

**Report of the
Ad Hoc Working Group on Computerisation of the NEAFC
Secretariat**

2 October 2002

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1. Opening by the Chairman

The Chairman, Mr. Jacques Verborgh, EU, called the meeting to order at IPIMAR, Lisbon. He welcomed the Inspector-General for Fisheries of Portugal, Mr. Agostinho Pereira Marqués, and thanked him for hosting the meeting. The Inspector-General addressed the meeting.

The Chairman thanked the Inspector-General and also the organising team led by Carlos Ferreira.

All Contracting Parties were represented. The Chairman welcomed participants, particularly new members of the Group and asked everybody to introduce themselves. A list of participants is given as Annex I. In addition to reviewing progress on the implementation of the technical elements of the Scheme, including the amendments adopted by the 20th Annual Meeting, he noted that the Extraordinary Meeting of April 2002 had mandated the Secretariat to start trials with alternative communication protocols and the Group would report to the 21st Annual Meeting of the Commission on these trials.

2. Appointment of the Rapporteur

The NEAFC Secretariat was appointed as rapporteur.

3. Adoption of the Agenda

The draft agenda had been circulated in August 2002 and no suggestions for changes had been received. The agenda is attached as Annex II. Under 'any other business' there would be a progress report from the IMPAST project, information on the Portuguese MONICAP and SIFICAP projects and a visit to the Portuguese FMC. The agenda was then adopted.

4. Report on the operation and the current status of the NEAFC Secretariat's computer system

The Secretariat reviewed the situation as seen from the Secretariat. The lack of return messages seems to be almost common to communication parties in the EU. The Netherlands and France are now onboard so position messages for all Contracting Parties and communication parties are now automatic, except for Poland. This is not the case with other messages. The information is summarised in Annex III.

The Chairman noted that there is progress and things are going in the right direction. He noted that the situation with respect to record numbers and return message had not changed, but Norway now only sends return messages if messages received from NEAFC have not been accepted by the Norwegian database.

The Secretariat informed the meeting that, when the NEAFC database was set up, it had been assumed that positions were reported every 6 hours. The Scheme says *at least* every 6 hours. Many countries do not filter messages, so if the national system reports every 2 hours NEAFC receives data with a similar frequency. This creates a huge amount of messages and may cause problems when sampling data automatically for inspection purposes. It is necessary to decide

the frequency of messages, so the system can be designed accordingly. The Chairman thought that this was something that should be considered by PECCOE.

The Chairman noted that last year's meeting had extensively discussed the electronic format of the observer report and also the question of longitude/latitude degrees in decimals. The Secretariat replied that this was not a problem for its database, which could handle both formats, but there may be problems when retransmitting data to national databases. With respect to the reporting of observations, the electronic format had not caused problems technically but, if there were several inspections at the same time, observations transmitted by fax may delay information in the Secretariat. In some instances, entering data manually has delayed matters more than 24 hours.

The Chairman noted that the reporting of aggregated catches was discussed at the last meeting. The Secretariat reported that PECCOE had discussed the problem and decided to recommend to the Commission that the reference to ICES areas was taken out of Annex V in the Scheme. This change should make it possible to report within the deadlines required. Again, this raised the general question of creating sub-(areas, divisions, etc.), which split catches between international and national waters. This more general problem has been raised with ICES and the CWP responsible for the official STATLANT catch reporting system.

5. Progress Reports by Contracting Parties on computerisation and data communication with the NEAFC Secretariat.

The Chairman asked Contracting Parties to report on changes since the last meeting of the Working Group. This agenda item is intended to give Contracting Parties and communication parties an opportunity to express their views on the situation, how they are attempting to improve implementation and any particular problems experienced.

Denmark (in respect of the Faroe Islands and Greenland) - Faroe Islands informed that they did not have access to X.25 but receive messages via the Internet. **Denmark (in respect of the Faroe Islands and Greenland) – Greenland** did not have the funding to establish a system for return messages.

Iceland informed the meeting that their system was up and running, fully implementing the Scheme with the exception of Annex V messages. They have split the system running the Oracle database on a Linux server and using the HP platform for communicating with NAFO, NEAFC, Greenland, Faroe Islands and Russia. An electronic logbook for bottom trawling has been approved by the authorities. It automatically creates a string for reporting to the Icelandic authorities. This could also be used for reports to other parties. They were open to the idea of introducing more informative error codes.

Norway has still not established the electronic reporting of observation data. They noted that they had sent over 6000 messages to NEAFC, but only received some 3000 return messages. They found that the error codes did not contain enough information, thus making the return messages less useful. Norway still wishes to keep the return messages as they are in the Scheme and work with new error codes as suggested by Iceland. They are using a format combined with characters and numbers (LA, LO) for longitude/latitude in manually transmitted messages. The Secretariat noted that if a message was entered manually into the Norwegian database (because of technical problems from a vessel) it would be transmitted to NEAFC as

an automatic message and a special format for these positions was not expected. The introduction of a special type of message for manual messages (MAN) had been discussed earlier. This would allow the NEAFC database to receive messages once every 24 hours (in cases of technical failures) without creating any warning from the system. It was noted that the NEAFC database will only accept one longitude/latitude code format from each party.

Poland has now secured funds for starting VMS. Delays in the tendering process have led to the postponement of the introduction of VMS to 1 May 2003. Fact-finding missions have visited other partners, for example Germany. The present system of reporting will continue for some time.

The Russian Federation uses the X.25 protocol and has tested enhanced software. More than 36,000 messages have been sent to NEAFC. Russia had had some error messages, but this seemed mainly to be related to transmission technology. They are now testing the technology available and also electronic logbook systems.

The communication partners of **the EU** then reported.

The representative of **Denmark-EU** had introduced automatic messages for positions and observations and is complying with the Scheme in every detail, except record numbers and return messages. He was still not convinced about the usefulness of record numbers or return messages. He had experienced problems in getting up to date information to active inspection platforms. He had been informed that provision of X.25 in Denmark will cease by 1 February 2003. However, the Danish authorities have been promised that internal traffic will continue although, as the business area will shrink dramatically, it is likely that the X.25 service will be terminated completely very soon. It is therefore very important that other solutions are found rapidly.

The representative of **Sweden** had continued implementation. They had developed software for observation reports via X.25 to NEAFC. Return messages were not seen as a problem. They had experienced the same problems as Denmark-EU with information to active inspection platforms.

The representative of **Spain** did not report any change from last year. They are reporting and receiving messages automatically by X.25. Spain is very happy with the X.25 protocol, although there have been problems. The Secretariat noted that Spain was correct in stating that messages on observation were transmitted by X.25, but some had been refused by the database for some reason.

The representative of **Germany** is acquiring new VMS software at the end of January next year. Data have been exchanged with a number of other parties.

The representative of **Portugal** reported that the situation has not changed since their report at the last meeting. Portugal filters messages to reduce the number forwarded to NEAFC. They are introducing a digital longitude/latitude format and automatic reporting of observations. They use record numbers and receive return messages from NEAFC.

Ireland is now reporting automatically to NEAFC, but had problems with automatic transmission of observations. The Irish representative did not think that it was cost effective to include record numbers. Ireland often carry out inspections in international waters first each

year, so they have huge problems with delays in notifications. The Secretariat agreed that this was a problem and would like to see the parties communicate this problem to their licensing authorities. The Secretariat spent considerable time and effort contacting Contracting Parties on this matter.

The representative of Denmark-EU suggested that the NEAFC website was used to make information available about notifications. The Icelandic representative has considered introducing the notification status into the error codes. The Chairman thought it would be useful to make a proposal along this line available for the consideration of all Contracting Parties.

The **UK** is now sending position messages automatically on X.25. They receive other reports by fax from vessels and retransmit them via internet e-mail to NEAFC. Recent first trials of X.400 email have been successful and it is hoped to transmit all text reports from UK vessels and SEN/SEX/OBS reports from UK patrol vessels when on duty in NEAFC waters by X.400 once final tests are completed. The UK still does not have automatic transmission of reports from the Secretariat to their patrol vessels, but will test possible solutions in early spring 2003. The UK representative still doubted the value of return messages. The UK is re-tendering their VMS contract on expiry of the current five-year contract for award in July 2003. The UK representative has received information that British Telecom will continue with X.25 for another four years. Other providers may not continue for as long and they are aware the joint PTT Concert service is closing soon.

The representative of Denmark-EU asked, based on experience this year, if the database was in danger of being clogged by data of no relevance to the inspection platforms. Was there any quality evaluation? The Secretariat responded that the database accepts messages which are consistent with the Scheme. However, if messages are not according to the Scheme and its specification they do not make sense. Transshipment messages are especially difficult. A quality control on content is difficult, because there are strong restrictions on interfering with, or interpreting, the data received. The control problem lies with the FMC. The representative of Norway suggested creating an automatic position message of the entry and the exit. These messages should be sent as soon as the vessel enters into or exits from the RA and have the format of a POS message, but be marked as special messages by not using POS as message type. In bilateral tracking these message types are called ENT and EXI. The Chairman would not rule out improvements, but it was inconceivable that the Secretariat should interfere with the data received. The Icelandic representative noted that messages might reach the FMC, but not the Secretariat. Here record numbers are of the utmost importance.

The representative of Denmark-EU had just wanted to draw attention to the problem of inspectors receiving too much and superfluous information. Analysis of the database may be useful. The UK agreed with Denmark-EU. The Chairman felt that this would require formulation of specific quality rules and that the matter requires further consideration. The Secretariat noted that it had been decided how and how much information the inspection platforms receive automatically and this information is based on last entry. For parties not receiving automatically, the Secretariat manually creates a list of information for the last 24 hours.

6. Evaluation of trials with alternative communication protocols to those provided for in the Scheme

The Chairman referred to the requirements in the Scheme of using X.400 or X.25. Some Contracting Parties did not experience problems, but some providers are phasing out these services. This has led to the need for contemplating alternatives.

At the last meeting there seemed to be support for HTTPS (128 bit encryption- used in e-banking). It had been decided that some trials should be undertaken to test this protocol, and form the basis for discussion in the AHWGC at this meeting in order to be able to report to the 21st Annual Meeting.

The Secretariat informed the meeting that setting up the trials had been more time consuming than originally expected, particularly because more research on protocols than anticipated had been necessary. The development of the framework for the trials (research on protocols) had been rather expensive and had only been possible because they had been supported by the Governments of Iceland and the Faroe Islands, funding one third of the costs each. The first technical paper setting up the trials had been circulated to Contracting Parties in July, but no Contracting Party had come forward to take part in the trials. The result of trials between the Secretariat's provider and the Secretariat had been given in a draft report in the latter half of September. The Secretariat would take note of all questions and discuss them with the provider. It would be possible for Contracting Parties to make trials with the Secretariat with real messages.

The Chairman asked if more testing was necessary. The Icelandic representative noted that the protocol tested was a commercial product that met standards set by Attachment V. It was not in favour of spending more money for tests under these circumstances. There was no reason not to proceed and open up the use of internet-based protocols. The representative of Denmark (in respect of the Faroe Islands and Greenland)- Greenland felt that if commercial banks could use the protocol, security and confidentiality would not be compromised vis-à-vis the Scheme. At the moment they were looking for partners for testing Internet based protocols.

Portugal noted that Trackwell created a gateway to make it possible for parties to link up to NEAFC. The Secretariat stressed that there was no obligation to use their provider. It was up to each Contracting Party to establish connections to the gateway. Ideally protocols should not be mentioned in the Scheme but only the confidentiality requirements. That would allow parties to use any protocol meeting the requirements. It was noted that NAFO has now introduced the possibility of using internet based protocols.

The Chairman felt that it was difficult to evaluate the trials presented not having taken part in them. He suggested that a more complete report on the trials should be available at the Annual Meeting in November. The Secretariat should push for a final report. The representative of Iceland asked which Contracting Parties are willing and ready to start trials. Russia and Greenland indicated interested. Norway also indicated interest, but noted that some time was needed for programming. The Secretariat indicated that there was no time limit for trials, but a possible report to the Annual Meeting may set a deadline.

The Chairman distinguished between two types of testing: **1.** On the HTTPS protocol meeting the requirements of security and confidentiality and **2.** The testing of individual communicating parties' links to NEAFC (and other parties).

The Norwegian representative proposed that software developed for this purpose should be shared. The Icelandic representative thought any software provider should be in the position to deliver this software. The Secretariat will be willing to assist. The UK representative was interested in testing, but did not have the capacity to do it at short notice. It felt that there were some implementation issues, which should be solved before new protocols were allowed. The representative of Greenland still had to be convinced that security requirements were met by the HTTPS protocol. The Portuguese representative noted that HTTPS is a standard protocol and the parties should not seek certification one by one. This was better done by the Secretariat. It was noted that the Secretariat could not act without a formal mandate from the NEAFC Commission that internet protocols are acceptable. The Icelandic representative repeated that we should rely on the standards given by the protocol providers. The Norwegian representative considered it important to open up for something else before X.25 is phased out. It found that the NEAFC provider had performed very well and if HTTPS is a standard which is used in banking, why should Contracting Parties not use it? It would be preferable to focus on one system that has been tested in other environments with high demands on security and confidentiality. The UK representative agreed that the NEAFC provider seemed to have established the HTTPS protocol as a valid addition to the protocols allowed. There were however other questions that had to be evaluated.

The Chairman summed up that trials had been made between the provider and the Secretariat, but the trials with Contracting Parties had not taken place. Some parties found it necessary to undertake such trials before committing themselves, but would not be able to do that before the Annual Meeting. He would like to see a more complete report from the provider with specific information on security and other standards as soon as possible. It seemed desirable that the Secretariat should become the certification authority. The Group was at present not in the position to make recommendations to the Commission on adding this specific protocol to the ones already allowed by the Scheme.

7. Evaluation of the use of record numbers

The Chairman stressed that the Scheme stipulates that the Secretariat shall send return messages and record numbers are necessary to make it possible to identify which message is causing problems. He noted a theological difference of opinion about the usefulness of return messages. This had been discussed extensively at the last meeting.

He wished to know if the trials offered options for replacing record numbers and return messages. The Secretariat informed the meeting that the new protocol only confirmed if the message had been delivered, but not if the database accepted the message. This can only be confirmed by including record numbers. The NEAFC database already accepts POS messages without record numbers because it is not vital that all POS messages are received but record numbers are necessary if confirmation is required that the more important messages, such as ENT and EXI, have entered the database.

The Icelandic representative had discussed the matter with the NEAFC provider and agreed with the Secretariat. There had to be a reference to the specific message. The Chairman summed up that the trials did not seem to have given alternatives to record numbers. The Secretariat noted that there were systems that checked string syntax and corrected it, but the NEAFC system had focussed on fast, automatic procedures assuming correct syntax.

The Irish representative asked about the difference between sequence numbers and record numbers. The Secretariat pointed out the appropriate parts of the Scheme setting out the definitions. The sequence number is connected to specific vessels. The record number is connected to the retransmission of messages to the Secretariat. Iceland noted that originally it had been envisaged that vessels would report directly to NEAFC. Later it was realised that vessels would report to FMCs which then retransmit to NEAFC. For these messages, record numbers are necessary.

The Chairman summed up that there had been an open and frank discussion and positions seemed not to have changed since the last meeting. Contrary to expectations, the trials with alternative communication protocols had not thrown new light on the issue.

8. Report to the 21st Annual Meeting of the Commission 11-15 November 2002

The Secretariat had circulated summary records of the meeting of 2 October and would accept corrections until 11 October. The report to the 21st Annual Meeting in November 2002, based on the summary records, will be finalised by the end of the week starting 4 October 2002.

9. Date and place of the next meeting

It was agreed to propose to the Commission that the Group meets again early in 2003 in London. Progress at this meeting will decide if there is a need for a second meeting in 2003. The Icelandic representative thought it would be practical have the meetings of AGHWGC and PECCOE in conjunction. This would save travel time and costs for many representatives.

10. Any other business

The only issue under this item was a progress report by Ms. Kourti from the Joint Research Centre of the European Commission. Copies of the presentation can be requested from the NEAFC Secretariat.

The results from matching satellite imagery to data from the NEAFC Secretariat database are summarised in Annex IV and seem to indicate that a fair number of vessels present in the Irminger Sea in June do not send VMS messages.

The Portuguese representative showed a video on the MONICAP system which outlined the cooperation between different agencies in prosecuting fisheries infringements and the vital role of VMS positions. VMS evidence is now permissible in Portuguese courts. Last year, the Inspectorate fined 125 cases administratively and only 20 had appealed to the courts.

The Chairman closed the meeting at 5:00 and thanked the Group for its efforts. The Group was invited to visit the Portuguese FMC.