able to identify all those vessels below 15.0m LOA to apply the a_1, or a_2 formula. The LOA is held in the technical register of the DMA.

C.E. Tucker advised that the list of the 140 or so vessels sample will be transmitted directly to DMA, with a copy to the Fisheries Directorate for protocol purposes.

H. Christensen advised that during field trips to vessels after identification, the DMA surveyors have authority to board any vessel. There may also be the possibility that a Fishery Officer would be present on some vessels during examination. It is also a possibility that the DMA may publish an article in a newsletter advising the industry of possible visits to ports and vessels, by the Team, to emphasise the benefits of ensuring a 'level field' basis with other member states.

H. Christensen also handed two copies of the "Danmarks Skibsliste" (DMA Danish Register of Ships) showing all vessels of 20 GT and over.

The meeting then adjourned for lunch.

After lunch, a short discussion was held regarding the inclusion of shelters/forecastles and whaleback spaces, in tonnage figures, especially as some vessels now have shelters extended to 0.75L or greater and are fully enclosed. H. Christensen advised in most cases, these spaces are not included in the GT measurement.

The meeting closed at 1430 approximately, and the Seafish team returned to the airport for the return flight.

C.E. Tucker
Marine Services and IT Manager

A.E. Copeland
Marine Surveyor

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Ireland, 9th September 1998 - 11th September 1998
W.S.G. Ritchie & R.J. Watts

Wednesday, 9th September 1998

W.S.G. Ritchie flew from Edinburgh to Dublin and R.J. Watts flew from Bristol to Dublin, meeting at the Airport terminal at approximately mid-day, before travelling to Dublin City Centre by public transport and thereafter taxi to the Hotel. During the afternoon and early evening a preparatory meeting took place at the "Earl of Kildare Hotel".

Thursday, 10th September 1998

0900 hours: W.S.G. Ritchie and R.J. Watts held a brief review meeting to discuss and evaluate fleet numbers and vessel types currently fishing from Ireland. Some discussion also took place concerning the recent announcement of grant aid proposals towards the cost of renewal of the Whitefish fleet and its possible implications regarding Tonnage/kW and MAGP compliance requirements.

1000 hours: Arrived at the Department of the Marine and Natural Resources (DMNR) offices to be met at reception by Mr Joe Ryan who is the Principal Officer of the Sea Fisheries Administration Division. Introductory meeting held at 1015 hours attended by:

Joe Ryan	-	Principal Administration Officer
Joe Keeney	-	Licensing Division Officer
Gordon Adamson	-	Ship Surveyor, Department of the Marine
W.S.G. Ritchie	-	Senior Marine Surveyor, Sea Fish Industry Authority
R.J. Watts	-	Marine Surveyor, Sea Fish Industry Authority

W.S.G. Ritchie outlined the purpose and objectives of this initial mission visit to Dublin and explained the background to the study, and why they believed that Seafish had been the successful tenderer - including the strict confidentiality requirements placed upon Seafish staff and the requirement to treat each Member State on a consistent basis to determine the accuracy of the tonnage particulars as submitted to Brussels. During this initial visit it was hoped that the current method of tonnage measurement could be discussed along with examining some examples of ITC'69 measurements already completed, to determine their accuracy with regard to the GT figures given.

J. Ryan explained the functions of the DMNR and the part played by J. Keeney within the licensing division, he also indicated the wide range and diversity of the Irish fishing fleet.

R.J. Watts requested that provision of an up-to-date copy of the Fleet Register as submitted to the EU and this was subsequently received during the course of the meeting. It was noted that the fleet now contains 85 vessels over 24m, 256 vessels from 15 to 24m and 786 vessels of less than 15m in length.

G.Adamson then briefly explained the situation regarding the current methods of tonnage measurement, stating that the only fishing vessels with their tonnage's calculated according to the ITC'69 method are those vessels greater than 24m, particularly new vessels of this size where it is a mandatory requirement. Even so, only a relatively small number have their tonnage measured according to this method and that the reason for this may be that the owners have no incentive to do otherwise.

R.J. Watts requested to be given a copy of the Department's "Notes for the guidance of Surveyors", this is a document produced by G. Adamson for use by his Marine Surveyors describing in great detail how and why vessels are measured for Tonnage and Registration. A copy was duly received at the meeting and details of some relevant pages according to this mission report are attached at Annex A. The information therein relating to fishing vessels was discussed during a technical meeting to be held later that day.

J. Keeney explained that although some fishing vessels over 24m in length have already been measured according to ITC'69 requirements, these were relatively few and amounting to approximately 30% of the numbers of this size of vessel.

J. Ryan indicated that at present there is no mandatory legislation in place requiring that fishing vessels be measured according to ITC'69 requirements. However, legislation will be introduced shortly to enable measurement to commence on the 15 metre to 24 metre vessel size range. It is envisaged that additional measuring Surveyors will require to be employed to enable a planned timetable to be completed. One of the main difficulties and expense would be for vessels where no drawings are available to enable accurate measurement.

G. Adamson explained that his Department are currently measuring vessels according to ITC'69 and have a "Tribon" computer programme in use, this enables the input of relative vessel data manually or by digitising, this system is also currently used for stability calculation work.

W.S.G. Ritchie asked if it would be possible to view some examples of ITC'69 measurement by use with this system, and it was agreed that this could be arranged for later in the afternoon at the Marine Survey office at Eden Quay. On a note of general observation concerning the current situation in Ireland with regard to the small number of vessels measured to date, there has been no incentive or legal requirement for owners of vessels less than 24m in length to undergo re-measurement according to the ITC'69 method. This has now resulted in an urgent situation for the Department of the Marine and Natural Resources to undertake a new measurement programme, which will require additional financial resources and the employment of extra personnel to undertake this work.

J. Ryan outlined recent suggestions currently under consideration by the DMNR, whereby the allocation of additional tonnage is required for a number of new vessel constructions on the grounds of safety. The additional tonnage appears to be necessary to enable compliance with the current safety legislation of the Torremolinos International Convention and EU Council Directives 93/103/EC and 97/70/EC. A recent case for consideration was described, whereby the alterations necessary for the replacement fishing vessel to meet both the stability and crew

safety requirements would result in the GT figure being increased by more than double, but the vessels overall size and effective capacity would remain as previously recorded.

An overview of the current licensing arrangements was discussed to determine how tonnage may be affected in general terms from any transfer arrangements. Restrictions apply to 3 categories of fishing at present, those being Pelagic Trawling, Beam Trawling and Multi-purpose Fishing (known as Polyvalent). This forbids the increase of either tonnage (GT) or engine power (kW) to occur for the re-issue of any fishing licence or entitlement. This has been the case since 1991 and it was pointed out that in Ireland fishing licences are not technically transferred from one vessel or owner to another but that they are re-issued. It is a condition that the re-issue of any licence entails a measurement and inspection by a Surveyor of the Department of the Marine to verify that the tonnage and engine power are as required.

W.S.G. Ritchie advised that as a secondary part of the missions to EU States was to comment on the engine power (kW) of sample vessels. These checks would only comprise of a visual check on engine type, kW power gearbox type and ratio. G. Adamson advised the meeting that his Department had no mandate to check or verify the power rating other than accept the information provided by the owners or installing engineers this was obviously subject to the figures appearing to be reasonable for that engine/vessel arrangement and configuration.

G. Adamson indicated that occasions have arisen where there has in fact been some doubts as to the stated accuracy of the vessels engine power (kW). In these circumstances the engine installers must set and seal the oil fuel rack arrangement to the engine manufacturers procedures, and then verify in writing that the power then produced is accurate and as specified. This procedure is accepted by his Department for registration detail requirements.

When vessels are fitted with new engines, a Department of Marine Surveyor will, whenever possible, attend to check that the engine being installed is technically as proposed and that safety equipment is on board the vessel as recommended. This inspection is carried out only under the Department's powers as tonnage measurers, as Ireland has only a limited safety inspection regime for fishing vessels.

Council Regulation (EEC) No. 2930/86 was briefly discussed and the Department of the Marine's interpretation of this is attached at Annex B. During this discussion it was brought to our attention that the provisional formula for estimating the GT of vessels 15 to 24m may be in doubt with regard to the use of the constant C in the formula to determine a_3. (The constant for Ireland being 0.21). It was assumed that this value be used for all Irish registered vessels and would not be representative of fishing vessels which, although on the Irish Registry, had been constructed in other countries.

J. Ryan briefly outlined the recently announced grant assistance package for the renewal of the whitefish fleet, whereby up to 400 fishing vessels will benefit under this EC assisted programme. This was discussed in connection with Tonnage and kW implications concerning MAGP figures whereby J. Keeney indicated that the Irish fleet have met their current targets in both the Pelagic and Beam Trawling sectors, adding that the figures for the remaining multi-purpose vessel sector is only marginally above the set target.

Details of this programme for grant assistance were received and some explanatory information is attached to this report at Annex C. It was noted that amongst the conditions of approval to enable the consideration of grant aid towards the cost of both new and second hand vessels, is that in both cases applicants should have available the necessary replacement capacity (GT, kW).

1430 hours: W.S.G. Ritchie and R.J. Watts travelled to the Department of the Marine Survey Office at Eden Quay, Dublin where they were met by Mr G. Adamson (Ship Surveyor) to discuss and inspect examples of ITC'69 tonnage calculations completed for Irish fishing vessels. The Merchant Shipping (Registry, Lettering and Numbering of Fishing Boats) Regulations, 1997 (SI 294 of 1997) applies to **all** fishing vessels registered in Ireland. For the purpose of determining which length and tonnage are to be entered in the fishing vessel register these Regulations refer to the Merchant Shipping (Tonnage) Regulations, 1984. However, fishing vessels of overall length less than or equal to 12m and registered under Part IV only of the 1984 Merchant Shipping Act are measured in accordance with Schedule 3 of the Merchant Shipping (Registry, Lettering and Numbering of Fishing Boats) Regulations, 1997.

G. Adamson then went on to explain the stability programme used to calculate hull volumes for ITC'69 measurement, this programme was devised by Kockums and known as the "Tribon Initial Design" suite of computer programmes. The digitising of hull form was then demonstrated and explained using offsets generated from the measurements taken from the hull form.

An example using the dimensions and offsets taken from the 26.30m LOA "Glenravel" D 329 was then checked as an example, this included main hull dimensions, superstructures and developed 'Lines Plan', hull offsets were taken from the Lines Plan and waterline lines and buttock lines produced, which were checked for fairness and accuracy. A total volumetric capacity of the vessel was established as 660.08m^3 which was similar to the figure of 660.90m^3 which had been calculated by the consultants employed by the owners of this vessel.

The difference in Gross Registered Tonnage figures (existing system) showed an appreciable increase from the original calculated figure of 100.78 GRT using the Part I method of measurement compared to a GT figure of 179 Tons as measured and demonstrated using the ITC'69 method.

Another example of a smaller vessel (A) was checked whereby the tonnage using the existing method of measurement did not correspond to that indicated on the Fleet Register. This difference was due to the addition of an enclosed shelterdeck arrangement, which increased the volume of the vessel and was included in the recent calculation. The original Part I calculated GRT figure was correct at that time, prior to the shelterdeck structure being fitted; the owners had not informed the original measurers that this alteration had taken place. This illustrates what can happen in the life of a fishing vessel which may have several different owners, the problem only then being discovered, when a new owner may have cause to have the vessel re-measured.

Sample vessel (B) was recorded as having an engine power of 375 BHP which when converted using the Imperial BHP to kW constant of 0.746 converts to 279.75 kW, but was in fact recorded as having a 220 kW engine installed. This example may indicate that at some time the engine has been replaced with one of less power or that it has been de-rated down to 220 kW. It appears that the Department of the Marine may not have been informed of this alteration by the vessel's owners, thereby leaving the Official Records unchanged and with incorrect current data on that particular vessel.

W.S.G. Ritchie and R.J Watts left the offices of the Department of the Marine at 1700 hours to review and discuss notes made during the day's meetings, returning to Edinburgh and Bristol the following day.

W.S.G. Ritchie
Senior Marine Surveyor

R.J. Watts
Marine Surveyor

LIST OF CONTACTS

Name	Organisation	Tel. No.
J Ryan	Principal Officer Sea Fisheries Administration Division Department of the Marine & Natural Resources Leeson Lane Dublin 2 Ireland	Tel: 00 353 1 619 9235 Fax: 00 353 1 661 3817
J Keeney	Licensing Division Officer Sea Fisheries Administration Division (As Above)	Tel: 00 353 1 619 9200
G W Adamson	Ship Surveyor Department of the Marine Marine Surveyors Office 26/27 Eden Quay Dublin 1 Ireland	Tel: 00 353 1 874 4900 00 353 1 874 3325 Fax: 00 353 1 872 4491

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Spain, 20th to 23rd September, 1998
C.E. Tucker and L.R. Webb

Sunday, 20 September 1998

PM - C.E. Tucker travelled from Lockington to Stevenage by car.

Monday, 21 September 1998

AM - C.E. Tucker travelled from Stevenage to Luton airport by car, while L.R. Webb travelled from Guildford to Luton by rail. Both officers then flew to Madrid (Barajas).

PM - The data concerning the Spanish fleet provided by the European Commission were transferred from Excel to SPSS, and examined by length group, GT estimated/measured, and location.

Tuesday, 22 September 1998

AM - A meeting was held at the offices of the Ministerio de Agricultura, Pesca y Alimentacion (MAPA) with officials from both MAPA and the Direccion General de la Marina Mercante (DGMM):

Present at meeting:

Miguel Angel Barrios Soria	-	Subdirector General, MAPA
Julio Zori	-	Fleet Register, MAPA, (part meeting)
Alfredo de la Torre Prados	-	Subdirector General, DGMM (part meeting)
Eliseo-Carlos Miranda Cerezo	-	Jefe de Area de Construccion, DGMM, (part meeting)
Jose Maria Cueste Ruiz-Bedigo	-	Jefe de Servios, DGMM, (part meeting)
Manuel Ruiz de Elvira Francoy	-	Naval Architect, NautaTec, (part meeting)
Jeronimo Hernandez Riesco	-	Jefe del Area de Reestructuracion, MAPA
Chris E Tucker	-	Marine Services Manager, Seafish
Lorna R Webb	-	Marine Surveyor, Seafish
Maria Calvo	-	Statistical Officer, Seafish (as Interpreter)

General Observations

The Seafish team introduced themselves, and explained the background to the study, and why they believed that Seafish had been the successful tenderer - including the strict confidentiality requirements placed upon Seafish staff (a copy of the Fisheries Act was handed to MAPA) and their arrangement of the study to treat each Member State on a consistent basis.

MAPA introduced their officials, offered co-operation with the study (subject to the reservations discussed below), stated that Spain registers all fishing vessels, and had met MAGP objectives. It was pointed out that the study is not to include examination of the

completeness of each state's fleet register, but to comment on the accuracy of vessel information appearing on the Community Register.

The division of responsibility between MAPA and DGMM was described, and it was claimed that Spain had imposed ITC'69 GT on their 15 to 24m vessels before it became compulsory under Community law. Also Spain had taken advantage of all the European decommissioning grant aid available, and had applied the EU specified maximum grant rates.

Methodology/Confidentiality

MAPA explained that the Spanish Administration in general (*e.g.* both MAPA and DGMM) had reservations about check measurements of individual (identifiable) vessels, and had approached the Commission for clarification of the requirement for Seafish to examine a sample (Seafish were handed a copy of a paragraph from DGXIV's letter of 13 August 1998). The Spanish interpretation of this letter was that Seafish would not need to visit ports for check measurements (which would obviously lead to identified vessel results), but would only need to examine the methodological arrangements adopted by the Spanish administration. The reservations were based in part on the intellectual property rights of vessel designers, and in part on Member State *vis-à-vis* European Community legal competence in measurement matters (attention was brought to Article 12 of the London Convention itself, which, although not part of EU fisheries legislation, grants rights of inspection to other Contracting Governments while Convention ships are visiting their ports only, and limits inspection to verifying the existence of tonnage certificates, and the correspondence of main characteristics with those shown on that certificate). However Seafish reiterated that they understood that their brief from the Commission included a requirement for a sample of between 30 and 100 checks per country (depending on the size of the national fleet).

A wide ranging discussion was held, in a co-operative attempt to establish a working methodology to overcome this apparent *impasse* in a manner which satisfied all parties requirements so far as practicable. A potential solution was identified for vessels over 15m, which would involve DGMM forwarding (to Seafish's UK offices) copies of tonnage certificates, general arrangement and lines plans, and volumetric calculations, for vessels chosen by DGMM from groups established by Seafish. These groups would be specified in terms of length ranges, year built ranges, and area of registration. This information, although specific to individual vessels, would be rendered anonymous by deleting any vessel identifiers (*e.g.* name, external number). For vessels under 15m, it may be possible for Seafish staff to accompany an official Spanish measurer while undertaking his duties, as there are no official plans available for this class of boats. Obviously the Spanish delegation will have to discuss this possible compromise with their superiors, while Seafish must similarly obtain clearance from the Commission.

The issue of required sample size was also discussed, with the Spanish administration convinced that only a very few vessels need to be assessed, while Seafish were similarly sure that a much larger sample was required.

Usage of Gross Tonnage (GT) and Power (kW)

It was explained that Spain now uses both GT and kW as the basis for authorising new construction on a one-for-one basis for the replacement of vessels exiting the fleet, although in the past higher exchange ratios were demanded. (Royal Decree 1040/97 formally sets out the system by which construction is now authorised). Also GT was used as the base parameter for the award of accompanying construction grants and the levying of harbour dues. National tonnage (GRT) was no longer used for such purposes. It was also claimed that there were no national personnel certification barriers at specific tonnage or power levels (*i.e.* skipper certification was independent of vessel size), but that only SOLAS and MARPOL limits applied.

Procedures for full ITC'69 GT Measurement

The system for measurement of GT was described. Spain has required vessels over 24m to have an ITC'69 measurement since 1982, and has also required GT measurement for all new fishing vessels since 18 July 1994. For new vessels (over 15m) DGMM initially approve construction on the basis of plans *etc.* submitted by the vessel designer, and then, post construction, physically check that the vessel corresponds to the "as built" plans, which are then, along with the stability booklet, officially approved. For existing (15 to 24m) vessels, if there are no officially approved plans in existence, lines plans, *etc.* are prepared by naval architecture consultants (authorised by DGMM) on the basis of physical measurements undertaken while the vessel is slipped for its annual safety inspection (the cost of these measurements being carried by MAPA). The official plans (in particular the GA and lines plans) are used as the basis for volumetric integration and thence tonnage calculation. Normally consultants use the officially approved "PAN" suite of computer programs for volumetric integration, based on a circular arc interpolation scheme. Where other programs are employed these also must be approved by DGMM. The calculations normally use the stations as per the official lines plan, *viz.* 10 main stations, plus two half stations. with zero stations at the ends of the volumetric length. (An investigation of the effect on accuracy of additional stations had been undertaken, which had shown no significant improvement).

Using, as an example, the GA for a single decked fishing vessel from one of the official files, the spaces included in the volumetric calculations were discussed in some detail. Although IMO TM5 specifies that small volumes (*i.e.* those less than 1 cu.m.) could be ignored for Convention ships, the Spanish authorities assured Seafish that such spaces (*e.g.* small hatchways) were normally included for fishing vessel measurements. Similarly, two decimal places were pragmatically retained for vessels under 24m - *i.e.* non-Convention ships - as the Spanish authorities had found that, for instance, not to do so would have resulted in a very large number of vessels with zero GT! The eventual fate of these fractional tonnages (post 2003) was queried, and Seafish offered the opinion that the Commission would wish them to be retained. An example national GT certificate was tabled, and Seafish noted that all spaces included in the volume (*e.g.* underdeck, wheelhouse, casing, galley/messroom, funnel, *etc.*) were clearly specified. The treatment of "open" spaces (*e.g.* fo'c'sles without after bulkheads) was discussed, and the Spanish authorities were quite definite that they strictly adhered to the requirements of Annex 1 to the London Convention.

Although DGMM head offices in Madrid carry overall responsibility for the issue of tonnage certificates, they only actually issue International Tonnage Certificates for vessels over 24m. They delegate the issue of certificates for vessels under 24m to one of their 28 coastal offices. Therefore the official files for over 24m vessels are held solely in Madrid, whereas the coastal offices hold the original files locally, but with copies also submitted to Madrid. (This implies that any files rendered anonymous for a Seafish sample of over 15m vessels could be sourced from Madrid).

It was pointed out that MAPA are funding the re-measurement of existing vessels over 15m, covering both DGMM and consultants' costs. Therefore DGMM specify which vessels consultants are to measure during their annual safety inspection, in order to meet the targets specified in Annex III of Commission Decision (95/84/EC) of 20 March 1995. It was claimed that the Spanish re-measurement programme was currently in line with those targets, with over 33% of vessels completed. It was further declared that should an owner be discontent with the GT calculated for his vessel under this programme, he could ask for an independent estimate (at his own expense) but MAPA could not recall any cases where this had occurred.

Estimation of GT for Existing 15 to 24m Vessels

The estimates of GT for existing 15 to 24m vessels, provided to the Commission for MAGP IV purposes, were based on the A3 formula of Annex I to Commission Decision (95/84/EC) of 20 March 1995, but with parameters estimated on the basis of available national parameters. LOA had been estimated by increasing the registered length by 10% and deducting 0.5m. Oslo breadth (Bi) had been assumed equal to national breadth, while Oslo depth (Ti) had been obtained by deducting allowances for depth of keel *etc.* from the national depth. A paper describing these corrections was handed to Seafish, along with a list of 128 sample vessels showing their application. Further clarification of the depth correction formulae, and of the parameters shown on the sample could be obtained *via* correspondence. Estimates of GT on this basis had been prepared administratively, and certificates had not therefore been issued - the data simply had been communicated to the Commission.

Estimation of GT for Existing Under 15m Vessels

A similar procedure had been adopted for estimating existing under 15m vessels, but the Spanish authorities were insistent that the calculation was based on the a_1 formula. LOA had been assumed as LBP/0.8, and the breadth and depth used were the Spanish national definitions which were close to those of the Oslo Convention (*sic*). (Note: Oslo Convention breadth and depth are for use with the a_2 formula of 95/84/EC).

Measurement of Under 15m Vessels

A programme of re-measurement of all under 15m vessels, funded by MAPA, and staffed by DGMM coastal office personnel (with some assistance from students of the Polytechnical University of Madrid) was currently underway. This programme, which was claimed to be on target for completion by 31 December 1998 (indeed unre-measured vessels would be prevented from fishing from 1 January 1999), simply involved directly physically measuring

LOA and London Convention breadth and depth (an explanatory diagram was shown) and applying the a_1 formula of 95/84/EC. Certificates were being issued by DGMM coastal offices.

Verification of Power

The procedure for verification of the propulsive power installed on board a new fishing vessel was described in some detail. A first comparison is made with the manufacturer's publicly declared specification (common across Europe) for the engine model to be installed, and this is followed up by DGMM witnessing a six hour dynamometer test at the engine's maximum continuous power. At the conclusion of this test, maximum power controlling equipment is fitted with a "tamper proof" DGMM seal. No comment on the possibility of an owner retro-fitting turbochargers or intercoolers was offered, however a new national regulation concerning fishing vessel power was in the course of preparation, with an approximate target date for introduction towards the end of this year.

Closing Remarks

Seafish thanked the Spanish delegation for organising the meeting efficiently - as it had been especially useful for all parties involved to be simultaneously represented - for the time they had devoted, and for their co-operation.

PM - After the meeting had concluded, Seafish telephoned Peter Hopkins, the DGXIV project officer responsible for the study, to relay the Spanish administrations reservations, and to outline the potential compromise described above. The outstanding issue of sample sizes was also discussed. The Seafish team than returned to their hotel, re-arranged return travel, and reviewed their manuscript meeting notes.

Wednesday, 23 September 1998

AM - The first draft of this mission report was prepared on the basis of the manuscript notes taken during the meeting described above.

PM – C.E. Tucker and L.R. Webb flew from Madrid to London Luton, and thence returned to the Hull area by car.

C.E. Tucker,
Marine Services and IT Manager

L.R. Webb,
Marine Surveyor

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Greece, 21st September 1998 - 25th September 1998
W.S.G. Ritchie and A.E. Copeland

Monday, 21st September 1998

W.S.G. Ritchie travelled the previous evening to Newcastle to be in time to fly from Newcastle Airport at 0830 hours to Athens via Brussels, arriving at the Hotel Christina around 1630 hours. AE Copeland, due to a travel documentation problem, made the necessary arrangements to travel the following day to Greece.

W.S.G. Ritchie reviewed and summarised during the early evening the fleet statistics with a view to understanding the composition in terms of length groups/GT estimated/measure and vessel locations. Agenda items and list of topics to be discussed was also reviewed and amended in some detail.

Tuesday, 22nd September 1998

0900 hours: W.S.G.Ritchie was met at the Hotel by Dimitris Mitropoulos from the Ministry of Agriculture (MOA) - Sea Fisheries Division, (Chief of Unit) and thereafter travelled by car to the initial meeting organised for 1000 hours.

0940 hours: Arrived at the Hellenic Ministry of Mercantile Marine (MOMM), Port Police Directorate - Fisheries Department, Piraeus and met by the project co-ordinator Lt Cmnder Skountis Vas.

1010 hours: The meeting commenced with Lt Cmnder Skountis Vas on behalf of himself and colleagues assuring Seafish of full co-operation and every assistance possible with the ITC'69 project.

W.S.G. Ritchie, on behalf of Seafish, outlined the purpose of the mission as well as the core objectives as being the verification of content and accuracy of tonnage measurements in each Member State, and during this initial visit to establish contacts with the Fisheries Directorate and Tonnage Measurement and Registration Authorities. He explained that this initial visit is for initial establishment of criteria and methods used by Member State Authorities for the calculation and re-measurement of tonnage in respect of how each country interpret and apply the various EU Tonnage Measurement Directives for fishing vessels. He also hoped to provisionally arrange for field trips to various ports and areas which will be carried out at later dates in conjunction with Fishery Authorities. He went on to outline briefly Seafish's background and the historical link with the EU concerning formulation of tonnage regulation, including the strict confidentiality requirements on staff and similarly the necessity to treat each Member State in exactly the same way by employing a consistent approach with the tonnage study. He emphasised that all information provided by the Authorities concerning

information on vessel designs *etc.* will be held in complete confidentiality in accordance with established Seafish practices.

Finally he mentioned that a part of Seafish's remit was to carry out random checks on engine power and make comment on the accuracy of the information appearing on the Community register. It was stressed that this exercise was secondary to the tonnage audit.

Lt Cmnder Skountis Vas then introduced the following gentlemen who also attended the meeting:

Nikolaos Giannakopoulos	-	Hellenic Register of Shipping
Alexandros Agapakis	-	Hellenic Register of Shipping
Commander Andreas Zoulos	-	Ministry of Mercantile Marine
S. Commander Nicholas Daskalakis	-	Ministry of Mercantile Marine
Nikos Hiopoulos	-	Ministry of Mercantile Marine

(as well as including D.Mitropoulos and Lt Cmnder Skountis Vas as co-convenors of the meeting).

Nicholas Daskalakis and Dimitris Mitropoulos explained in detail the areas of responsibility between MOA and MOMM in that the Fisheries Ministry (MOA) were responsible for fleet management and policy including reporting tonnages/power etc (*i.e.* all fleet statistics) to European Commission, and that the Ministry of Mercantile Marine were responsible for all tonnage measurement and issuing of certificates as well as the procedure for estimating existing under 15m vessels by calculation.

N. Daskalakis outlined briefly the current position on progress on GT measurement of the Greek fishing fleet although it was agreed that this could be discussed in more detail at subsequent meetings arranged for tomorrow.

Existing vessels (under 15m) approximately 18,000

Breadth and depth are being re-measured and recorded as per Greek and Oslo Convention as the vessels phase-in for safety inspections. It is considered that this programme is around 85% complete and is planned to complete December 1998/early next year.

New vessels (under 15m)

Length and depth are being measured in accordance with EEC 2930/86 for LOA and London Convention for breadth and moulded depth.

Existing vessels (15m to 24m) approximately 700

These are being measured to ITC'69 method by the Hellenic Register of Shipping by contract with the Ministry of Agriculture (Sea Fisheries Division). This programme is considered to be approximately 60% achieved with 250 vessels completed within the programme which is

scheduled for completion at the end of 1999. This means approximately 250 vessels are being targeted per year, although it is thought the final number of vessels in this class may total only 650 by the end of next year.

All vessels under 24m are also measured to meet the requirements of Greek Law which is used for domestic levies/harbour dues *etc.*

New Vessels (15m to 24m)

These vessels are being measured by the Tonnage Department of the MOMM to ITC'69 requirements and an 'ITC '69 type' simplified certificate issued.

Vessels (over 24m) approximately 110

All existing vessels have been measured and issued with an ITC'69 International Tonnage Certificate. Likewise, all new vessels are measured as part of the registration procedure.

W.S.G.Ritchie went on to outline our requirement for a second visit to be arranged early next year and this was fully discussed and agreed that arrangements could be made, given some notice, that a programme of visits to vessels/ports can be arranged.

Whilst it was considered ideal for Seafish to specify a 'large' list of specific vessels, it was generally thought that this may not prove to be too successful in practice due to the seasonal movement of the fleet. It was proposed that if agreements could be reached on typical ports/area, the MOMM could compile 'large lists' of vessels (in all size ranges) to allow us to choose a suitable sample. In this way, it was suggested the audit/check would have a better chance of success.

The following list of ports were proposed:

1. Piraeus with a full range of vessels and the Hellenic Bureau of Shipping and Mercantile Marine tonnage offices on hand for calculation/plans checking facilities.
   A number of other fishing ports were within easy access such as Raf Ina (40 Kilometres north east) and Salamis which is a nearby island with many of the smaller fishing vessels;

2. It was proposed for consideration that a second port/area could be Salonica (500 Kilometres north) and Kayala which is near Salonica each with bigger vessels and a mixed fleet of under 24m vessels;

3. Island of Crete with the main port Chania offering a full range of vessels or;

4. Sirus on the Ageanean Sea also providing a full range of sizes.

W.S.G. Ritchie indicated that on balance he considered Piraeus and Crete would give the ideal spread considering the geography of Greece with its 2000+ islands. However, he agreed to

communicate further indicating sample numbers/sizes of vessels to facilitate further visits in March and April 1999 as being suitable dates in the programme.

It was explained recorded propulsive power (kW) installed on board fishing vessels was a secondary investigation Seafish were contracted to undertake, although it was generally agreed this was quite difficult to achieve without the use of sophisticated dynamometer testing equipment.

A. Zoulus very eloquently explained that in Greece **only** the maximum continuous rating of the installed engine is recorded on all certificates. A letter or certificate is required by MOMM from each Manufacturer (not Agent) clearly stating the MCR of each main engine before this information is recorded on tonnage and safety certification documents (which would be explained in a bit more detail the following day).

As far as re-engining is concerned on existing vessels, no change of power rating is allowed and the power of the new engine must be certified by the manufacturer with engine settings sealed in the factory once power measurements have been completed.

Seafish thanked the Greek representatives for organising this most useful and helpful initial meeting with all Authorities represented around one table thus displaying a clear sign of full co-operation.

Seafish confirmed their appreciation that the next meeting scheduled for 1000 hours on the following day had been organised at the Ministry of Mercantile Marine offices (Merchant Ships Inspectorate) Tonnage Measurement Department, IK Palaiologon Str, Piraeus to be followed by a meeting in the afternoon at the Hellenic Registry of Shipping offices at 23 Alki Miaouli Str, Piraeus.

W.S.G. Ritchie returned to the Hotel at 1545 hours to review notes and brief A.E.Copeland on today's meeting to allow them to make the necessary preparations for the meetings arranged for Wednesday 23rd September.

Wednesday, 23rd September 1998

W.S.G.Ritchie and A.E. Copeland were collected by car at 0930 hours for a meeting at the Department of Mercantile Marine, Piraeus, at 1000 hours.

The meeting commenced at 1000 hours in the Tonnage Measurement Department. Those present were:-

Nicholas J Daskalakis	-	S. Commander
Andreas Zoulus	-	Commander (Eng.)
Nikos Hiopoulus	-	Registry Measurer
W.S.G. Ritchie	-	Seafish
A.E. Copeland	-	Seafish

W.S.G. Ritchie requested that it would be useful if N. Daskalakis would run through in detail the method of registration, tonnage recording, certificate issue and the re-measurement programme as briefly discussed yesterday.

N. Daskalakis commenced by advising the re-measurement programme as follows:-

i) Vessels over 24m are measured to ITC''69 (Greek Rule I) for those vessels engaged in international voyage.

ii) Vessels over 24m operating in home waters were previously measured under Rule II (simplified formula), and all of these vessels (existing) have now been re-measured to ITC'69. The ITC'69 tonnage certificate is issued to the vessel, with copies kept on file at the Registry.

(Example of the vessel 'Aimilia B' SV2330 was provided (Annex 1), showing the vessel's original tonnage as measured in 1988 under Greek Rule II, and the re-measured tonnage as measured in 1992 under ITC'69). Both of these certificates are retained by the Registration Department. The re-measured tonnages are also advised to the Fisheries Directorate and to Port Offices.

iii) Existing vessels 15m to 24m are in process of re-measurement by the Hellenic Register of Shipping by direct contract from the Ministry of Agriculture - Sea Fisheries Division. The original tonnage of the majority of these vessels was originally computed by the Greek Rule II method. After completion of re-measurement of each vessel, the Hellenic Register forward this vessel's file and the Certificate of Measurement to the Department of Mercantile Marine.

iv) Existing vessels below 15m are being directly converted by the Ministry to the 3259/94 a_2 formula. These vessels were originally measured under the Greek Rule II method, and after the new tonnage is calculated, the existing Greek Rule II certificates are retained, with the local Port Office being notified of the revised tonnage, and the certificates amended to show the revised GT. Certificates for those below 6.0m are retained in the Port Office of the port of registry.

N. Daskalakis passed over examples of blank tonnage forms to Seafish (Annex 2). The first being form 'ΥΜΟΔΕΙΤΜΑ Α' 'Certificate of Measurement', which shows the method of measurement in accordance with Rule I as originally used by the Greek Authorities, showing gross and net tonnage. All tonnages of over 24m vessels calculated by this method have now been adjusted to ITC '69 Convention Tonnage (as shown in Annex 1).

The second form (untranslated) is form YEN/AY 370 'Certificate of Measurement' which shows the method of measurement in accordance with Greek Rule II. A sketch showing the dimensions used in the Rule II method was passed to Seafish (Annex 3), showing the lengths, breadth, and depth used to compute the GRT. It was noted that the depth utilised in the formula shown (G) is slightly different than the ITC'69 Convention depth in that it is measured

from the deck at centre, and not at the deck at side, resulting in a slight difference in hull volume when compared to the European Union system.

A blank International Tonnage Certificate (ITC'69) was passed to Seafish and explained by N. Hiopoulus. This certificate shows the name, numbering, and dimensions of the vessel, together with gross tonnage, net tonnage, history of build, construction, and powering (Annex 4).

A. Zoulus then advised that the BHP shown on the certificate is the maximum continuous rating as stated by the engine manufacturer. In each case, the manufacture is requested to provide a written statement to this effect directly to the Ministry of Mercantile Marine. For conversion to kW, the Greek authority uses the factor of 1 HP = 0.7351 kW. The powering system is subject to an inspection during the two yearly safety inspection by the ship inspection service. No growth in power or tonnage is allowed on vessels of over 8m L and 20 BHP. The maximum continuous HP as outlined above is also historically recorded for the purposes of crew qualifications.

A.E. Copeland requested if details shown on tonnage forms were verified by the Mercantile Marine Ship Inspectors. N. Daskalakis advised that only in special cases for specific vessels (*i.e.* unusual hull form or power *etc.*) were visits made by the ship inspection service. Normal procedure was for all documents/drawings from builders and designers to be sent to the Mercantile Marine office for certification and issue of Registration Certificate.

As W.S.G. Ritchie and A.E. Copeland were due at the Hellenic Register of Shipping, the meeting was closed at 1200 hours, with arrangements made for further discussions the next morning at 0930 hours.

Wednesday, 23rd September 1998 - 1230 hours

W.S.G. Ritchie and A.E. Copeland transferred by car to the offices of the Hellenic Register of Shipping, and on arrival were met by Mr N. Giannakopoulos (NG) who is the Department Supervisor for the Yacht and Small Craft Department and Mr A. Agapakis, Division Director who briefly further explained that the tonnage re-measurement programme being carried out at present, was being handled by his Department. The party were then introduced to A. Agapakis who emphasised the Hellenic Register of Shipping would provide full co-operation with the project and as he was not completely up to date with progress and methodology of the re-measurement programme, he would leave the meeting a bit later on, and that all matters raised would be dealt with by N. Giannakopoulos and his staff.

W.S.G. Ritchie commenced by explaining the brief of the mission (as previously outlined during the visit in the morning to the Ministry of Mercantile Marine). After explanation of the Seafish role in the UK and the background of links with the EU on formulation of tonnage regulations, W.S.G. Ritchie advised that the Greek Ministry of Mercantile Marine had informed the team of the contract for the re-measurement of vessels 15-24m by the Hellenic Register of Shipping, and requested that N. Giannakopoulos would be kind enough to explain the procedures and current status of the programme.

N. Giannakopoulos commenced by outlining the re-measurement programme which was by direct contract with the Ministry of Agriculture - Sea Fisheries Division as a commercial project supported by EU grant funding. He also advised that the programme is for vessels of 15-24m and is scheduled to be completed by end of 1999.

N. Giannakopoulos explained the procedures utilised for the re-measurement programme and advised that this was best explained in four stages, being:-
a) Measurement, b) Computation (IT), c) File system as applicable to vessel, and d) Status List of work programme.

N. Giannakopoulos explained that the method of examination is brought about by adherence to the quality control system being utilised for the programme, being to ISO 9001. All work carried out for the re-measurement programme is subject to a continuous audit under the QA system.

a) Measurement

The measurement of each vessel is carried out by physical measurement of the vessel's exterior hull to obtain exact shape at each defined section or frame space. This is achieved by the vessel being slipped, and the surveyors erecting a rig composed of a collapsible vertical pole, graduated in height, complete with a horizontally adjustable batten. The vertical pole is set at a pre-determined distance from the vessel's centre line, and the horizontal batten extended to the vessel's side at set heights above the base/keel line. All previous shipyard or designers drawings are disregarded.

The resultant offsets, together with length, breadth, depth, and superstructure dimensions are submitted to the HQ Office in Piraeus. Drawings are then made from the submitted data at the Piraeus Office (Yacht and Small Craft Department) showing all sections measured, together with the major dimensions taken.

b) Computation

After confirmation by drawing of the dimensions and offsets supplied by the surveyor, the data is then computed to give the gross and net tonnage according to ITC'69. An example of a computer print-out for the vessel 'Agia Barbara' was provided (Annex 5), together with a copy of the completed International Tonnage Certificate. It was noted that the surveyor also countersigns the computer print-out.

c) Filing

The computation print-out, completed tonnage certificate, drawings, and copies of safety certificates are kept together in one file. A complete copy of the file is also issued to the Ministry of Mercantile Marine as each vessel is completed.

d) Status List

A list detailing every vessel is retained in Headquarters. This list shows the status of the re-measurement programme, with numbers of vessels completed, currently undergoing re-measurement, and those remaining to be re-measured.. The list is reviewed and updated on a weekly basis by HQ staff. From the status list, it can be seen that in 1997, 150 vessels were re-measured; and in 1998 to date, 260 vessels have been re-measured. It is planned to complete the total by the end of 1999. (Approximately a further 265 vessels).

N. Giannakopoulos then invited the team to tour the Headquarters section of the Yacht and Small Craft Division, to view the actual work being carried out.

The computation and data entry area was visited, at the request of A.E. Copeland the drawings for the vessel for which the sample tonnage calculation (Annex 5) had been provided, were produced. A.E. Copeland checked that the offsets stated on the drawing agreed with those offsets shown on the print-out, and with the information from the surveyor, and that dimensions shown on the International Tonnage Certificate were in agreement. Further files of differing vessels were produced for inspection. All the derived section drawings based on individual surveyors measurements were fount to be of similar good standard. N.Giannakopoulos explained that only Hellenic Registry surveyors were used for the re-measuring programme, and as there were regular seminars arranged for all surveyors, this ensured that similar standards are maintained throughout the surveyor staff. There is also an ongoing audit for Quality Assurance purposes, which entailed a senior HQ surveyor visiting a completed vessel with the re-measuring surveyor, and repeating the re-measurement exercise.

The party then returned to the conference room. At the resumption of the meeting, W.S.G. Ritchie advised that a sample number of vessels at differing locations would be selected by the Seafish team for inspection and measurement verification. This list will be forwarded to the Ministry of Mercantile Marine for agreement.

N. Giannakopoulos assured full co-operation of the survey and HQ staff in examination of any vessel selected that had previously been re-measured or was due to be measured, and asked if particular ports or vessels had been designated at this stage.

W.S.G. Ritchie advised that ports had yet to be finally designated, and that for protocol purposes, this would be decided in conjunction with the Ministry of Mercantile Marine and the Fisheries Directorate. A list of vessels would be produced, of which approximately 50% will be selected for examination.

The meeting concluded at 1700 hours, and the Seafish team returned to the hotel to review notes and identify points for further discussion next morning.

Thursday, 24th September 1998

W.S.G. Ritchie and A.E. Copeland were collected by car at 0900 hours for a further meeting at the Department of Mercantile Marine at 0930 hours.

Present at the meeting were:-

Nicholas J Daskalakis	-	S. Commander
Andreas Zoulus	-	Commander (Eng.)
Nikos Hiopoulus	-	Registry Measurer
W.S.G. Ritchie	-	Seafish
A.E. Copeland	-	Seafish

W.S.G. Ritchie opened the meeting by advising of the team visit to the Hellenic Register of Shipping the previous afternoon, and that the team had been advised that a completed file for each re-measured vessel was supplied to the Ministry of Mercantile Marine by the Hellenic Register of Shipping. In this context, AEC requested to view the Ministry file on the vessel 'Agia Barbara' being one of the cases examined during the visit to the Hellenic Register office.

N. Hiopoulus produced the file from Registry archives, and upon examination, the contents were found to agree with the documentation examined in the Hellenic Register of Shipping file for the same vessel, and complete with the ITC '69 Tonnage Certificates dated 24.11.97.

N. Hiopoulus also provided from this file the original certificate of registry dated November 1954 which was showing the original Greek Rule II Gross and Net Tonnage. This certificate is also endorsed to show a change of propulsion engine from Deutz to MAN in 1995. Also in this file is kept the Certificate of Nationality, dated September 1995 showing the main dimensions, Rule II tonnage, and details of owners. Copies of these certificates plus a copy of the most recent safety inspection certificate were passed to the Seafish team (Annex 6).

A.E. Copeland referred to the meeting of previous day, when propulsion power was discussed, and requested a view of documentation concerning the rating of any particular engine. A. Zoulus confirmed that the onus was placed on the engine installer or owner to provide this information to the Ministry of Mercantile Marine as a condition of registry or re-registry. Sample letters from four separate manufacturers were passed to the team (Annex 7) for retention. Each manufacturer has identified the particular engine by serial number, and certified the rating as a maximum continuous HP.

A.E. Copeland asked if this certified HP was physically checked on any vessel. A. Zoulus replied that the only check that was made was a visual inspection during the two-yearly safety inspection. The onus to report any alteration to the power or change of engine, is on the owner to report to the Port Office.

N. Daskalakis provided a further file concerning the vessel 'Kavo Doro II' which is a 28m LOA vessel engaged in international voyages. This vessel has been measured at time of build

in 1988 to Greek Rule I which is the ITC'69 method. A copy of the Certificate of Measurement was passed to the team (Annex 8), after examination of the file.

A further short discussion was then held concerning the location of the fleet with regard to having access to varying sizes of vessels.

N. Daskalakis after discussion with A. Zoulus and N. Hiopoulus, proposed as previously discussed that the port visits for the Greek mainland be centred on Piraeus, as there are various ports within daily travelling distance with a variety of vessels in each size range. It was further suggested that the Island of Crete be visited for the second port visit, as this area also encompassed a number of ports with varying size of vessel.

W.S.G. Ritchie agreed that the Seafish team will consider these areas in consultation with the Fisheries Directorate and after a study of the disposition of the fleet.

The meeting concluded at 1200 hours and the team returned to the hotel to commence writing of reports.

W.S.G. Ritchie
Senior Marine Surveyor

A.E. Copeland
Marine Surveyor

CONTACT LIST

Name	Organisation	Tel. No.
Dimitris Mitropoulos Directorate of Marine Fisheries	Ministry of Agriculture 381 Acharnon Street GR - 11143 Athens	00 30 1 20 16 251
L Cmnder (HCG) Skountis Vas Port Police Directorate Fisheries Department	Ministry of Mercantile Marine Grigoriou Lambraki, 150 185 18 Pireaus	00 30 1 42 20 694
Nikolaos Giannakopoulos Yachts & Small Craft Dept. Supervisor	Hellenic Register of Shipping 23 Akti Miaouli str 185 35 Piraeus	00 30 1 42 21 900
Alexandros Agapakis Plan Approval Engineering Division Director	Hellenic Register of Shipping 23 Akti Miaouli str 185 35 Piraeus	00 30 1 42 21 900
Nicholas J Daskalakis S Commander HCG (Eng)	Hellenic Ministry of Mercantile Marine Merchant Ships Inspection Service K Paleologou 1 185 35 Piraeus	00 30 1 41 91 850 00 30 1 41 11 214
Andreas Zoulos	Hellenic Ministry of Mercantile Marine K Paleologou 1 185 35 Piraeus	
Nikos Hiopoulos	Hellenic Ministry of Mercantile Marine K Paleologou 1 185 35 Piraeus	

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Sweden, 6th October 1998 - 8th October 1998
R. Watts and A Thomson

Monday, 5th October 1998

R.J. Watts travelled from Plymouth via Bristol and Amsterdam, and A. R. Thomson travelled from Inverkeithing to Gothenburg via Edinburgh and Amsterdam. Both arrived at the Hotel Riverton at 1945 hours.

Tuesday, 6th October 1998

0800 hours: R.J. Watts and A.R. Thomson had a preparatory meeting to discuss objectives and review the fleet statistics received from C.E. Tucker, and the initial EU inspection report for the Swedish fleet, prior to the first meeting at Fiskeriverket (National Board of Fisheries). From reading the SPSS report, a number of fleet characteristics are evident:

- There are 2260 vessels on the register;
- The vast majority of vessels (1993) are under 15m in length;
- The average length is approximately 10m, average GT is just under 20t;
- There are no vessels under 5m in length on the register;
- There is a heavy concentration of vessels registered in Gothenburg;
- There are 2116 vessels with GT, but no distinction between measured and estimated, 142 with GRT, and 11 with other (national) tonnage measurements;
- There was no age profile of the fleet other than pre/post 1995 year of build.

The previous EU report indicated the following:

- Over 15m in length, vessels tonnage measurement was carried out to ITC '69;
- Under 15m in length, vessels were measured using EU approved national procedures, which would require investigation;
- There was not a derating issue, as far as the EU inspectors were concerned.

At 1000 hours R.J. Watts and A.R. Thomson arrived at the National Board of Fisheries (NBF). (Note: Location is now Ekelundsgatan 1, **not** Lilla Bommen 6) for the introductory meeting.

Present at the meeting:

Hans G Andersson	-	Senior Administrator Department of Markets & Structures
Ingela Bengtsson	-	Byra Director Department of Markets & Structures
Anders Bogelius	-	Senior Officer Department of Fisheries Control

R.J. Watts gave an introduction to Seafish and an explanation of the aims and objectives of the investigation on behalf of the EC. A.R. Thomson stated that no information gathered in one country would be passed on to another and that any commercially sensitive information would remain confidential. Vessel names would not appear in the report.

The characteristics of the Swedish fishing fleet were discussed, and HGA described how the fleet was broken down into 6 segments, these are:

1. Vessels less than 12m in length fishing with static gear, pots, *etc.* in coastal waters.
2. Shrimp trawlers.
3. Pelagic vessels fishing with purse seiners or mid-water trawls.
4. Vessels fishing with bottom trawls for white fish and nephrops.
5. Vessels over 12m in length fishing with static/passive gear.
6. Vessels over 12m in length fishing for salmon.

Dividing the fleet in this way has allowed 'reduction rates' to be applied to the individual segments rather than to the fleet as a whole. Segment No 4 has seen the heaviest reduction. Individual segments have been reduced by different percentages, although within a particular segment, power and tonnage were reduced by the same percentage.

Sweden has achieved MAGP(3) and expects to reach its target for MAGP(4).

Fishing quotas in Sweden are by species, they are not allocated to individual vessels or fisherman. 85% of the Swedish quota is pelagic, 11% cod and 4% other. Quotas are based on quantity, not value.

The Swedish Fishing Vessel Register is kept on a database at the National Board of Fisheries, and A. Bogelius is responsible for its upkeep. At the time of writing there were 2223 vessels on the Swedish Register, and the database contains the following information:

Segment
Vessel name
Port of registry
Radio call sign
GT or GRT
LOA

Beam
Depth (moulded)
Power (kW)
Owner details
Type of fishing
Amount of fish caught in year
History of vessel modifications since build.

Net Tonnage for fishing vessels is no longer recorded on the register.

When a requirement for tonnage measurement arises, a Tonnage Surveyor from the Tonnage Measurement Department of the National Maritime Administration (NMA) is contacted to carry out the tonnage measurement and calculation, and then the NMA issues a Tonnage Certificate. Details of GT and power are then passed to the Central Shipping Register for Sweden in Stockholm (which registers all vessel types, not just fishing vessels). The NBF register is updated electronically with respect to any fishing vessel particulars on a weekly basis from Stockholm. Vessels under 5m in length are not included on the register.

Only full-time fishing vessels appear on the register and there are around 3000 full-time commercial fishermen operating approximately 2200 fishing vessels. The NBF's advertising brochure (1) states there are a few thousand part-time fishermen (whose vessels will not be registered), and approximately 300,000 recreational net fishermen who fish with nets for private consumption. These net fishermen are allowed nets up to 180m in length, and up to 6 pots per person, but there is an exemption for lobster fishermen who are allowed 14 pots per person.

Every full-time fishing vessel owner requires a licence, and most fishermen will require a personal licence (on a 5 yearly renewal). Every fishing vessel has a "Permit to Fish" (see Annex (2)). Fishermen who do not continue to earn their living by fishing will lose their personal licences. There were approximately 2680 personal licences and 2200 vessel licences at the time of writing.

The Swedish Government allows grant aid for a decommissioning programme, which is based on GT (£600 per ton). The GT is taken to be that contained in the register to prevent people re-building their vessels and increasing GT just prior to decommissioning.

There is no grant aid for any equipment which increases efficiency, and hence amount of fish caught. Grants are only available for equipment which increases safety or fish product quality.

If an owner wants to build a new vessel which is to be larger than his existing one, he must obtain licence cover for any extra GT or power over and above his existing vessel. This means purchasing another vessel with a licence. There is no reduction in either GT or kW when combining licences in this manner.

If an owner alters his vessel without informing the authorities, and this subsequently comes to light, then he will have to obtain extra licence to cover for any increase in GT or kW caused by

the modifications. Fishing vessels are surveyed every 2 years in Sweden and any changes affecting tonnage will be notified by the Surveyor to the authorities.

For Swedish owners buying foreign-flagged vessels second-hand, there would normally be no problem in accepting an ITC'69 Tonnage Certificate from a country that had signed the Convention. However, there had recently been two cases of vessels bought by Swedish owners from Scotland and Eire, where the Tonnage Certificates were found to have incorrect GT values subsequent to the sale, which resulted in the new owners having to pay for extra licence. These specific instances were discussed in greater detail at the meeting the following day with the NMA Tonnage Measurers.

Although there is some concern for the future, at the present time there is not a problem with flag of convenience vessels on the Swedish Fishing Vessel Register.

H.G. Andersson explained that only the NMA Tonnage Measurement Department is allowed to carry out tonnage measurements and issue of Tonnage Certificates in Sweden. There is an exception to this for fishing vessels under 12m in length, whereby the NBF, not the NMA, calculate GT for these vessels. It is understood that discussions are in hand to transfer this activity from NBF to NMA some time in the future.

In Sweden, safety tonnage can be subtracted from GT on application to Brussels. This is done on a boat by boat basis. Safety tonnage reductions are only allowed for reasons such as attaining intact/damaged stability requirements for a particular vessel, not just for improving working conditions or increasing crew comfort. Sweden has very few open decked vessels over 11.95m in length.

H.G. Andersson commented that he did not think that GT and installed power are good measures of capacity to catch fish. In particular, he was concerned that many modern design vessels increase GT for no significant increase in capacity. What matters is where boats fish and how many fish they catch.

Vessels under 5m in length are not measured for GT.

The Swedes decided that it would not be practicable to send Surveyors out to measure individually all of the older, under 12m long vessels. As the NBF already had Oslo parameters for most of these vessels, the decision was taken that NBF would calculate GT for this class of vessel to speed up the conversion to GT and keep costs down. Because GT could not be calculated without a value for Length and Depth (moulded), the NBF wrote a letter (Annex (3)) to all 1400 owners with an instruction showing them how to measure Length and Depth, asking them to return this information for NBF to calculate GT correctly to the EC directives. Out of the 1400 letters sent, 1000 owners replied by the 1996 deadline. Of the 400 remaining a large proportion have since left the register.

There are no plans to re-measure these vessels.

H.G. Andersson and A. Bogelius stated that this formula was approved by the EC.

NBF calculate GT for new vessels under 12m to EC directive regulations:

$$GT = L \times B \times D \times a_i$$

NMA measure the tonnage of **all** vessels, including fishing vessels, over 12m LOA and 4m breadth (extreme).

In Sweden, GT is rounded down to the nearest ton which will give a zero GT for any vessel below 1 ton. Enclosed spaces less than $1m^3$ are not included in volume calculations.

Generally speaking, H.G. Andersson stated that vessels below 12m in length have GT calculated to the EC directives (including some using the national formula when depth was unknown) by NBF, and vessels 12m to 15m in length had tonnage measured and calculated by NMA to EC directives. H.G. Andersson believed that over 95% of vessels now had GT figures, and there were no plans to re-measure the small number of vessels outstanding and GRT would be taken as an approximation for GT in these cases.

Fishing vessels over 15m LOA and all other vessels over 12m by 4m are measured to ITC'69. Boats less than 12m by 4m which are **not** fishing vessels could be measured to ITC'69 by NMA. NBF measure fishing vessels under 12m LOA (see above).

As far as installed power was concerned, H.G. Andersson stated that there was not a problem with derated engines, although these were cases where engines were derated to avoid the requirement to carry a qualified engineer onboard. The breaks are as follows:

Over 3000 kW	Technical 'B' Engineer Exam (Merchant Navy);
1600 - 3000 kW	3-4 months course at the Nautical University;
750 - 1600 kW	Certificate from Nautical School;
490 - 750 kW	Certificate awarded after test;
Under 490 kW	No requirement for qualification.

Swedish Safety Authority (National Maritime Administration) inspectors check engine and gearbox installations and confirm that the kW figure on the plate mounted on the engine is correct in accordance with makers certification. The power is accepted as previously recorded. There are no re-checks or power measurements on engines for vessels in service. The inspectors pass the information on power to Stockholm for inclusion in the register.

Some engines are sealed at the owners request, this may typically occur when the owner wants a bigger engine than he has a qualified engineer onboard for.

Segments 3 and 4 (Purse Seiners and trawlers) are the categories where installed power has the most influence.

There is still, at the present time, enough surplus kW within the MAGP to allow owners to re-engine with increased power.

H.G. Andersson stated that EC 2930/86 penalised owners who installed main engine driven generators or pumps unfairly, because although it is more efficient to derive power for auxiliaries in this way, the overall power is still available for propulsion only if needed. Power is not recorded on the Tonnage Certificates.

A.R.Thomson and R.J. Watts returned to the Hotel Riverton at 1700 hours and reviewed notes taken during the day's discussions until 1900 hours.

Wednesday, 7th October 1998

H.G. Andersson picked up AR. Thomson and R.J. Watts at 0920 hours and proceeded to the offices of the National Maritime Administration (NMA) in Gothenburg to meet with the Tonnage Surveyors.

Present at the meeting were:

Ronnie Hanzen	-	Principal Ship Surveyor	NMA
Ingvor Kronhamn	-	Senior Ship Surveyor	NMA
Hans Tiederman	-		NMA

H.G. Andersson, A.R. Thomson and R.J. Watts

A.R. Thomson and R.J. Watts went over the background to the investigation.

A.R. Thomson asked what rules and regulations applied in Sweden to the measurement of tonnage. The Swedes passed legislation SJOFS 1982:30 which was amended by SFS 1994:1162 to apply ITC'69 to vessels over 12m length and 4m breadth. Vessels under 12m can be measured to ITC'69. In practice, EC directives 2930/86, 3259/94 and 95/84 are applied to fishing vessels from 5m to 15m LOA., see Ref 10G 981006 IKN (4) in Annex.

Vessels with no lines plans available are measured using a laser measuring device, which follows the plate seams on the hull. The vessel has to be slipped for this process. The output of 3-D points from the measurement device can be downloaded directly into one of the NMA's computer systems (they are either the "SIKOB" or the "NAPA" systems) which will then generate the lines and calculate hull volumes.

Net Tonnage for ships less than 24m is 0.30 GT.

All vessels are visited and any existing drawings or documentation is physically checked on board before it is used for tonnage calculation purposes.

The meeting then went on to discuss the detail of tonnage measurement with the NMA Surveyors.

Over 24m

GT measured and calculated in accordance with ITC'69.

I. Kronhamn, R. Hanzen and H. Tiederman tabled a report (see Annex (5) Ref 981007 KN) detailing the cases of 2 second-hand vessels bought by Swedish owners from Britain and Ireland whereby the GT stated on the ITC'69 Tonnage Certificate was both out of date, because the vessel had been modified since measurement, and wrongly calculated in the first instance. The 43.95m long ex-British vessel had a GT of 569 tons on her Tonnage Certificate, measured by Lloyds Register in 1987. By 1998 when the vessel was re-measured by NMA, this had gone up to 598 tons. The reasons for this were:

a) The aft net bin had been closed watertight since the 1987 measurement (+58m^3).
b) The forecastle had been incorrectly exempted and the deckhouse height incorrectly measured (+27m^3) at the 1987 measurement.

The hull volume was correct (see SIKOB lines output in Annex (6)).

A.R. Thomson and R.J. Watts concurred with the NMA's findings and tonnage calculation for the UK vessel. A copy of the Swedish Certificate is enclosed in the Annex (6).

As a result of the shortfall in GT the new Swedish owners of both vessels had to arrange extra licence cover at significant cost to themselves.

Since 1995, there have been approximately 10 vessels transferred to the Swedish register from UK and Ireland - and all have had problems with Tonnage.

I. Kronhamn stated he would expect GT to be calculated to within 1 or 2% accuracy.

15m to 24m

GT measured and calculated in accordance with ITC'69. The approximation formula using a_3 is not used.

I. Kronhamn handed over a copy of the calculation and Tonnage Certificate for a 23.72m LOA vessel. This actual vessel was physically checked later that day by A.R. Thomson and R.J. Watts (see Annex (7)).

Calculation method was reviewed by A.R Thomson and R.J. Watts and was in accordance with ITC'69.

Under 15m

GT measured and calculated in accordance with EC Directives using a_1 formula.

I. Kronhamn tabled the calculation and Tonnage Certificate for a 12.73m LOA vessel (see Annex (8)). A.R. Thomson and R.J. Watts checked the calculation; which was correct in accordance with EC Directives.

This vessel had a previous tonnage measured to the Oslo Convention which was 19.07 tons compared to the 21 tons calculated to EC rules.

H.G. Andersson I. Kronhamn A.R. Thomson and R.J. Watts left the NMA office at 1300 hours and travelled to the "O-Varvet Ab" Shipyard to visit the 23.72m LOA vessel that had been discussed earlier.

A.R. Thomson and R.J. Watts physically checked the main dimensions, which were confirmed correct, apart from depth, where an apparent discrepancy was found. I. Kronhamn later supplied a drawing (see fax 26/10/98) which confirmed that the depth recorded on the form was actually correct.

The power stated on the maker's plate on the main engine of 675 kW at 1600RPM was as expected for a Caterpillar 3508 REV.

H.G.Andersson showed A.R. Thomson and R.J. Watts around a 14.95m vessel (with a novel trawl towing arrangement). This size of vessel has become a "paragraph" for the Swedish fishing fleet. Applying the EC formula for under 15m means that shelters have no influence on GT at all; an open and a shelter decked vessel of the same length (below 15m) will have the same GT according to the formula.

Going even slightly above 15m in length, with a shelter, can almost double GT in comparison with a vessel just below 15m.

A.R. Thomson and R.J. Watts were returned to the Hotel at approximately 1800 hours and reviewed notes taken that day until 1900 hours.

Thursday, 8th October 1998

A.R. Thomson and R.J. Watts travelled back to UK.

A.R. Thomson
Marine Surveyor

R.J. Watts
Marine Surveyor

ANNEX

(1) NBF Brochure.

(2) Vessel Permit (Specimen).

(3) Letter to owners for Length and Depth measurement, dated 26th October 1995.

(4) Swedish Fishing Vessels - Tonnage Measurement handout, dated 6th October 1998.

(5) Fishing vessels bought from abroad handout, dated 6th October 1998.

(6) Copy ITC '69 Tonnage Certificate, 43.95m vessel, dated 21st August 1998.

(7) Copy Tonnage Certificate, 23.72m vessel, dated 19th January 1989.

(8) Copy Tonnage Certificate, 12.73m vessel, dated 19th August 1997.

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Finland, 12th October 1998 - 15th October 1998
L.R. Webb and A.R. Thomson

Monday, 12th October 1998

L.R. Webb travelled from Humberside to Amsterdam, Schipol; A.R. Thomson travelled from Edinburgh to Amsterdam, Schipol. Both proceeded from Schipol to Helsinki, arriving at the Hotel Arthur at approximately 1800 hours. A preparatory meeting was held at the hotel where the Finnish Fishing Fleet details were reviewed along with the list of topics to be discussed with the Finnish Ministry of Agriculture and Forestry - Department of Fisheries & Game and the Finnish Maritime Administration during the initial visit.

The Community Fishing Vessel Register shows that the Finnish Fleet comprises some 4000 vessels - most of which are below 15m in length (approximately 3900 or 97% of the total number of registered fishing vessels).

Tuesday, 13th October 1998

0900 hours: L.R. Webb and A.R. Thomson reviewed lists of questions and programme of meetings for next 2/3 days.

1000 hours: Arrived at the Ministry of Agriculture and Forestry (MAF) situated on 6th floor of No 4A. Shown to the Department of Fisheries & Game on the 5th floor to meet:

Mr Ali Lindahl	-	Senior Planning Officer MAF Department of Fisheries & Game
Mr Jerker Klawer	-	Maritime Inspector/Naval Architect Finnish Maritime Administration (FMA)

Apologies were tendered on behalf of Mr Jarmo Vilhunen, Chief Inspector of Fisheries, who was away on business at the time (A. R. Thomson and L.R. Webb met him the following day).

A.R. Thomson gave a brief introduction explaining the aims and objectives of the investigation, Seafish's role on behalf of the EC, and the progress made to date. The requirement for confidentiality was affirmed by A.R. Thomson who stated that no information gathered in one country would be passed to another.

A. Lindahl is responsible for the database that contains the Finnish Fishing Vessel Register, and J. Klawer is one of the Maritime Inspectors who carry out tonnage surveys on fishing vessels. J. Klawer explained there is only one full-time Tonnage Surveyor, Mr Anders Fabritius, who is based at the FMA offices in Helsinki.

The Maritime Inspectors carry out the actual measurement of tonnage and calculations. Mr Fabritius co-ordinates the Maritime Inspectors, and after the survey, checks the Maritime Inspectors calculations before issuing a Tonnage Certificate. The Maritime Inspectors carry out their tonnage measurement duties out of office hours, in their spare time.

A. Lindahl confirmed that he had been able to arrange a visit for the next day to two vessels for A.R. Thomson and L.R. Webb along with J. Klawer. J. Klawer agreed to bring with him a copy of his original measurements and calculations for the vessels for A.R. Thomson and L.R. Webb to check.

A.R. Thomson requested a copy of the Finnish Fishing Fleet Register. A. Lindahl supplied a copy of "The Finnish Merchant Marine and Fishing Vessels 1998", dated 1st January 1998 (1). This contains details of vessel age, length, GT or GRT and power (kW) for all 4000 fishing vessels on the Register. It further divides the Fleet into three categories according to fishing method applied, *i.e.*:

i) Trawlers - fishing for cod, herring and sprats;
ii) Salmon Vessels - fishing for salmon with long lines and drift nets;
iii) Coastal Vessels - fishing various species using gill nets, trap nets, *etc.*

Finland divides its fishing vessels into two categories, Length under 12m and Length over 12m.

Under 12m vessels only have LOA measured and recorded on a Certificate and this information is passed to Brussels. A vessel slightly over 12m LOA may still fall into the under 12m category because its ITC'69 registered length may be less than 12m. Vessels less than 5.5m in length are not measured and do not have to have safety surveys; MAF notify Brussels whether these boats are actively fishing, in which case they are added or removed from the Register.

There is a number in the 'GT' column of the Finnish Fleet Register for vessels L<12m. This figure is taken to two decimal figures. J. Klawer stated this figure is likely to be an Oslo convention 'GRT', however no-one from the FMA has any records showing how these tonnages were derived, and he himself has no personal knowledge of their derivation.

There is no requirement in Finland for under 12m vessels to be re-measured, and no intention of doing so in the future. J. Klawer explained that as the vast majority of vessels on the Finnish Register are below 12m in length, it would be a major and costly exercise to re-measure to ITC'69 or EC regulations when the Oslo 'GT' would probably be a good enough approximation to GT anyway.

J. Klawer and A. Lindahl explained the process for measuring tonnage and forwarding the data to Brussels for vessels with length over 12:

Once the requirement for a vessel tonnage measurement is established, a Maritime Inspector visits the vessel to measure it. If lines drawings are available, sample section measurements

are taken to confirm the drawings are correct before performing the calculations for GT and NT. If no drawings are in existence, which is often the case, then the Inspector will measure enough sections to provide the information required to calculate (i) the enclosed spaces, and (ii) hull volume. The hull volume is calculated using Simpsons Rule - see below for the FMA guidelines on stations and offsets.

The calculations are forwarded to Mr Fabritius in Helsinki by the Maritime Inspectors, who may be working in any one of the FMA's four districts: Gulf of Finland, Archipelago, Gulf of Bothnia and Inland Sea. Mr Fabritius then issues a Tonnage Certificate if he is satisfied that the measurement and calculation has been carried out correctly to ITC'69 (the calculations are carried out and checked using spreadsheets written by the individual concerned. There are no standard programmes used in Finland, and no approval of the spreadsheets used). He keeps a copy for his records in the main FMA office in Helsinki and sends the Certificate to the vessel owner for it to be kept on board. The local district FMA office will keep records of all measurements and calculations carried out by its own Inspectors. The vessel owner then forwards a copy of the Tonnage Certificate to his 'rural' MAF office who enter the tonnage information onto the main MAF database containing the Fishing Vessel Register, and from here the information is transmitted to Brussels.

Finland has not adopted the EC directives (EC 2930/86, EC 3257/94 and 95/84/EC). Instead they intend measuring all fishing vessels over 12m to ITC'69 for GT and NT.

J. Klawer stated there are still over 100 vessels over 12m in length which have Oslo 'GT' figures in the Register. These are in the process of being measured over the next three years to convert to ITC '69 GT (identifiable by a double zero after the decimal point under the GT column in the Register). Inspection of the Register (1) supplied showed that out of 277 vessels on the Register over 12m in length, 123 had ITC'69 and 154 had the old Oslo 'GT' that would have to be re-measured. (This information is approximately one year old now so may not be accurate in terms of the number of vessels to be re-measured).

J. Klawer said that when an over 12m vessel is having its three yearly safety survey carried out and the Maritime Inspector finds that the vessel does not yet have an ITC'69 GT measurement, then he will tell the Skipper to apply for re-measurement within one month of the survey. If this does not happen, the Skipper will not be allowed to go to sea. Theoretically, this gives a three year cycle time from the present date for all tonnages to be to ITC'69 because of the three year survey requirement.

The only vessels required to be entered on the Register are vessels owned by fishermen who earn at least 30% of their annual income from fishing activities. (These are termed "commercial" or "full time" fishing vessels). L.R. Webb raised the question as to what happens when a vessel is part owned by several people who may each derive less than 30% of their income from fishing that vessel. Apparently, this issue is being discussed at Governmental level in Finland at the moment.

L.R. Webb asked what implications GT figures have for Finnish fishermen. It transpires that GT determines crew requirement, *i.e.* number of crew on board and the certification and

qualifications required for the Skipper. New legislation is due next year on fishing vessel safety which will address certification. At present the breaks are at 150t, 500t and 1600t. GT does not appear on any fishing licences. Skippers require certification for vessels in the range 10m to 27.5m in length (1961 legislation) and any vessel over 27.5m is treated as a merchant vessel. GT is not used to determine harbour dues.

NT has no official or revenue implications, other than appearing on the Tonnage Certificate as required by ITC'69.

As far as powering is concerned, J.Klawer confirmed that the FMA do not measure engine power, but at the safety survey the Marine Inspectors do check that the engine has not been altered or replaced. Safety surveys on fishing vessels 5.5m to 27.5m in length are carried out every three years, above 27.5m there is an annual survey. The Inspectors check the details of engines fitted to vessels with manufacturers data. There are a small number of de-rated engines which are sealed and the seals checked at the safety surveys.

Vessels having an installed power of over 350 kW require a qualified Engineer on board and vessels with over 750 kW must have a Chief Engineer.

Power is recorded on the safety survey Certificate by the FMA Maritime Inspectors. The Skipper is required to advise engine power and details of main engine to MAF when the vessel is registered. Power does not appear on the Tonnage Certificate.

A.R. Thomson asked if safety tonnage was an issue in Finland, but at the present time Finland are below MAGP limits and there are no restrictions on total tonnage, although this may become a problem in the future.

There are grants available for decommissioning - mostly for salmon vessels; no details of numbers of vessel or tonnage were available. The size of the grant appears to be based on age and GT.

There are no new fishing vessels building in Finland at the moment, although there is a large vessel building in Denmark (approximately 40m) for Finnish owners.

Finland do not have a problem with flag of convenience vessels on their Register.

J. Klawer confirmed that the FMA would check Tonnage Certificates of second-hand vessels bought onto the Finnish Register only if they suspected the country of origin did not measure GT to ITC'69 properly, but otherwise the existing Tonnage Certificate would be accepted as is.

Only Finland, Sweden, Denmark, Germany, Latvia, and Estonia are allowed to fish in the Baltic Sea, other EU countries are not allowed into this fishery.

The potential locations for the second visit to audit actual tonnage measurements were discussed. There are a number of factors influencing choice of port. Most fishing ports are

located in the South of Finland as inshore and Northern waters tend to freeze over in winter. Vessels are likely to be port-bound during winter months so January/February would be a good time to visit from a vessel availability point of view. There is also a difficulty in that smaller vessels do not tend to be in the same harbours as large trawlers. The port of Hanko was suggested as being a good location, Hanko is about 100Km from Helsinki. Travel by road in winter in Finland is not a problem.

A visit to a fishing boat in Helsinki had been arranged for the following morning with J. Klawer and A. Lindahl

A.R. Thomson and L.R. Webb left the MAF offices at 1600 hours and returned to the hotel to review notes and the Fishing Vessel Register.

Examination of the Fishing Vessel Register (as at 01.01.98) showed that the Fleet can be categorised as follows:

	GT (ITC'69)	"GT" (Oslo)	No GT (Under 12m)	Total
Trawlers	93	74	28	195
Salmon Vessels	30	80	206	316
Coastal Vessels	Nil	3477	3477	3477
Totals	**123**	**154**	**3711**	**3988**

All the coastal vessels which make up over 90% of the Fleet total numbers are under 12m in length and so are not required by the Finnish regulations to have a GT measured to ITC'69. There is only one of these coastal vessels with installed power over 350 kW (thus requiring a qualified Engineer).

Wednesday 14th October 1998

A.R. Thomson and L.R. Webb were picked up from the hotel by AL and drove to the fishing harbour in Helsinki where we met J. Klawer. The purpose of the visit was to check the ITC'69 tonnage measurement carried out by J. Klawer on a 19.99m salmon vessel that was being converted for trawling. A second 25.75m vessel with a shelterdeck was not available for inspection, as had been planned.

Prior to A.R. Thomson and L.R. Webb taking any measurements, a meeting was held on board the vessel with J. Klawer to go over some points raised at the previous meeting, and then to discuss his methodology prior to the ship check.

J. Klawer handed over copies of the following documentation which are annexed to this report:

- Form 0 - completed by the Maritime Inspector once he has calculated ITC '69 GT and NT and sent to the Tonnage Surveyor (Mr Fabritius) in Helsinki (2).

- Forms 1 & 3 - completed by the Maritime Inspector, these forms lay out the Simpsons Rule calculations for underdeck and cargo volumes (3).

- Page 4+ - completed by Maritime Inspector, these forms contain the above deck enclosed space volume calculations (4).

- Specimen International Tonnage Certificate (1969) Blank (5).

- Copy of Tonnage Certificate and calculations for a 15.74m long vessel (6).

- Copy of Tonnage Certificate and calculations for a 19.99m long vessel. (The same vessel checked in Helsinki by AT and LW) (7).

- Copy of Tonnage Certificate and calculations for a 24.29m long vessel (8).

J. Klawer tabled an internal written procedure (in Finnish) for ITC'69 tonnage measurement which was issued by the Tonnage Surveyor (Mr Fabritius) to all the Maritime Inspectors engaged on tonnage management work.

The National Board of Navigation in Finland passed the legislation (N:0522) under the authority of the Finnish Government for ITC'69 tonnage measurement to be adopted on the 18th July 1982. As stated previously, there is no legislation in place to enact the EC directives on tonnage measurement.

J. Klawer went through the tonnage measurement process:

Very few vessels (especially the older ones) have lines drawings, and in this case the following guidelines for taking **internal** section measurements are as follows:

Under 15m	-	4 transverse sections
15m to 30m	-	6 transverse sections
30m to 45m	-	8 transverse sections

For vessels over 15m, two half station sections are also measured, one forward and one aft, to cater for shape.

Likewise, for the sections themselves for an under 5m depth, five intervals between offsets are taken with a half station inserted at the bottom. Vessels are not slipped for this process - all measurements are taken with the vessel afloat. Even if a vessel has lines drawings available, the Maritime Inspector still visits the vessel to take measurements of representative sections to check the lines are correct before calculating volumes.

Above deck enclosed spaces are physically measured on board, and any enclosed space above $1m^3$ in volume is included in the calculation for GT.

Most Maritime Inspectors have their own spreadsheets for helping calculate volumes and tonnages. J. Klawer uses his own EXCEL spreadsheet (see calculation for 19.99m long vessel in Annex (7)), and the Tonnage Surveyor in Helsinki also has his own spreadsheet to check the calculations submitted to him by the Marine Inspectors. None of these spreadsheets are approved by any one authority (MAF or FMA), although the checking process should highlight any errors.

A.R. Thomson and L.R. Webb then proceeded to take check measurements on the 19.99m vessel and compare results with J. Klawer's original assessment. The following dimensions were found to be correct:

Length
Breadth
Cargo hatch
Wheelhouse dimensions
Deckhouse dimensions

The conversion to trawling work that was being carried out made an accurate assessment of moulded Depth difficult but such measurements that could be taken indicated that Depth moulded was most probably correct.

All dimensional measurements taken by the Maritime Inspectors are to two decimal places.

A.R. Thomson, L.R. Webb and A. Lindahl left the harbour at approximately 1100 hours and travelled back to the MAF office to meet Mr Jarmo Vilhunen, Councillor of Fisheries. At the meeting A.R. Thomson explained the nature and purpose of the investigations, and following general discussions, Mr Vilhunen was able to answer a number of questions raised at previous meetings.

The meeting finished at approximately 1200 hours and A.R. Thomson and L.R. Webb returned to the hotel.

As the investigation was complete, A.R. Thomson and L.Webb attempted to change to earlier flights - which proved possible for L.R. Webb who left Helsinki at approximately 1600 hours, but there were no earlier flights to Edinburgh so A.R. Thomson had to fly back as originally planned. A.R. Thomson spent the rest of the day and following morning writing the draft report.

Thursday 15th October 1998

A.R. Thomson travelled to Edinburgh arriving at 1800 hours.
A.R. Thomson
Marine Surveyor

L.R. Webb
Marine Surveyor

ANNEX 1

1. The Finnish Merchant Marine and Fishing Vessels (Fleet Register), dated 01.01.98.

2. Form 0 - Tonnage measurement administration form.

3. Forms 1 to 3 - Tonnage measurement calculation form.

4. Page 4 - Tonnage measurement calculation form.

5. Specimen ITC'69 Tonnage Certificate.

6. Copy of Tonnage Certificate for 15.74m vessel.

7. Copy of Tonnage Certificate for 19.99m vessel.

8. Copy of Tonnage Certificate for 24.24m vessel.

DRAFT ADMINISTRATIVE CENTRE MISSION REPORT

Portugal, 13 - 16 October 1998
C.E. Tucker, B.F. Wilson

Tuesday, 13 October 1998

C.E. Tucker and B.F. Wilson travelled by car to Edinburgh, and thence to Lisbon (*via* Brussels) by air. The fleet data for Portugal, supplied by the European Commission, was transferred from Excel spreadsheets into the SPSS statistical analysis package, and summary fleet statistics produced. These showed that the Community Register contained details for some 11,400 active vessels, of which some 10,400 were under 15m, approximately 500 were between 15 and 24m and about 180 over 24m. The vast majority of the smallest and largest vessels had had a measured GT reported, while about 3/4 of the medium sized boats were covered by an estimated GT only. Some 1,100 boats had no GT on file, whereas power (kW) was included for effectively all vessels. It was of some suprise that a definative LOA was only shown for some 4,700 boats, as this parameter forms the basis of all GT for vessels under 15m, and of the estimates for those between 15 and 24m. The geographical distribution of the Portugese fleet was also examined.

Wednesday, 14 October 1998

A meeting was held at the offices of the Direccao-Geral das Pescas e Aquicultura (DGPA) at Cais de Alcantara Mar, Lisboa, with the following persons present (including representatives of the Directorate General of Ports, Shipping and Navigation - DGPNTM - who are located in the same building):

Jorge M. Conceicao	-	Chefe de Divisao, DGPA (part meeting)
Joao Ramos	-	Naval Architect, DGPA
Eng. Carlos Paiva	-	Chief Engineering Surveyor, DGPNTM
Maria da Conceicao Alves	-	Tonnage Department, DGPNTM
Sara Delgardo	-	DGPNTM (as interpreter)

The Seafish team introduced the study, explained its objectives (primarily aimed at ensuring the accuracy of tonnage reported to the Community fishing vessel register, but with power as a secondary objective), and described the reasons Seafish believed that they had secured the contract - emphasising the requirements to maintain confidentially of, for example, the intellectual property rights of designs.

The Portuguese system for each of the five groups of vessels established under Council Regulation EC/3259/94 was then discussed. It was emphasised that DGPNTM were totally responsible for all tonnage measurement, calculation, and issue of certificates, with no independent consultant Naval Architects or Classification Societies involved.

Over 24m Length between Perpendiculars (LBP)

Portugal had ratified the 1969 International Tonnage Convention (London) in 1989, and had started to measure over 24m new vessels under this Convention from about 1992/3, with existing vessels being remeasured thereafter so as to achieve the target of completing the programme by 18 July 1994. This activity not only included vessels engaged in international voyages (as required by the London Convention) but also coastal vessels to ensure compliance with Community law.

This program had been undertaken by an individual Naval Architect, engaged under contract by DGPNTM, and supervised by them. The calculations were all performed on the basis of General Arrangement drawings and Lines Plans held on file by DGPNTM, as all vessel particulars were held in an archive maintained by DGPNTM since 1910, and therefore no physical checks were made on the vessels themselves (unless the owners had notified DGPNTM that their vessel had been modified, in which case new drawings were required). The basis of the calculation of volumes was the General Hydrostatics System (GHS) programs, developed in the USA.

It was stated that, even though the relevant IMO Technical Memorandum allowed spaces of less than 1 cu.m. to be ignored, this was not normal practice in Portugal for all sizes of fishing vessels. So far as the requirement (under the Community Fishing Vessel Register Regulation) to present Gross Tonnage (GT) results to two decimal places was concerned, DGPNTM had taken the pragmatic attitude that over 24m vessels (for which a London Convention International Tonnage Certificate (ITC) was issued) should be rounded down, while for smaller boats two decimal place accuracy should be maintained.

Where an existing vessel had been imported from abroad, DGPNTM required that the calculations on which their ITC had been created should be produced for rigorous checking. If satisfactory a new ITC would be issued, otherwise remeasurement would be required. In all cases where a new vessel was built abroad DGPNTM would measure the tonnage themselves, after visiting the shipyard concerned.

New Vessels between 15m Length over All (LOA) and 24m LBP

From about 1992/3, all new vessels, and those which had undergone modifications, in this size range, were treated exactly the same as larger vessels, with the exception that a National Tonnage Certificate, as opposed to an ITC, was issued.

Existing Vessels between 15m LOA and 24m LBP

"Temporary" tonnages for existing vessels in this size range had been calculated, on the basis of principal dimensions, early in 1995. Originally it was believed that the basis of this calculation had been the development of a formula by Portuguese tonnage experts (by fitting a formula to known GT), but subsequently it was confirmed that the Community a_3 formula had been used. The principal dimensions employed had been LOA, maximum Breadth, and internal Depth (equivalent to the Oslo definition), which had been obtained from the DGPA database of Nationally defined dimensions.

A remeasurement programme, based on the Lines Plans and General Arrangements held in the DGPNTM archive, had been started at the same time, and was proceeding slowly - although it was expected that the target for its completion by 2004 would be met. National Tonnage Certificates, partly based on physical surveys, were being issued as this work progressed. It was being entirely undertaken by two staff based in DGPNTM's Lisbon office.

At this stage of the meeting a discussion of the volumes included in the calculation of GT ensued. Superstructures and deckhouses which were fully enclosed (such as wheelhouses, casings, mess rooms, galleys and other accommodation spaces), together with small hatchways (even if these were less than 1 cu.m.) were included, but *e.g.* foc's'les would only be considered if they were fitted with a closing bulkhead at their after end. (These interpretations may also apply to vessels over 24m LBP).

Both the results of the "Temporary" calculations, and of full GT remeasurement, were transmitted to Brussels by DGPA.

Existing Vessels under 15m LOA

Two regimes exist in Portugal for the establishment of the principal dimensions for this class of vessels - of which DGPA believed there may be some 10,400. DGPNTM are responsible for all vessels over 9m, and for those vessels smaller than 9m fitted with inboard engines ("fixed engines" *sic*). For vessels fitted with outboard motors (or with no engine at all) smaller than 9m, a physical inspection is made by "Local Authorities" (*sic*) - in practice Naval (military) personnel - if available.

A recalculation of tonnage for all under 15m vessels, which were on the register prior to 15 December 1994, was made using a computer and the EC a_2 formula based on previously measured nationally defined dimensions. These were declared to be the LOA, maximum breadth, and internal depth - the last two being declared to be close to the "Rule" (Oslo) definitions. National tonnage certificates based on this calculation had been issued.

New Vessels under 15m LOA

The same inspection regime (DGPNTM/Navy) as for existing vessels was employed, but the EC a_1 formula was now used, based on LOA, and the London Convention breadth and depth.

Power

The system for the approval of main (and auxiliary) engines fitted to Portuguese fishing vessels was described. There are 2 DGPNTM Engineer Surveyors based in Lisbon who are responsible for the issue of approval certificates for all engine installations (the Seafish team were later handed an example copy). This certificate contained full details of the propulsion engine manufacturer, type, maximum continuous output power (to ISO 3046 or equivalent) and speed (RPM), besides such additional information as year of manufacture, number of cylinders, fuel, starting, cooling and induction (i.e. naturally aspirated, turbocharged, or turbocharged and intercooled) systems, specific fuel consumption and weight. Details of the

gearbox also included manufacturer, type and reduction ratio, while shaft information included material, diameter, *etc.* Sufficient details of the propeller (material, number of blades, pitch and diameter) were also recorded, so that a check could be made that it was capable of absorbing the engine's output power (SHP).

The declared outputs of all main engines were checked against a file of catalogue and manufacturers' power ~ RPM curves held in DGPNTM's offices (which Seafish were later shown) and all installations were finally approved by DGPNTM's Engineer Surveyors (or Naval personnel for engines below 65 hp) attending a sea trial.

The above procedures were followed for both new vessels and the installation of replacement engines (other than outboard motors), but prior to the approval process being initiated, DGPNTM check that the power proposed is acceptable to DGPA from a fisheries viewpoint - specifically control of vessel capacity to maintain compliance with MAGP targets. Derating was declared not to be an issue in Portugal - the control exercised meant that if an engine had an advertised (catalogue) power of say 300 kW, then a certificate claiming it had been derated to 221 kW would simply not be contemplated.

Usage of Tonnage and Power in Administration

Although Portugal is currently within its MAGP targets, DGPA maintain a system of discretionary approval of replacement vessels and re-enginings. There are no special defined rules, the basic principal is, to build a new vessel, an old vessel shall be taken out of service, and its replacement by one of increased length and tonnage is permitted. If the vessel is small then perhaps a 9m vessel would replace a 7.5m vessel (with a disproportionate breadth and depth increase), so an increase of a few tons would be similarly permitted, even though this may represent a 100% growth. The percentage increase in tonnage would be much smaller for a larger vessel. Maximum power permitted for a new vessel is determined by reference to curves based on length, tonnage (national) and fishing method, although discretion is also applied. This again would allow a very large percentage increase in power for very small vessels (*e.g.* 5 hp to 10 hp), but this would decrease for larger vessels also.

DGPA foresaw that Portugal may start to have a problem with meeting MAGP targets, with depth increases on replacement vessels, together with the fitting of shelterdecks - both of which they saw as improving crew living and working conditions.

The opinion was expressed that the Portuguese administration, in their attempts to adhere to previous MAGP's, had maybe been too strict with the levels of power permitted - which could now be proving too small for adequate operation.

Although potentially tonnage and power could be used for the allocation of catch quotas to individual vessels, this had not yet been pursued. Only sardines and espada were subject to such quotas, with sardines being allocated on the basis of historic catches, and espada on the basis of length groups.

National crew qualification requirements were based on tonnage and power bands, but national tonnage measurements were used as the basis for these regulations. Also important to Portugal were third country agreements, which are based on tonnage.

Required Sampling Strategy

It was explained that a target sample of 60 vessels was required for the study, distributed in order to reflect the number of vessels in each fleet length category, and to reflect their relative contribution to national aggregate tonnage and power. Thus perhaps some 20/30 under 15m boats, with 20/30 15m to 24m vessels and 5/10 over 24m ships would be required, with a mixture of old and new boats in each category along with a mixture of construction material (wood, steel and GRP). For the 15m to 24m class both estimated and remeasured vessels should be included. Seafish, on the basis of the (anonymous) copy of the relevant fields from the EU fleet register provided by the Commission and a defined geographical area for the port visits, would therefore choose a random sample of about 120 vessels, which, after identification by the Commission, would be forwarded to DGPA/DGPNTM several weeks before the proposed second mission. This should allow time for the archives to be searched for the relevant vessel details.

Seafish explained that the focus of physical checks on vessels for which full GT calculations had been performed (*i.e.* most of those over 15m LOA) would be volumetric checks on deckhouses and superstructures, with hull volume checks only being required on a few vessels. DGPNTM pointed out that approved stability booklets, complete with hydrostatics, were available for all vessels over 15m, and some fibreglass boats over 10m, which would assist this process.

Given the time between identifying the sample, and obtaining the records required, a further mission (of maybe 5 to 10 days) in perhaps January/February was indicated - including at least one day "shadowing" DGPNTM tonnage measuring/calculating staff during their normal duties. For the port visits, the Seafish team would need to be introduced to relevant local contacts.

The meeting closed with an agreement to travel to Sesimbra the following day, and Seafish thanked DGPA/DGPNTM for their assistance.

C.E. Tucker and B.F. Wilson then returned to their hotel, and commenced drafting this visit report.

Thursday, 15 October, 1998

C.E. Tucker and B.F. Wilson travelled to Sesimbra, a fishing port some 40 km South of Lisbon, in company with J. Ramos, C. Paiva, M. da Conceicao Alves and S. Delgardo.

The first visit made was to a small steel shipbuilding yard (Tecnogomes), where Seafish were introduced to Pedro Mendonca, Technical Director. During their tour of the facility, and the vessels under construction, the team noted the following observations relevant to this project:

- Strict limitations on tonnage (GT) and power, coupled with owners' desires to have larger winches, net drums, etc. has lead to vessels being designed with bulbous bow to support large external ballast ratios.
- Limitations on propulsion engine power has encouraged installations where significant auxiliary power requirements have been transferred to separate prime movers.

- It also appears that wheelhouse 'tween deck heights are being reduced (with consequent loss of visibility) in order to minimise the tonnage of new construction.

Next a visit was made to an adjoining wood repair/construction yard. While the team were observing the initial stages of the construction of a 18m LOA vessel, it was confirmed by DGPNTM that the LOA would be measured to the face of the top of the stem. Similarly depth would be taken to the top of the keel, rather than either rabbet line.

The team were then escorted aboard an elderly 27m wooden stern trawler, which had been converted from the original side trawl design, with an open foc's'le and an enclosed shelter arranged around the original deckhouses. DGPNTM confirmed that the latter area would only be included in GT calculations if it were weathertight, *i.e.* significant openings fitted with closing appliances, *e.g.* doors or hatches.

A visit to the fishing port area was then undertaken, where a large number of very small (under about 5m) boats were observed on the beach, with a good mixture of larger vessels (up to approximately 25m) afloat and on the slipway. Seafish were then taken aboard a traditional style 18m wooden purse seiner. It was confirmed that the wheelhouse/deckhouse/engineroom casing, fish room hatch and forward accommodation companionway would be included in the GT measurement for this type of vessel. It was also noted that all the hydraulic systems, and electrical generation, were driven by the main engine, with just a small auxiliary ("donkey") for pumping duties. The party then moved to a large (over 20m) full shelterdeck GRP long-liner, built in 1997. Although the line storage bin, situated aft on the top of the shelterdeck, was of solid construction, and fitted with wooden lids so that an enclosed locker was created, DGPNTM stated that it would be excluded from the volume for GT, but the deckhouse and hatchways also on the shelter deck would be included. On this vessel the main engine only drove a light duty hydraulic system for line retrieval, with all other services supplied with electrical power derived from two separate auxiliary sets.

It was noticed that on all the vessels visited there was good access to a sufficient length of propeller shaft, so that experimental measurements of SHP using strain gauge techniques would be a practicable proposition, even though no such experiments were planned within the current study.

Seafish then thanked the DGPNTM representatives for all their assistance, and returned to DGPA's Lisbon office for a final meeting with J. Ramos and J. Conceicao. DGPA took a photocopy of Seafish's manuscript notes of the previous day's meeting for their records, and it was decided that the port mission could be centred on the Lisbon area, covering the coast between Peniche and Sesimbra. The point previously made about the difficulties faced by the Portuguese administration in encouraging investment in new vessels (who's construction was

grant aided) when the GT could increase by a factor of three for the same vessel length was reiterated, and emphasised by pointing out that much of the increase in volume was a function of the incorporation of spaces devoted to improving crew working and living conditions. The difficulties in recruiting and retaining high quality crew if only poor conditions were provided were described. DGPA confirmed that such additional tonnage was obtained by aggregation of licences.

C.E. Tucker and B.F. Wilson then thanked the DGPA representatives for the assistance rendered, and returned to their hotel, where this report was progressed.

Friday, 16 October, 1998

C.E. Tucker returned to Leeds (*via* Brussels), and B.F. Wilson to Edinburgh (*via* Brussels also) by air, with this report being completed *en route*, and with onward journeys being accomplished by rail and car respectively.

C.E. Tucker
Marine Services and IT Manager

B.F. Wilson
Marine Surveyor

4. Other Meeting Notes

NOTE OF MEETING

DGXIV, 99 Rue Joseph, Brussels
Tuesday, 20 January 1998

Present:

Michael Roitmann	DGXIV
Peter Hopkins	DGXIV
Marcel DeWulf	DGXIV
Inaki Aguirre	DGXIV
Chris Tucker	Seafish

Timing of Reports

With the requirement for the Commission to undertake a mid-term review of MAGP IV before the end of 1999, which will start with the Commission Services meeting Member States' representatives during September 1999, the Intermediate Report (which will contain the factual results from all Member States) must be submitted by 1 September 1999 at the very latest. The Draft Final Report, containing both the factual elements of the Intermediate Report and the associated analysis, should follow in September or October 1999 at the latest, with the actual Final Report (incorporating the Commission's comments) being submitted in December 1999. In these Reports it will be essential to demonstrate that a consistent approach (as, to some extent, provided by team cascading/rotation) has been adopted for all Member States.

The Interim Report, which should be submitted at the mid point of the contract (*viz* February 1999) should simply be a short factual statement of the dates of visits made, number of boats examined, *etc.* together with an external cost statement, which would simply be designed to support the invoice which should also be submitted at that time.

In addition to these four formal reports, Seafish intend to submit Internal Reports on each Member State, shortly after the conclusion of each examination mission, but these must be treated as Confidential working documents and therefore should not be transmitted to Member States.

Liaison

Seafish should maintain regular liaison with DGXIV - both with Structures (D1) and with the Community Inspectors (Unit C4) who are currently engaged in checking that the certificates held on board vessels agree with the Community Register, and who have also made an initial investigation of Member States' attempted compliance with EC/3259/94 and 95/84/EC (copy supplied).

The 1998 programme of Community Inspections starts - 12 January Belgium, 26 January Edinburgh, 9 February Sweden, 23 February Netherlands, 2 March London. This should be reflected in the ordering of work as much as possible. Seafish and the Inspectors should inform each other of the dates planned for all visits.

Power

The Commission wish Seafish to supply "Expert Opinions" with regard to the issue of propulsive power installed on vessels - provided of course that this does not jeopardise the GT programme. This should not only cover the de-rating issue, but also practical matters such as the fitment of nozzles, CPP's, and driving winches *etc.* from auxiliaries as opposed to PTO's - with the basic aim of establishing whether *e.g.* bollard pull tests or torsion meters should eventually be required.

Also it would be useful if Seafish could investigate why the power of vessels apparently alters when exported from one Member State to another.

Priorities

After much discussion, the following target ordering of Member States was agreed, reflecting both the Community Inspectors' programme, and Community Register priorities:

UK
Netherlands / Belgium
Italy
Spain
France
Ireland
Greece
Portugal
Germany
Denmark
Sweden
Finland

Authority

DGXIV representatives stressed that Seafish was undertaking this task under the Commission's responsibility, which provided Seafish's authority to access whatever information was required. It was for the Commission to write to Member States to officially request the necessary co-operation - if this was not forthcoming then Seafish should step back. So far as access to vessels was concerned, the Member State co-operation requested would be for Seafish to accompany one or more of their measurers undertaking their normal duties. Should a specific vessel be needed (which would only be in very exceptional circumstances as it would most likely be at sea as soon as the request was made) Seafish would either request a special visit, or accompany a Community Inspector, or request the Community Inspector to make the check required himself and report the result to Seafish.

Vessels over 24m

As it was most likely that vessels over 24 metres were being measured by classification societies (if at all) it was felt that the relatively low emphasis placed on these larger vessels in the proposed work programme was satisfactory.

Information Requirements

It was agreed that Seafish should have unfettered access to the Community Register - for the purposes of this contact only of course - and that the best way of providing this would be by down loading (part) copies of the Register onto CD-ROM. A complete copy of the current situation for all member states should be provided (for planning purposes) at the start of the Contract (*i.e.* an up-to-date snapshot) and just prior to missions to Member States, a complete copy of the full history of that State's Register (as up-to-date as possible), with all amendments, transfers, *etc.* shown, should be provided as the basis against which physical checks and recalculations should be compared.

Interpretations

Seafish felt that two concepts used in the Invitation to Tender and their response should be carefully interpreted.

"Evaluation" implied that the majority of the work, and the bias of the reports produced, would be very strongly towards observation of compliance or non-compliance in each Member State. Analysis, conclusions and recommendations would represent only a small part of the evaluation, and these would only be at a purely technical level, leaving organisational or political implications to be dealt with by the Commission.

"Target" (in respect of sample sizes), represents best intention, as the eventual sample sizes achieved will be a function both of the co-operation received and the actual situation discovered in each Member State. Therefore Seafish can not guarantee these numbers, but does undertake to use its best efforts to achieve the targets indicated, and to exceed them if possible.

These two interpretations were agreed by DGXIV.

Personnel

As Seafish is likely to appoint new recruits to its Marine Survey team in 1998, it would wish to employ them, alongside the existing team, on this contract. This was quite acceptable to the Commission, providing firstly that they were at least as well qualified as the current staff and secondly that their CV's were submitted to the Commission for approval prior to their being employed on the project.

Contract

A draft contract was tabled, which confirmed that the Commission had decided, for budgetary reasons, to accept the offer by Seafish for a lump sum of 284,893 ECU for its services, plus travel, subsistence, translation and other external expenditure at cost (estimated at 113,767 ECU). The basis of subsistence allowances was discussed, and it was agreed that Seafish should simply apply its normal regulations - *viz* UK Civil Service rates.

After brief examination of the draft contract Seafish queried two points. Firstly there appeared to be a conflict between Article 4.2 which specified a 20% initial payment with Annex I, Article 10.2 which specified 25%. Secondly Article 5, which imposed penalties for late performance, could cause problems, as a great deal of the speed at which the work was undertaken would depend on the co-operation received from Member States. DGXIV agreed to examine these two points, and make such adjustments as practicable in the final contract forwarded for signature.

Further Action

DGXIV is to forward a final contract to Seafish Edinburgh for signature as soon as possible, with the intention of achieving an effective start date of 1 February 1998 (which implies the contract will end 31 January 2000). In the meantime, Seafish is to produce a report of the meeting, to be returned with the signed contract, together with a revised work programme reflecting the priorities discussed.

C.E.Tucker
Manager, Marine Services

FIRST PROJECT CO-ORDINATION MEETING

Edinburgh, 12 February 1998

Those present:

Sea Fish Industry Authority:	C. Tucker
	G. Ritchie
	A. Copeland
	R. Watts
	B. Wilson
	N. Ward
MacDuff Ship Design:	D. Cameron
	S. Oakes

Introduction

CT explained the role of NW as project auditor and laid out the proposed agenda.

1. Discussion of EC tonnage measurement rules and ITC 1969.
2. Lunch.
3. Private Seafish session on project planning and administration.

DC and SO held observer status at the meeting and it was agreed that they would only attend the session discussing tonnage rules.

Abbreviations

ITC'69	–	International Convention on Tonnage Measurement of Ships 1969
CR No 2930/86	–	Council Regulation (EEC) No 2930/86 of 22 September 1986 defining characteristics for fishing vessels.
CR No 3259/94	–	Council Regulation (EC) No 3259/94 of 22 December 1994 amending Regulation (EEC) No 2930/86 defining the characteristics of fishing vessels.
CD 20/3/95 or (95/84/EC)	–	Commission Decision of 20 March 1995 concerning the implementation of the Annex to Council Regulation (EEC) No 2930/86 defining the characteristics of fishing vessels.

Review of System Development

CT then gave an overview of the EU regulations regarding tonnage which had been brought into force following MAGP1. MAGP1 specified targets for tonnage in each country and a decommissioning scheme based on tonnage of which each country has a different measurement system.

The EC created Council Regulation (EEC) No 2930/86 to harmonise the different definitions. It was felt obliged to adopt the most common international standard - ITC'69 but from the convention that by virtue of Article 4 it does not apply to vessels less than 24m, and from Article 3 it does not apply to ships unless engaged on international voyages.

CR No 2930/86, Article 4, overcame these problems by adopting Annex I of ITC'69 which defines tonnage. Net tonnage is also defined in Annex I but no EU rule, as yet, uses it. It was noted that, although ITC'69 restricts itself to vessels not less than 24m, the calculation coefficients go down to $10m^3$ which is a very small vessel.

Using the UK as an example, it did not follow CR No 2930/86 even though it voted for the regulation. UK read ITC'69 as intended for vessels on international voyages and vessels over 24m and so did not apply it.

In 1993/94 the EU decided to make matters easier and amended CR No 2930/86 by CR No 3259/94. CR No 3259/94 divided the fleet into five categories:

1. New vessels <15m LOA, tonnage is to be calculated from a formula using LOA, with B and T as defined by London Convention (the same formula is to be used for existing vessels if London B and T are available).

2. New vessels ≥15m (length overall) built after 18/7/94 are to be measured to ITC'69. (ITC'69 measurement applies to the community register only for MAGP purposes).

3. Existing vessels <15m, tonnage is calculated from a formula using LOA, with B and T as defined by the Oslo Convention.

4. Existing vessels ≥15m to <24m, there is a programme of remeasurement and 33% should be done by 31/12/97 (an interim approximate formula is allowed). By 31/12/2003 all new and existing vessels should be remeasured.

5. Existing vessels ≥24m (ITC'69 length). Measured to ITC'69 but time limit relaxed from 18/7/94 to 31/12/94.

The current contract is about how progress is going with tonnage measurement in EU member states.

There was then some discussion of the problems and inconsistencies which can be created by the differing and inconsistent methods of tonnage measurement.

The main problem areas were licence aggregation and the fact that modern vessels built in the last five years tend to have greater volumes than older vessels.

As tonnage is a tradeable commodity there is a donor licence problem in that the tonnage transferred may use a different system to that tonnage reported to the Community.

It was stressed by CT that the project is acting as agent for the Commission not the UK national authority.

An examination was then made of what is needed for each vessel group.

Existing vessels <15m
Tonnage is based on a formula using LOA, B_1, T_1 (Oslo Convention) and a coefficient a_2. Breadth B_1 is taken to the inner edge of frames and Depth T_1 is taken from underside of tonnage deck to top of floors or double bottom.

Spain, Greece and Italy, which do not have Oslo convention parameters will use the a_1 formula.

New vessels <15m overall
Tonnage is based on a formula using LOA, B_2, T_2 and a coefficient a_1. Breadth B_2 and Depth T_2 are according to ITC'69. LOA does not include bolted on extensions (unless these are obviously purely a device to obtain a lower measurement/weathertight structure, and/or protective freeboard) or platforms such as fitted to crabbers.

Depth T_2 is measured to the rabbet on a bar keel but where there is a hollow at the garboard this is faired out. Also depth is taken to the main deck not the shelterdeck.

Open boats were seen to be a problem for both <15m categories and so it should be examined what member states are doing. The depth is from "top of shell" to bottom of frame at mid LOA for ITC. Depth is likely to be the biggest problem for open boat tonnage. Breadth is the maximum and so creates less problem.

New vessels >15m length overall
Must use ITC'69. RW showed a sample document for an ITC'69 vessel tonnage measurement.

CT stated he thought there was not much ambiguity in ITC'69 and volumes should be accurate.

Existing vessels ≥15m overall to 24m between perpendiculars.
In this group there will be a phasing in of ITC'69 measurement with a formula used in the interim (where B_1 and T_1 are as defined in the Oslo convention and a_3 is based on B_1, T_1 and a coefficient for each country).

Again, as Spain, Italy do not have Oslo convention parameters so special considerations will apply.

New and existing vessels over 24m LBP
These should not cause too many problems with accuracy/interpretation, as they were most likely to be being re-measured (if at all of course) by classification societies.

ITC'69 Volume Definitions

DC and SO of MacDuff Ship Design then showed three vessel general arrangements and asked for comments on the tonnage measurement especially with regard to openings in deck shelters.

The main problem areas with these designs concerned opening in the shelterdecks.

In design 1, the aft end of the shelterdeck was open, but the curtain plate was recessed amidships (*i.e.* it did not run straight across the vessel). In this case it was decided that the excluded space would be from the end opening to a line drawn parallel to the end opening, B/2 from it (*i.e.* the excluded space would follow the contour of the curtain plate and be B/2 long).

Design 2 had a shelterdeck open at the aft end, but also had an open section of deck along the middle (*i.e.* the centre longitudinal section was open). In this case the space beneath the opening would be excluded.

Design 3 had an opening in the side of the shelterdeck forward for gear handling. This space would have an exclusion on one side of the shelterdeck in way of the opening provided the opening was at least H/3 high as specified in ITC'69.

Project Planning and Administration

CT stated he had spoken to the Commission after the tender was accepted and we were the most expensive. The bid accepted was 284,000 ECU for technical work and an estimated 130,000 ECU for travel and subsistence. Travel and subsistence must be monitored but more funds might be available if required.

The project is basically checking out the work done by the various Tonnage Administrations and will involve accompanying surveyors on the job.

The fieldwork is required to be completed within 12 months. Italy was thought to be an important starting point but we will look at UK first even though little appears to be going on at present.

Due to the mid-term review of MAGP4 the Commission require our interim results by September 1999 in the form of a draft final report, with the full final report due by December 1999.

An internal factual report should be produced on each member state following a visit and each report should be forwarded to the Commission as and when produced. This will require liaison with Community Inspection Unit C4.

As a side issue the Commission would like our expert opinion on vessel power so far as possible but ***not*** so as to jeopardise the tonnage measurement project. Data from engine plates, gearbox plates and shaft diameters could be noted with comments on the derating issue. The Commission

is looking for suggestions on a universal tractive pull estimation procedure, and why registered power changes when moving a vessel from one country to another.

The idea of rotating the inspection teams was liked to cover all the countries - UK, Netherlands, Belgium, Italy, Spain, France, Ireland, Greece, Portugal, Germany, Denmark, Sweden, Finland.

We will work under Commission responsibility and they will sort out any access problems if there is a refusal.

Access to vessels will be on the basis of accompanying local surveyors or officials.

The project officially starts on 1/2/98 and ends on 31/1/2000.

We will get access to the Community register on CD-rom and this records each change to each vessel as and when it occurs.

When making visits to member states it is important to keep DGXIV in touch with our movements for coordination and liaison purposes. About 80% of our data will be derived from facts and figures and 20% from interpretation, so what we achieve is with cooperation. If time allows we will do more work in areas where this is justified.

Any new personnel must have their C.V.s submitted before being included in the project.

Payment will be made against Interim report and cost statement after the first 12 months. The Commission hopes that funds last to pay the estimated travel and subsistence.

Some costs will be incurred for interpreters, but it was felt that the best option was to find them locally either from local colleges or through hotels. This will save on travel costs.

An example of the areas requiring investigation was given as Sweden and Finland. These countries do not have coefficients for tonnage estimation (given in 95/84/EC for other countries) and so what are they reporting?

Work Programme

There will be a team allocated to visit each member state. An initial schedule was done but this needs revising in view of the change in order of states to be visited.

The teams will be organised as follows:

Member state 1	Surveyor 1, Surveyor 2
Member state 2	Surveyor 2, Surveyor 3
Member state 3	Surveyor 2, Surveyor 4
Member state 4	Surveyor 2, Surveyor 4
Member state 5	Surveyor 2, Surveyor 3
etc.	

The idea of this mix of staff was liked by the Commission.

The initial programme will be recognised and volunteers were sought for each state on the basis of previous knowledge/language ability.

GR	UK, Eire, France.
AC	France, Italy, Finland.
RW	Spain, Holland, Belgium.
BW	Denmark, Holland.
CT	France.

Two further surveyors will be employed and the full range of member states will be covered by the team changes identified.

CT is the project coordinator and GR is the Project Manager who will organise the programme taking into account the items discussed.

CT stated he would have limited involvement in missions due to pressure of other work, and so AC stated that the new recruits were needed as soon as possible.

When GR had done the preliminary timetable/programme, this will be sent back to the Commission with the contract, together with CT's report on his understanding of discussion between himself and the Commission following award of the contract.

Finally it was felt that a database of engine power outputs would be helpful in making comments on vessel installed power and so CT will request this from Marine Safety Agency who are thought to have it.

J N Ward
20 March 1998

NOTE OF MEETING

DGXIV, 99 Rue Joseph, Brussels
Thursday, 12 March 1998

Present:

Stephanos Samaras	DGXIV - Structures	(Part Meeting)
Michael Roitman	DGXIV - Structures	
Peter Hopkins	DGXIV - Structures	
Marcel DeWulf	DGXIV - Structures	(Part Meeting)
Inaki Aguirre	DGXIV - Structures	(Part Meeting)
Brendan O'Shea	DGXIV - Inspectorate	(Part Meeting)
Harry Vonk	DGXIV - Inspectorate	(Part Meeting)
Mr. Thai	DGXIV - FV Register	(Part Meeting)
Chris Tucker	Seafish	
Gordon Ritchie	Seafish	

Kingfisher Information Service - Extension Proposal

Mr. Samaras informed Seafish that he had now examined this proposal and felt that, although it was worthy of EU support, the only available central budget (Pesca Article 4) was heavily oversubscribed for 1998, and a similar situation was expected next year. However he strongly recommended that the project be submitted for support through the UK national Pesca programme, both as it was eligible through the "Information" objective, and as the UK had not made much progress with Pesca yet there were still plenty of funds available - as he had been discussing with Andrew Kuyk recently.

Data from EC Fishing Vessel Register

Having re-examined the legal position, the Commission Services now realised that the agreement reached at the 20 January meeting, *viz* to allow Seafish unfettered access to the Register *via* a complete dump of the current situation onto CD-ROM, was not possible, as each Member State had previously been assured that their data would not, *in toto,* be transmitted outside the Commission. After considerable discussion, the following multi-stage procedure was agreed as a methodology which would enable Seafish to work around this problem, yet still accomplish the objectives of the project:

1 - DGXIV are to provide descriptive reports - one per Member State, with the first four sent by fax / e-mail within a week or so, and the rest following as soon as possible thereafter. These reports are to show the fields (variables) available / missing (i.e. numbers of records (vessels) in each of these categories), broken down by length groups (under 15m, 15-24m, over 24m), together with a full description of the meaning of each field name and any codes employed.

2 - On the basis of these descriptive reports and within about a week from receipt, Seafish are to specify (to the Commission) the statistical report they need for each Member State.

3 - These statistical reports, which the Commission should be able to prepare quickly, are to contain numbers of vessels, broken down by such variables as size, age, port, *etc.* They will be used both as the basis for extrapolating the results obtained from the eventual samples achieved (*i.e.* "Grossing-up" to estimate the overall accuracy of the EC Register for each Member State) and, more immediately, for Seafish to specify the number of specific vessel records that they require for each group identified for examination.

4 - Seafish are therefore to request the Commission to draw a *pseudo*-random sample, of a specified number of vessels from each group from which they wish to examine. This sample is to contain the complete EC Register history of the vessels selected, together with identifiers such as name, official number, call-sign, *etc.* This list is to be provided as two Excel files - one the current situation and the second any changes recorded during the vessel's appearance on the EC Register.

5 - Upon receipt of this list, Seafish will request each Member State to organise that the records (*e.g.* copy certificates, drawings, stability booklets/hydrostatics, *etc.*) of all listed vessels be made available for audit On the examination missions Seafish will therefore check as many vessels from this sample as possible. As it is unlikely that the achieved sub-sample will contain all the listed vessels (because of likely problems with data availability, time constraints, *etc.*), the list of vessels will have to be considerably larger than the target number desired, but this procedure will avoid the Member State having too much control over the vessels audited. Should an excess of data be available at the time of the examination missions, Seafish will apply a second *pseudo*-random selection.

6 - Just prior to each examination mission, the Commission will forward an up-date of any changes recorded for all vessels on the above list of vessels which are potentially to be audited.

7 - Finally, three months after the physical checks of vessels in company with the national measurers have been undertaken, the complete EC Register history of these vessels is also to be forwarded to Seafish. This is to check both the efficiency and accuracy of the data transmission process from measurer to national administration and thence to the Commission. (It was also agreed that Seafish should **not** attempt to follow-up any deficiencies identified in this process with the member State concerned.)

Methodology of Working with National Administrations

The Commission is to write, very shortly, to both the Fishery Ministries and Tonnage / Registration Authorities in all Member States, to inform them of the project, and to officially request their co-operation. Copies of these letters are to be forwarded to Seafish.

Prior to any examination mission, an advisory letter is to be sent to each Member State stating what documents Seafish require their Administration to provide for audit (*e.g.* copy certificates, drawings, stability booklets / hydrostatics, *etc.* for lists of pre-identified individual vessels) or what arrangements they would like made for "physical" checks (*e.g.* area to be visited, types of vessels to be targeted, work programme of local national measurer, *etc.*). Seafish should forward drafts of these letters to the Commission, before they are sent, to enable DGXIV to check whether they should make these requests, as opposed to Seafish.

Seafish are to also inform DGXIV, in particular the Community Inspectors, of the dates of all proposed visits to Member States, and, if necessary, to undertake joint missions with the Inspectors. (It is a requirement that Member States are advised in advance of any additional people accompanying Inspectors on mission.) Although there may be potential co-operation problems with Italy, Netherlands and France, Seafish **may** use their personal contacts within the UK to assist the project on an informal basis.

Objectives of Missions

As indicated above, by Seafish / Commission pre-selecting a list of vessels from which the audit (documentary based) target samples were to be selected, the objective of as random a sample as possible (irrespective of Member State's desire to introduce bias) should be achieved.

Although the prime task of these documentary checks was re-affirmed as "checking vessels", it was agreed that the **prime** objective of physical examinations was to check the measurers' procedures, with examining the boats concerned really being a secondary task - although these opportunities should not be foregone, nor should any opportunity to examine vessels' documents during a physical inspection be overlooked. Although some degree of bias might be introduced by a Member State directing Seafish towards specific measurers, etc., this could be avoided by the specification of an area / port for physical examination, together with target types of vessel. Over a period, a reasonably "random" sample should then emerge.

Administrative Items

It was agreed that C E Tucker's note of the previous meeting (20 January 1998) was true and accurate, and he was therefore requested to prepare a similar note of the current meeting.

Seafish should submit an invoice to claim the first payment under the contract, which, although it was dated 31 December 1997, was to run from 9 Feb 1998 to 8 Feb 2000. It was satisfactory for this first invoice to be dated 1 April 1998.

Travel and subsistence expenses for the meeting on 12 January 1998 should be included within the contract expenses, as re-imbursement through the "Expert" system had not proved practicable.

The minutes of Seafish's project co-ordination meeting (Edinburgh, 12 February 1998) should be forwarded to P Hopkins, as should monthly reports of travel, subsistence and other external expenditure (*e.g.* interpreters) so that DGXIV can monitor expenditure on these items.

Seafish's intention to advertise for additional personnel to support the project was discussed, and Agra Europe suggested as a suitable medium.

Catamaran Measurement

A Spanish paper (dated 6 February 1998), proposing a measurement scheme for catamarans was tabled by the Commission, and discussed. It was agreed that the suggestions made therein appeared quite suitable for vessels less than 15m, and it was recommended that they be circulated to the other Member States and that a similar approach might be adopted for existing 15 to 24m vessels during the phase-in period.

C.E. Tucker
Manager, Marine Services

SPECIAL DELIVERY

Our Ref: 7209/14
Your Ref: 97/S 161-103655

Stephanos SAMARAS,
Head of Unit,
Directorate General for Fisheries,
DG XIV- D1 (J99 2/07),
European Commission,
Rue de la Loi 200 / Wetstraat,
B1049 Bruxelles / Brussel,
BELGIUM

1 May 1998

Dear Mr. Samaras,

Evaluation of Re-Measurment of the Community Fishing Fleet in Units of Gross Tonnes

Further to meetings this week with Michael Roitman, Peter Hopkins, and Thanh-Nhon Thai, we are delighted to be able to confirm that we can accept a copy of the current Community Fishing Vessel Register *in toto*, in accordance with the following:

1 - All vessel identifiers (*e.g.* Internal Number, Name, Radio Call Sign, Registration Number, *etc.*) are deleted and replaced by a DGXIV assigned sequence number (of course DGXIV will need to maintain internally a table showing sequence number against vessel number, so that the sample of vessels randomly selected by Seafish for examination in specific ports/areas may then be identified).

2 - All other information from the current situation table (SITG) and the vessel remeasurement table (FV.SUIVI_REMESUR) are merged into a single table (ASCII format, one vessel per line, comma or tab seperated), and sent to us on a CD-ROM *via* secure courier.

3 - In return, we hereby confirm that all this data shall remain absolutely confidential, and will not be passed to any person or organisation outside the Sea Fish Industry Authority, either as individual vessel details, nor as statistical summaries, other than as absolutely necessary for the performance of the of the current evaluation contract (for instance, it may become neccesary to discuss particular vessel entries with their own Member State fisheries / tonnage administrations - but even so we shall ensure that no state gains any access to information concerning other states' vessels or fleet). May we remind you that Seafish employees (and any other person who might gain information as a result of the Authority's work) cannot divulge information concerning a particular undertaking without legal authorisation, without be liable to criminal prosecution under Section 12 of Fisheries Act 1981, which could lead to a fine or imprisonment (see section 2.1.2, page 13 of our tender dated 2 October 1997)

We trust the above meets your requirements, and look forward to receiving the data shortly.

Yours Sincerely,

Duncan ROBERTSON
Secretary

Christopher Emeric TUCKER
Manager, Marine Services

cc: JE Tumilty, Technical Director
WSG Ritchie, Senior Marine Surveyor

SECOND PROJECT CO-ORDINATION MEETING

Grange-over-Sands, 10 November 1998

Those present at meeting:-
C.E. Tucker
W.S.G. Ritchie
R.J. Watts
B.F. Wilson
L.R. Webb
A.R. Thomson
J.T. Tumilty
N.J. Ward

A.E. Copeland was absent due to illness.

The following agenda was drawn up by W.S.G. Ritchie

1. Overview of contract
2. Contract co-ordinator's programme summary
3. Technical auditor's comments on preliminary reports
4. Round the table impression of each mission
5. Review of contract aims and objectives
6. Ports/coastal regions' visits timetable
7. Fleet samples
8. Contract interim progress report (February 1999)
9. General discussion / any other business

1. Overview of the Contract

C.E. Tucker described the history of the contract up to the present day. C.E. Tucker and A.E. Copeland had worked on the tender documents and were informed that we had won the contract in February 1998. The EU notified Member States' administrations, as well as sorting out administration problems associated with making contact with the appropriate organisations in each country.

The EU were to give us a copy of the whole vessel register for all countries, but in fact they had to only give some of the information required. We therefore now have a complete list but the individual vessel identification is missing.

This whole set-up phase had taken much longer than expected.

The initial administration visits to each country have been completed and so we are now almost back on schedule. However we will be slightly behind on the ports/coastal regions' visits.

If mission reports can be written up immediately after a visit, the final report can annexe these, requiring only an executive summary of 30 pages to be added.

2. Contract Co-ordinator's Programme Summary

C.E. Tucker then went on to describe the project programme and its three phases.

(i) *Initial visits* - this phase was intended to help us find the "lay of the land". No critique was required at this stage, only to sponge up information and establish working relationships with key people in each country. The French have refused to co-operate altogether and this matter has been referred back to Brussels. Spain is complying but not fully co-operating. They have said that they wish to protect individual interests and intellectual property in terms of vessel design.

A.R. Thomson then suggested that there may be other means to get the required French information *e.g.* IMO. C.E. Tucker replied that we should not do this and, if not welcome in France, we should refer the matter to Brussels. R.J. Watts added that it was a pity to miss out one country as the tonnage measurement is likely to be accurate, but is the administration reporting it correctly?

Further questions were asked with regard to other discrepancies which might be noticed but were not part of the core contract, and should they be mentioned? C.E. Tucker replied that they should be flagged up in the reports but not commented on.

(ii) *Ports/coastal regions' visits* - this involves the checking of a series of sample vessels. For larger vessels the volumetric calculations may be correct, but there could possibly be a wide range of interpretation of the spaces to be included, and how to measure them. Interpretation may also be a problem for vessels of "length <15m overall" category because depth is so critical (Oslo/London conventions).

R.J. Watts raised the question of whether Seafish staff should check UK vessels with a Seafish survey, but C.E. Tucker pointed out that the vessels will be chosen at random and measurements are open to challenge anyway.

This phase of the contract is due to finish in May 1999.

(iii) *Reporting* - a good draft of the final report is required by September 1999. Vessel power will be reported on, but is a secondary objective. The deadline should be attained if individual mission reports are done there and then as mentioned earlier.

J.E. Tumilty suggested a standard format for each mission report, but the consensus was that informal reports, as already produced for the first series of visits, were best.

C.E. Tucker then went on to reiterate the requirements for the final report which would comprise a 30 page executive summary with the mission reports for each individual visit annexed, along with detailed technical and statistical analyses.

3. Technical Auditor's comments on Preliminary Reports

J.N. Ward then reported that he had read the first series of mission reports on the initial visits and thought that they were very well presented. A good rapport seemed to have been developed with each of the countries visited.

One problem which appears from reading the reports is that of consistency of terminology *e.g.* GRT and GT. J.N. Ward suggested that a standard nomenclature/abbreviations list should be drawn up and defined, and this should be used throughout all reports. He also suggested that a country specific list should be drawn up defining the categories of tonnage (1-5) and include the % to be re-measured by specific dates.

Another suggestion was to make up a standard sheet describing the work carried out in the contract, which could be handed to anyone met during the ports/coastal regions' visits. This would ensure a consistent description of the contract and could be translated into the language of the specific country. The meeting felt it would help if this had the appropriate EU logo as well as the Seafish logo.

4. Round the table impression of each mission

(i) *UK* – R.J. Watts commented that the re-measurement is a mess. The UK administration does not know what the parameters are used for. There appears no attempt to make the "<15 m overall" category comply. The MCA are to organise the measurement and legislation for the ">=15m overall- 24m between perpendiculars" category is in place.

(ii) *Belgium* – B.F. Wilson reported that inshore shrimp vessels (12 -15m with single beam) had been left off the list as these are not classified as commercial vessels, but catch for home consumption, even though some are up to 250 hp. It is not known if these are policed.

The tonnage of other vessels is possibly overstated, although all have been done by now. There is only one new vessel to be measured, but it is suggested that a check is made on superstructure measurement.

(iii) *Netherlands* – A.R. Thomson said that shrimp trawlers are not measured but only fish inland waters. Tonnage compliance in general is probably good, but court action against those understating horsepower failed on a technicality and so continues unchecked.

(iv) *Italy* – W.S.G. Ritchie stated that they did not meet the actual tonnage measurers, as RINa do the measurements. It all appeared to be very bureaucratic with many certificates, but is it accurate? It appeared that houses had not been included where they should have been. Sicily will be included in the next visit as it appears to be well on with re-measurement.

(v) *Spain* – L.R. Webb said they were only permitted to go so far in their investigation. This was said to be because of Spanish rules on intellectual property rights/privacy of design. However it was felt, in reality, to be more on account of restrictions from above in government *i.e.* Ministerial level.

(vi) *France* - There was no co-operation.

(vii) *Ireland* – R.J. Watts said that they tend to follow the UK example but not quite so bad. The department carrying out the work is understaffed. They have complied on MAGP but only half of the ">24m between perpendiculars" category have been measured. No legislation exists to cover the ">=15m overall - 24m between perpendiculars" category. Two or three new surveyors are being recruited to help the situation.

(viii) *Greece* – W.S.G. Ritchie reported that the Greeks are organised and have the staff to do the measurements. The Hellenic Bureau of Shipping has an EU contract to measure the ">=15m overall - 24m between perpendiculars" category. Lines are drawn with the ship on a slip and so should prove accurate.

At this point it was mentioned that the EU contribution to re-measurement in each country varies and so we should find out how much was given to each.

(ix) *Portugal* – B.F. Wilson said they were well organised. The various government departments were in the same building which helped (fisheries and tonnage measurement). All officials were quite open and gave information freely.

(x) *Germany* – A.R. Thomson said that their visit was "stage managed". Staff were very helpful and open. A whole day was spent at Germanischer Lloyd showing the measurement procedure and equipment.

J.E. Tumilty said that Germany had shrimp vessels and were they included? It was agreed that this should be investigated as for Belgium and Netherlands.

(xi) *Denmark* – C.E. Tucker said that there was good co-ordination between fisheries and tonnage staff, and all were helpful and informative. However there was a "laissez-faire" attitude to horsepower. The departments had not measured the"<15m length overall" category but they said they had the information to do so. It seemed that shelterdecks had not been included in ITC'69 tonnage. All Danish tonnage is now EU tonnage.

(xii) *Sweden* – R.J. Watts said that there did not appear to be any major problems except that there seems to be a large number of small gillnetters which do not appear on the register. Whether these are significant in terms of landings is open to question but they are afforded the status of "catch for home consumption". They may be in the same category as angling boats in the UK, but we should, perhaps, question how important this sector is EU wide.

(xiii) *Finland* – L.R. Webb informed the meeting that their Finnish host from the Fisheries Department did not know the technicalities of tonnage measurement, and they were informed that, in fact, there was actually only one full time surveyor. There are over 3,000 vessels in Finland and most are <12m length and have no tonnage. For vessels >=12m length they use ITC'69. The host did not know the EU directives on tonnage measurement, but said that tonnage was a requirement at the three yearly safety inspection.

A winter visit was suggested for the ports/coastal regions' visit as vessels are unable to fish due to ice.

5. Review of Contract Aims and Objectives

C.E. Tucker then went on to reiterate the aims and objectives of the contract and a summary was given to everyone based on the tender document.

The first point raised was that Ireland says it is appropriate to use the tonnage from the country of origin as many of their vessels are imported. Often this is the UK tonnage. However, it was clarified that the EU regulations state that it is the country of registry which determines tonnage, not the country of origin.

This prompted the need for us to make a check-list for each tonnage category in each country, ensuring that the visiting Seafish surveyors would record all data for each sample vessel (*e.g.* Date of registry *etc.*).

The progress of Spain, Italy and Greece was then discussed with regard to the re-measurement of existing vessels in the "<15m overall length" category, and appropriate application of ITC'69 to regulation categories of vessels.

The problem of making informed comments on vessel power during coastal/port missions was then raised by R.J. Watts. The question asked was whether we should just read and accept the figures on the engine plate or make further investigations using engine manufacturers' brochures, specifications etc. The problem of engine de-rating requires expert knowledge and some of the older engines use similar model numbers to current engines but data may be unavailable for previous models even if the exact designation is known.

At this point it was suggested that there may be better ways of designating the vessel power or "potential" such as fuel usage or bollard pull. Following the next series of visits it may be possible to make more comments on these methods of assessing power but this is secondary to the tonnage verification.

6. Ports/coastal Regions' Visits Timetable

C.E. Tucker stated that, as we should have the vessel identification list back by Christmas, the first visit should take place in the last week of January or first week in February. The whole visit timetable should be carried out from the end of January to the end of April

1999. For continuity, each team should include at least one member from the administration centre visit team. Any visits not carried out during the planned period would be completed in May or June. This will require eleven visits in about four months and each country needs to be assigned to a particular month.

W.S.G. Ritchie suggested that the country visits should be carried out in the order of the initial visits. C.E. Tucker agreed that this could be done except the countries which required to be done early *i.e.* Finland and Italy. Also Greece and Italy require two centres to be visited and this will require two separate visits. However, C.E. Tucker said that small countries will probably only require a one week visit, and Belgium and Netherlands could be covered in one combined visit.
Transportation during the visits was discussed and it was agreed that either a car should be taken or one hired on arrival in the country visited. It was felt that no more planning of the visits could be made at this particular time.

7. Fleet Samples

This item was dealt with out of turn as it was felt it needed to be addressed before discussing the visits.

C.E. Tucker has received copies of all EU fleet registers without the vessel identification, so we must now select a random sample for each category in each country. This random sample will then be sent to the Commission who will identify only those vessels.

C.E. Tucker requested that L.R. Webb should carry out the random selection using the SPSS computer program. As L.R. Webb does not have experience of this program C.E. Tucker will go through the first country register to train L.R. Webb.

The selection for each country should be carried out by the end of the first week in December and sent direct to the Commission. Hopefully the Commission should return the vessel identifications by Christmas. C.E. Tucker stated that a sample twice the size of the number of vessels to be visited in each category should be selected to allow for the inevitable fact that some vessel would be at sea or unavailable during visits.

8. Contract Interim Progress Report (February 1999)

C.E. Tucker then described the requirements of the interim report which is required after the contract has run for twelve months. This will comprise all the mission reports for the initial visits annexed to a three or four page statement of the overall progress. An invoice will also be included. All the mission reports completed should be sent to Pauline Nadin in Hull so they can be done in standard format. C.E. Tucker and J.E. Tumilty will ask for the necessary financial data to complete the invoice.

9. General Discussion /Any Other Business

Several of those present expressed concern at the subsistence given by Seafish in some of the countries visited. The daily allowance did not usually cover expenditure. J.E. Tumilty stated that, if the rate was inadequate, then those concerned should claim actual expenditure, but remember that to do this they must retain all receipts.