To : ICG/NEAMTWS Tsunami Warning Focal Points (TWFP) and Tsunami National Contacts (TNC)
ICG/NEAMTWS Chair, Vice-Chairs and Officers

cc. : Official National Coordinating Body for liaison with the IOC Member States
Permanent Delegates/Observer Missions to UNESCO of IOC Member States and National Commissions for UNESCO of IOC Member States in the NEAM region

Subject : Invitation to participate to the third NEAMTWS Communication Test Exercise (NEAMTWS-CTE3) on 1 October 2013

We have the pleasure to announce the third NEAMTWS Communication Test Exercise (NEAMTWS-CTE3), which will be conducted on 1 October 2013. The NEAMTWS-CTE3 will involve the National Tsunami Warning Centres (NTWC) and the Tsunami Warning Focal Points (TWFP).

The candidate Tsunami Watch Provider (TWP), National Tsunami Warning Centres (NTWC) and Tsunami Warning Focal Points (TWFP) must keep a high level of readiness so as to be able to act efficiently and effectively to provide for the public’s safety during fast-onset and rapidly-evolving natural disasters like the tsunamis. To maintain this high state of operational readiness and especially for infrequent events such as tsunamis, tsunami watch/warning centres and emergency agencies must regularly practice their response procedures to ensure that vital communication links work seamlessly, and that agencies and response personnel know the roles that they will need to play during an actual event.

IOC Circular Letter No. 2495
(Also available in French)

IOC/WWW/TA/FS
Paris, 22 August 2013
NEAMTWS-IX during 11-13 September 2012 in Southampton – United Kingdom, confirmed a Task Team on Communication Test and Tsunami Exercises (TT-CT&TE) which is responsible for the preparation and conduct of NEAMTWS-CTE3 and organization of its assessment. The aim of the NEAMTWS-CTE3 is to refine procedures for testing the communication of tsunami alert messages between National Tsunami Warning Centres and all Tsunami Warning Focal Points (TWFPs), including speed and availability within NEAMTWS region. CTEs conducted during the previous intersessional period highlighted the importance of having other communication methods like Global Telecommunication System (GTS). Moreover, during the TT-CT&TE meeting, held in Paris on 24 April 2013, it was decided to introduce one additional communication technology, the SMS (http://www.ioc-unesco.org/index.php?option=com_oe&task=viewEventRecord&eventID=1307). Therefore the utilization of SMS during the NEAMTWS-CTE3 is another aim of the Exercise. We, therefore, kindly ask you to send us a phone number in order to test the SMS functionality. The information concerning the Messages Provider (Greek NOA National Observatory of Athens) will be provided in the second letter of Announcement.

NEAMTWS-CTE3 will address the questions related to the evaluation and issuance of the warning message by Tsunami Watch Provider, as in the previous CTEs, but will also attempt to assess the national and/or local response and warning dissemination mechanisms once emergency authorities receive a warning. NEAMTWS-CTE3 will involve all possible TWFPs using conventional message dissemination channels that have been previously subject to test between candidate TWP and NTWCs. Message dissemination using GTS will be only available between TWFPs that have this system available to them at the operation level.

The NEAMTWS-CTE3 messages will be delivered to the TWFP (TNC in the absence of a designated TWFP) operational addresses as provided by Member States to the IOC secretariat. Member States are invited to verify that these addresses are accurate and up-to-date. Any changes, corrections or amendments should be sent to the IOC Secretariat through the official channels described in UNESCO IOC TWFP and TNC nomination forms. They will be used in the NEAMTWS-CTE3 if received one week before the exercise.

We kindly ask you to fill the attached form and to send it to the Secretariat (neamtws-secretariat@unesco.org) not later than 18 September 2013.

More information on the nature of the exercise together with technical details concerning the conduct and evaluation of the exercise can be found in the NEAMTWS Communication Exercise Manual, attached to this Circular Letter. All relevant documentation and updated information on the Exercise can be accessed through the NEAMTIC website (http://neamtic.ioc-unesco.org)

Thank you in advance for your cooperation.

Yours sincerely,

François Schindelé  
Chairman, ICG/NEAMTWS

Wendy Watson-Wright  
Assistant Director-General, UNESCO

Executive Secretary, IOC

[signed]

Annex:
Form with contacts of the message receiver for the communication test

NEAMTWS Communication Exercise Manual
INFORMATION ON MESSAGE RECEIVER

COUNTRY:

INSTITUTION:

Email addresses to receive the test message:

Primary e-mail address:

Alternate e-mail address (if any):

Fax numbers to receive the test message:

Primary fax number:

Alternate fax number:

Phone numbers to receive the test message:

Primary phone number:

Alternate phone number:

Contact Info:

Name:

E-mail:

Fax:

Mailing Address:
TSUNAMI EARLY WARNING AND MITIGATION SYSTEM IN THE NORTH-EASTERN ATLANTIC, THE MEDITERRANEAN AND CONNECTED SEAS

Communication Test Exercise Manual
**TABLE OF CONTENTS**

1. INTRODUCTION
2. PREPARATION OF NEAMTWS-CTE
3. DESCRIPTION OF NEAMTWS-CTE
4. REQUIREMENTS AND GUIDELINES FOR THE COMMUNICATION TECHNOLOGIES TO BE USED IN NEAMTWS-CTE
   4.1 General Requirements
   4.2 Requirements for E-mail
   4.3 Requirements for Fax
   4.4 Requirements for GTS
       4.4.1 GTS Capacity Building
5. MESSAGE SECURITY
6. EXERCISE PARTICIPANTS
7. EVALUATION OF NEAMTWS-CTE
8. SMALL SCALE COMMUNICATION TEST EXERCISE (SSCT)
9. REFERENCES

**ANNEXES**

<table>
<thead>
<tr>
<th>Annex</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANNEX I.A</td>
<td>SAMPLE TEST MESSAGES FOR E-MAIL AND FAX</td>
</tr>
<tr>
<td>ANNEX I.B</td>
<td>SAMPLE TEST MESSAGES FOR GTS</td>
</tr>
<tr>
<td>ANNEX II.A</td>
<td>INFORMATION ON MESSAGE PROVIDER</td>
</tr>
<tr>
<td>ANNEX II.B</td>
<td>INFORMATION ON MESSAGE RECEIVER</td>
</tr>
<tr>
<td>ANNEX III.A</td>
<td>EVALUATION QUESTIONNAIRE FOR MESSAGE PROVIDER</td>
</tr>
<tr>
<td>ANNEX III.B</td>
<td>EVALUATION QUESTIONNAIRE TO MESSAGE RECEIVER</td>
</tr>
<tr>
<td>ANNEX IV</td>
<td>GENERAL OVERVIEW OF GTS</td>
</tr>
<tr>
<td>ANNEX V</td>
<td>GTS HEADER FORMAT FOR TSUNAMI MESSAGES</td>
</tr>
<tr>
<td>ANNEX VI</td>
<td>LIST OF NATIONAL METEOROLOGICAL SERVICES IN NEAM REGION</td>
</tr>
<tr>
<td>ANNEX VII</td>
<td>EXAMPLE OF MESSAGE DETAILS AVAILABLE IN THE SERVER MAIL BOX</td>
</tr>
<tr>
<td>ANNEX VIII</td>
<td>EXAMPLE OF TIME STAMPS ON A FAX MESSAGE</td>
</tr>
<tr>
<td>ANNEX IX</td>
<td>CTE FIRST ANNOUNCEMENT MESSAGE TEMPLATE</td>
</tr>
<tr>
<td>ANNEX X</td>
<td>CTE SECOND ANNOUNCEMENT MESSAGE TEMPLATE</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

The Tsunami Watch Providers (TWP), National Tsunami Warning Centres (NTWC) and Tsunami Warning Focal Points (TWFP) must keep a high level of readiness so as to be able to act efficiently and effectively to provide for the public's safety during fast-onset and rapidly-evolving natural disasters like the tsunamis. To maintain this high state of operational readiness and especially for infrequent events such as tsunamis, TWP/NTWC and emergency agencies must regularly practice their response procedures to ensure that vital communication links work seamlessly, and that agencies and response personnel know the roles that they will need to play during an actual event. For this purpose, Tsunami Communication Test Exercises (CTEs) must be conducted regularly, ideally every 1 to 3 months on a fully operating system.

General objectives of a CTE are:

(i) Evaluate and validate the Tsunami Watch Providers' dissemination process of issuing tsunami messages to the NEAM (North-Eastern Atlantic, Mediterranean and Connected Seas) region.

(ii) Evaluate and validate the process for countries to receive and confirm tsunami messages.

(iii) Develop and implement mechanisms for the regular update of NTWC and TWFP contacts.

(iv) Help the establishment and updating of Standard Operational Procedures (SOP) as regards the communications used to disseminate and receive tsunami messages in the NEAM region.

TWFPs are the key players in terms of translating the warning message into essential information for Civil Protection and Disaster Management Authorities (CP-DMA), especially if they are not CP-DMA by themselves. The CTEs are important tools in terms of seeking the involvement of CP-DMAs. Therefore, the NEAMTWS CTE will address not only the questions related to the evaluation and issuance of the warning message by (candidate) Tsunami Watch Providers, but will also attempt to assess the national and/or local response and warning dissemination mechanisms once emergency authorities receive a warning. The CTE will involve all possible TWFPs using conventional message dissemination channels, like e-mail and fax. Message dissemination using GTS will be only available between TWFPs that have that system available to them at the operational level. It is also desirable that relevant organizations not belonging to the ICG/NEAMTWS, like the European Union Monitoring and Information Centre (MIC) and the Caribbean Tsunami Warning Center, participate in the NEAMTWS-CTE as observers and they are encouraged to fill also the questionnaires related to the exercise.

Tsunami Communication Test Exercises are planned, conducted and evaluated by dedicated Task Teams established by the ICG/NEAMTWS. This manual together with the report of previously conducted CTEs are available through the IOC website.

2. PREPARATION OF NEAMTWS-CTE

The Message Provider is chosen among the candidate TWPs and agreed upon within the ICG/NEAMTWS appropriate Task Team. The identification of the Message Provider will be clearly identified in the CTE announcement. When in operation, the TWPs will define in their SOP the periodicity for conducting CTEs. Message recipients will involve all possible TWFPs and NTWCs belonging to the NEAMTWS.

The CTE period begins by issuing a first announcement from official IOC channels to all TWFPs registered in the NEAMTWS, at least 4 weeks in advance of the planned exercise date. This CTE Manual should also be sent at the first announcement as an attachment and the announcement should clearly indicate from where this Manual could be downloaded.
In the announcement, CTE participants should be strongly invited to read this manual in detail and report any inconsistencies to the IOC Secretariat. During the following 3 weeks period TWFPs from Member States (MS) will have the time to correct and or update all the contact information.

The CTE is preceded, one week before, by a second announcement sent by the Message Provider via e-mail in order to ensure that the anti-spam and firewall software operating in the Message Receivers networks do not block the Communication Test Exercise Message. This will also allow the Message Provide to check any limitation in the number of email recipients. The text of these two announcements should be very clear on the actions that are required by the message recipients in order to participate in the exercise and in its evaluation.

On the day of the second announcement, the IOC Secretariat will send the most up-to-date list of TWFP / TNC contact information in the following format to the Message Provider, copied to the Task team chair/co-chairs. It should be reminded that it's the Member States’ responsibility to nominate their Tsunami National Contacts (TNCs) and Tsunami Warning Focal Points (TWFPs) and to ensure the actuality of these information.

<table>
<thead>
<tr>
<th>TWFP CONTACT INFO</th>
<th>TSUNAMI MESSAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name Address E-mail Fax</td>
<td>Primary Alternate</td>
</tr>
<tr>
<td>Country 1 Institute 1 Institute 2</td>
<td>Fax Message E-mail Message Voice Message</td>
</tr>
<tr>
<td>Country 2 Institute 1 Institute 2</td>
<td></td>
</tr>
</tbody>
</table>

3. DESCRIPTION OF NEAMTWS-CTE

NEAMTWS Tsunami Communication Test exercises will simulate the dissemination of tsunami messages by one RTWC Tsunami Watch Provider and its timely reception by the NTWCs and all participating TWFPs. It will try to evaluate the communications delays that may be involved in the international communication systems, and identify possible bottlenecks by requiring the record of adequate time stamps. To do this properly, it is desirable that all exercise participants have their equipments synchronized, either to local time or universal time. If possible, each exercise participant should provide the methods and procedures used to ensure the synchronization of equipments, PCs and fax.

The NEAMTWS CTEs will use email, fax and GTS as means of communication. It will be conducted in such a way to be completed in a timely manner during reasonable work hours across the time zones found in the NEAM region, most likely between 10.00-14.00 UTC. It is important to note that, while being an old generation of communication technology, the well-proven reliability of GTS in case of emergency situations makes its use indispensable.

The NEAMTWS CTE begins by the broadcast of a Tsunami Test Message by one of the candidate TWP. (See the message description in Annex-I.A and Annex-I.B).

In order to simulate in the best way possible the operation of a TWP, the instant when the message provider is aware that a Tsunami message has to be delivered should be considered as time zero of the evaluation (time stamp zero or TS0). The message should already be pre-formatted, missing only the time stamp on the header. The message provider will then take all the actions required to issue this message by e-mail, fax and GTS to all possible message recipients. This means that the preparation latency from the message provider can be also evaluated.

The participant NTWC/TWFP then receives this message. It is required that the operator that receives the message takes note of the time when the message was received by the local equipment (TS1), and the time when the message was read and understood by the operator.
(TS2). It is important that these time stamps are well taken and reported in the evaluation questionnaire. Some guidelines on the cares to be taken to report TS1 accurately are presented in annexes VII and VIII.

The NEAM-TWP tsunami text messages, format and content, including information on the rules used for the numbering of Tsunami Communication Test Messages, can be found in the Interim Operational Users Guide (I-OUG) for the Tsunami Early Warning and Mitigation System in the North-Eastern Atlantic, the Mediterranean and Connected Seas (NEAMTWS), also given at the NEAMTWS website. The names of countries/institutions and corresponding abbreviations to be used in the test should also be taken from the I-OUG. [http://neamtic.ioc-unesco.org/images/documents/neamtws-opug-version%202%200%20final.pdf]

4. REQUIREMENTS AND GUIDELINES FOR THE COMMUNICATION TECHNOLOGIES TO BE USED IN NEAMTWS-CTE

4.1 General Requirements

ASCII character set should be used in the message templates used in all communication technologies. All times in the evaluation questionnaires should be reported in HH:MM:SS UTC format.

Message providers are encouraged to make use of an interface especially created for message dissemination by accessing pre-formatted messages and updating the time information and channelling the messages to e-mail, fax and GTS dissemination to avoid human errors.

No country/institution other then the Message Provider is entitled to broadcast the CTE message. All deviations from this guideline need to be reported in the Evaluation Questionnaire.

4.2 Requirements for E-mail

The number of e-mail message recipients would be restricted to 2 e-mail addresses per agency and 4 e-mail addresses per member state.

In addition to TS0, TS1E (time stamp of e-mail message) should be reported by the Message Provider. Message Recipients are recommended to develop codes to automatically detect e-mail messages and send the subject line to the designated mobile phone number of TWFP via sms.

4.3 Requirements for Fax

The number of fax message recipients would be restricted to 2 per member state; thus 1 per agency if two agencies are designated. If a single agency has been designated, both primary and alternate fax numbers would be utilized.

At least an 8-channel fax server for should be used for the fax message dissemination. The Message Provider should set up the fax server in such a way so that each recipient fax number will be subject to at least three attempts to send the fax message, where in each attempt the fax recipient will be ringed at. In addition to TS0, TS1F (time stamp of fax message) should be reported by the Message Provider and ASCII character set should be used in the fax message templates.

For the easier evaluation of fax message dissemination, the sequencing of the fax numbers should be done in such a way so that in each group, the last two digits of the three digit fax sequence code would always correspond to the same country, sorted in alphabetical order. An example is given below:
As described above, it is recommended to limit the fax numbers to 2 per institute, where the number of institutes per countries should be limited to 2, also. If required, messages could be distributed by the primary or alternate TWFPs to other national organizations. Any arrangement for this should be within the discretion of the respective country. Member States are encouraged to provide alternate fax numbers.

Message Recipients are recommended to develop codes to automatically detect fax messages and send them as internal email.

4.4 Requirements for GTS

In addition to TS0, TS1G (time stamp of GTS message) should be reported and ASCII character set should be used in the GTS message templates. In coordination with the WMO-NR, detailed GTS logs should be acquired both by the Message Provider and Message Recipient, where applicable. Message Recipients are recommended to develop codes to automatically detect GTS messages and send them as internal email. Similar mechanism could be implemented to automatically detect the header of the message and inform the TWFP via sms.

GTS connects meteorological and other centres throughout the world. Its primary purpose is to distribute meteorological, hydrological, and other data, products, alerts, and warnings to the global meteorological community, composed of member nations of the World Meteorological Organization (WMO). The structure of the GTS makes use of terrestrial communications circuits to disseminate data, products, and messages over a tiered network. The three tiers of the GTS are the World Meteorological Centres (WMC), the Regional Telecommunications Hubs (RTH), and the National Meteorological Centres (NMC).

NTWCs and TWPs should employ backup communications for data and information collection required to detect a tsunami. Alternative communication paths within a centre should be employed by tsunami warning centres. In the event of the failure of one of a centre’s primary communication links, such as e-mail or fax, information can be re-routed through a secondary connection. GTS is among the robust communications methods that are used for the transmission of tsunami warnings. A general overview of GTS can be found in Annex IV.
4.4.1 GTS Capacity Building

TWFPs should contact their national representative for WMO (WMO-NR; see Annex VI) to establish the necessary infrastructure for GTS including hardware and software. TWFPs can receive the GTS messages through e-mail, ftp, VPN and/or in-situ satellite system, which are connected to the GTS system hosted by WMO-NR. TWFP contact info should be registered at GTS also through the WMO-NR.

To establish a link between the WMO-NR and the TWFP, the TWFP has to contact its WMO-NR requesting:

- Type of transmission mode existing in the WMO-NR (email, ftp, VPN..).
- The establishment of a MoU or other type of agreement to receive the messages.

The TWFP has to provide the list of messages header he would like to receive (see Annex V).

TWPs are invited and encouraged to cooperate with other TWPs to validate the successful establishment of GTS links. Such cooperation took place between CENALT (France), IM (Portugal) and KOERI (Turkey) in 2011 before the First Enlarged Communication Test Exercise (NEAMTWS-ECTE1), which led to the successful utilization of GTS.

The Tsunami Communication Test Exercise will also validate the first part of the transmission path, namely the latency between the TWP and the WMO-NR.

5. MESSAGE SECURITY

Message security is a major concern in any Tsunami Communication Test Exercise. In NEAMTWS-CTE, the message authorship will be ensured by validating the fax number, and/or fax-id code, email address and message headers that the Message Provider will use for the exercise and that are known beforehand. The CTE will provide a true evaluation of the communication channels used for the message dissemination, but it is recommended that message recipients ensure that the anti-spam and firewall software operating in their networks do not block the Communication Test Exercise message.

6. EXERCISE PARTICIPANTS

There are two types of exercise participants: The message provider and the message receivers. The Message Provider is the candidate Tsunami Watch Provider that offered to participate. The basic requirement for a provider is to be able to disseminate messages to multiple recipients using email, fax and GTS.

Only Member States with designated TWFP/TNC can participate in the CTE. TNCs communication details would be used in the CTE only if the respective Member State has no TWFP designated. In case of a designated TWFP, TNCs communication details would not be used during the CTE.

The NEAMTWS-CTE messages will be delivered to the TWFP/TNC operational addresses as provided by the Member States to the IOC secretariat. Member States are invited to verify that these addresses are accurate and up-to-date. Any changes, corrections or amendments should be sent to the IOC secretariat through the official channels described in UNESCO IOC TWFP and TNC nomination forms. They will be used in the NEAMTWS-CTE if received at least one week before the exercise.

The information that is required from each exercise participant is presented in Annex II.A for the Message Provider and Annex II.B for the message recipients.
Since the information from the Message Provider is needed to verify the authoritative source of the CTE messages, it has to be given beforehand by the two exercise announcement messages.

The basic information of the Message Recipients (TWFPs and candidate TWPs) is the one that is officially collected by the IOC following information by the Member States. Annex II.B forms will be utilized to verify the Message Recipient Information provided via official channels.

Participants are especially encouraged to read the Exercise Reports of previously conducted CTEs, which can be found at the UNESCO publications website [http://www.unesco.org/new/en/unesco/resources/publications/unesdoc-database/]

7. EVALUATION OF NEAMTWS-CTE

The evaluation will be conducted by filling a questionnaire (see the proposed questionnaires in Annex III.A and Annex III.B, one for the message provider and one for each message receivers). Each agency that participates in the CTE is requested to deliver one report encompassing all messages received. These questionnaires should be answered shortly after the end of the exercise, and they must be sent via email to the Message Provider within one week of the CTE. The complete address is provided in Annex II.A.

After reception of all the questionnaires, the Message Provider is responsible to prepare the Exercise Report within 6 weeks after the conduct of the CTE and circulate to the CTE participants and the Task Team. The Exercise Report should include a story book of the CTE starting from TS0 (as the instant when the message provider is aware that a Tsunami message has to be delivered) to TSE (as the instant when the message dissemination activities are finalized). The Exercise Report should also make use of system logs (including GTS logs obtained from the WMO-NR) of the Message Provider and include statistical information on message dissemination concerning each communication technology utilized. Following parameters should be included: number of recipients, number of successful message delivery, min time of message delivery, max time of message delivery, median time of message delivery and mean time of message delivery. The Exercise Report should also include an evaluation of the TWFP response. CTE participants are required to provide their comments and feedback within the following 15 days. If necessary, the Message Provider will update/modify the CTE report accordingly and send it to the Task Team within 15 days. The Task Team chair/co-chairs will be responsible for the approval of the CTE report and send it to IOC Secretariat within the following 15 days. Lessons learned will be applied on consecutive exercises and relevant documentation updated if necessary.

In the Evaluation Report, message provider will also indicate which Member States TWFP/TNC contact information differences are observed between the information they have received from IOC Secretariat and from the Annex II.B. After this, a standard message could be sent by the secretariat to the respective Member State stating this fact and informing the Member State on the urgent need of updating TWFP/TNC via official channels, indicating that when NEAMTWS is in place, Annex II.B will be removed from the CTE Manual and CTEs will rely only to the information provided to the IOC Secretariat via official channels.

8. SMALL SCALE COMMUNICATION TEST EXERCISE (SSCT)

A SSCT could be conducted after the initial evaluation of the CTE focusing on the problem areas of the CTE and to consolidate the lessons learnt from it. The decision on this would be taken by Task Team responsible for the CTE. The main differences of a SSCT from a CTE are the following:

1- A SSCT is limited only to a subset of communication technologies and subset of TWFPs. In case of a need to utilize all communication technologies involving all participants of CTE, a new CTE has to be conducted.
2- The requirements and guidelines for the communication technology(ies) provided in this manual will be also applicable to SSCT.

3- The announcement of the SSCT will be made by the TWP and should be sent to the participants of the CTE it follows, 10 days before the SSCT clearly defining which States/Centers will be involved.

4- The reporting of SSCT will not be subject to same requirements and guidelines as the CTE provided in this document. The Message Provider will be responsible to prepare an exercise report within 15 days and submit it to the the Task Team chair/co-chairs who will be responsible for the approval of the SSCT report within the next 15 days. The SSCT report will be added to the CTE report it follows as an Annex.

9. REFERENCES

NOAA. NECP Central Operations
    http://www.nco.ncep.noaa.gov/sib/decoders/CREXLIB/toc/tidedcod/

    TSUNAMI EARLY WARNING AND MITIGATION SYSTEM IN THE NORTH-EASTERN ATLANTIC, THE MEDITERRANEAN AND CONNECTED SEAS-First Enlarged Communication Test Exercise (ECTE1) - Exercise Manual & Evaluation Report; Necmioglu, O., Rudloff, A


World Meteorological Organization. 2007. Meeting of Expert Team on Data Representation and Codes. Geneva. WMO. [ET/DR&C/Doc. 3.1.3(1) (12.IV.2007)]

    http://www.wmo.int/pages/prog/www/TEM/GTS/index_en.html
ANNEX I.A

SAMPLE TEST MESSAGES FOR E-MAIL AND FAX

Subject: TSUNAMI COMMUNICATION TEST MESSAGE NUMBER 001

Body:

TSUNAMI COMMUNICATION TEST MESSAGE NUMBER 001
NEAM KOERI CANDIDATE TSUNAMI WATCH PROVIDER
ISSUED AT 1430Z 10 AUG 2011

... TSUNAMI COMMUNICATION TEST ...
THIS TEST APPLIES TO ... CGCCR(BELGIUM)... BAS(BULGARIA)... INMG(CAPE VERDE)... NPRD(CROATIA)... OC(CYPRUS)... DMI(DENMARK)... NRIAG(EGYPT)... EMI(ESTONIA)... FMI(FINLAND)... GSC(FINLAND)... CENALT(FRANCE)... BSH(GERMANY)... DWD(GERMANY)... NOA(GREECE)... GSI(ISRAEL)... DPC (ITALY) ... NCGR(LEBANON)... CPD(MALTA)... SPMC(MONACO)... KNMI(NETHERLANDS)... DSB(NORWAY)... NHQ SFS(POLAND)... IM (PORTUGAL)... NIEP-ROMANIA)... NPO “Typhoon”(RUSSIAN FEDERATION)... DGPCE(SPA... SMHI(SWEDEN)... SWO(SYRIA)... AFAD(TURKEY)... DFID(UNITED KINGDOM)

FROM – KANDILLI OBSERVATORY AND EARTHQUAKE RESEARCH INSTITUTE (KOERI)

TO – TWFP PARTICIPANTS IN THE NEAMTWS COMMUNICATION TEST EXERCISE

SUBJECT – TSUNAMI COMMUNICATION TEST

THIS IS A TEST TO VERIFY COMMUNICATION LINKS AND DETERMINE
TRANSMISSION TIMES INVOLVED IN THE DISSEMINATION OF OPERATIONAL
TSUNAMI MESSAGES FROM THE CANDIDATE TSUNAMI WATCH PROVIDER TO OTHER
CANDIDATE TSUNAMI WATCH PROVIDERS, NATIONAL TSUNAMI WARNING CENTERS AND
TSUNAMI WARNING FOCAL POINTS OF THE NEAM TSUNAMI WARNING SYSTEM

RECIPIENTS ARE REQUESTED TO FILL THE EVALUATION QUESTIONNAIRE AND SEND IT
ACCORDING TO THE NEAMTWS-CTE INSTRUCTIONS

THANK YOU FOR YOUR PARTICIPATION IN THIS COMMUNICATION TEST
THIS WILL BE THE FINAL MESSAGE ISSUED

TSUNAMI COMMUNICATION TEST MESSAGE NUMBER 001
ANNEX I.B

SAMPLE TEST MESSAGES FOR GTS

Body:

WEME40 LTAA YYGGgg

TSUNAMI COMMUNICATION TEST MESSAGE NUMBER 001
NEAM KOERI CANDIDATE TSUNAMI WATCH PROVIDER
ISSUED AT 1430Z 10 AUG 2011

... TSUNAMI COMMUNICATION TEST ...
THIS TEST APPLIES TO ... CGCCR(BELGIUM)... BAS(BULGARIA)... INMG(CAPE VERDE)... NPRD(CROATIA)... OC(CYPRUS)... DMI(DENMARK)... NRIAG(EGYPT)... EMI(ESTONIA)... FMI(FINLAND)... GSC(FINLAND)... CENALT(FRANCE)... BSH(GERMANY)... DWD(GERMANY)... NOA(GREECE)... GSI(ISRAEL)... DPC (ITALY)... NCGR(LEBANON)... CPD(MALTA)... SPMC(MONACO)... KNMI(NETHERLANDS)... DSB(NORWAY)... NHQ SFS(POLAND)... IM (PORTUGAL)... NIEP(ROMANIA)... NPO “Typhoon”(RUSSIAN FEDERATION)... DGPCE(Spain)... SMHI(SWEDEN)... SWO(SYRIA)... AFAD(TURKEY)... DFID(UNITED KINGDOM)

FROM – KANDILLI OBSERVATORY AND EARTHQUAKE RESEARCH INSTITUTE (KOERI)

TO – TWFP PARTICIPANTS IN THE NEAMTWS COMMUNICATION TEST EXERCISE
SUBJECT –NEAMTWS TSUNAMI COMMUNICATION TEST

THIS IS A TEST TO VERIFY COMMUNICATION LINKS AND DETERMINE
TRANSMISSION TIMES INVOLVED IN THE DISSEMINATION OF OPERATIONAL
TSUNAMI MESSAGES FROM THE CANDIDATE TSUNAMI WATCH PROVIDER TO OTHER
CANDIDATE TSUNAMI WATCH PROVIDERS, NATIONAL TSUNAMI WARNING CENTERS AND
TSUNAMI WARNING FOCAL POINTS OF THE NEAM TSUNAMI WARNING SYSTEM

RECIPIENTS ARE REQUESTED TO FILL THE EVALUATION QUESTIONNAIRE AND SEND IT
ACCORDING TO THE NEAMTWS-CTE INSTRUCTIONS

THANK YOU FOR YOUR PARTICIPATION IN THIS COMMUNICATION TEST
THIS WILL BE THE FINAL MESSAGE ISSUED

TSUNAMI COMMUNICATION TEST MESSAGE NUMBER 001
### INFORMATION ON MESSAGE PROVIDER

<table>
<thead>
<tr>
<th>Name of the Country:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the Institution:</td>
</tr>
<tr>
<td>Email address to broadcast the communication test message:</td>
</tr>
<tr>
<td>Fax number(s) to broadcast the communication test message&lt;sup&gt;1&lt;/sup&gt;:</td>
</tr>
<tr>
<td>Fax ID code(s):</td>
</tr>
<tr>
<td>GTS Message Header:</td>
</tr>
</tbody>
</table>

### TWFP Information<sup>2</sup>

<table>
<thead>
<tr>
<th>Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail address:</td>
</tr>
<tr>
<td>Fax:</td>
</tr>
<tr>
<td>Mailing address:</td>
</tr>
</tbody>
</table>

<sup>1</sup> Include all the lines used by the Fax machine in case of parallel broadcasting.

<sup>2</sup> Please note that this information is only to identify the person responsible for sending the message, and also responding to the technical questions concerning the CTE.
<table>
<thead>
<tr>
<th><strong>ANNEX II.B</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INFORMATION ON MESSAGE RECEIVER</strong></td>
</tr>
</tbody>
</table>

| **COUNTRY:** |
| **INSTITUTION:** |

Email addresses to receive the test message:

- **Primary e-mail address:**
- **Alternate e-mail address (if any):**

Fax numbers to receive the test message:

- **Primary fax number:**
- **Alternate fax number:**

Contact Info:

- **Name:**
- **E-mail:**
- **Fax:**

**Mailing Address:**
ANNEX III.A
EVALUATION QUESTIONNAIRE FOR MESSAGE PROVIDER

Please note that all times should be provided in Universal Time in HH:MM:SS format. Please copy and paste confirmation sheets from the fax machine (if available), and a copy of the messages distributed by email, fax and GTS. Please verify that the time-stamp information is visible on the documents, if applicable. Preferably the e-mail message text appended to this report should be copied directly from the mail-box server in order to provide all the details on timing and routing.

<table>
<thead>
<tr>
<th>COUNTRY:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTION:</td>
<td></td>
</tr>
<tr>
<td>Provide T0 Time:</td>
<td></td>
</tr>
<tr>
<td>Provide times of message delivery for each communication technology below:</td>
<td></td>
</tr>
<tr>
<td>time stamp:</td>
<td>E-MAIL</td>
</tr>
<tr>
<td>Provide a detailed story of all activities starting from T0 and TN (end of the exercise). Did you receive any error messages or observed any problems? If yes, describe them for all dissemination technologies and addresses concerned.</td>
<td></td>
</tr>
<tr>
<td>Describe the operational service to deliver the e-mail messages.</td>
<td></td>
</tr>
<tr>
<td>Describe the operational service to deliver the fax messages.</td>
<td></td>
</tr>
<tr>
<td>Describe the operational service to deliver the GTS messages.</td>
<td></td>
</tr>
<tr>
<td>Describe briefly the preparation made in your agency for the Communication Test Exercise</td>
<td></td>
</tr>
<tr>
<td>Describe briefly the procedures taken during the exercise, before time zero, and after time zero.</td>
<td></td>
</tr>
<tr>
<td>Did you synchronize the PC before distributing the email messages? If yes, describe briefly the procedure used.</td>
<td></td>
</tr>
<tr>
<td>Did you synchronize the fax machine before sending the messages? If yes, describe briefly the procedure used.</td>
<td></td>
</tr>
<tr>
<td>Did you find the exercise useful in assessing the readiness of your agency to distribute tsunami related messages?</td>
<td></td>
</tr>
<tr>
<td>Do you have any comments on the exercise, including the exercise manual and/or information received related to the exercise?</td>
<td></td>
</tr>
<tr>
<td>Have you and/or your institution been contacted by media concerning the exercise before/during/after the exercise? Please provide brief information if applicable.</td>
<td></td>
</tr>
</tbody>
</table>
## ANNEX III.B

### EVALUATION QUESTIONNAIRE TO MESSAGE RECEIVER

Please note that all times should be provided in Universal Time in HH:MM:SS format, where applicable. Please copy and paste into this questionnaire e-mail, fax and GTS messages received for each delivery.

<table>
<thead>
<tr>
<th>COUNTRY:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INSTITUTION:</td>
<td></td>
</tr>
</tbody>
</table>

Provide the time stamps of the messages received through each communication technology:

- **E-MAIL**
- **FAX**
- **GTS**

| Provide times of message delivery for each communication technology: |
| --- | --- | --- | --- |
| **Primary E-MAIL** | **Alternate E-MAIL** | **Primary FAX** | **Alternate FAX** |
| [type e-mail address] | [type e-mail address] | [type fax number] | [type fax number] |
| [type time in UTC HH:MM:SS format] | [type time in UTC HH:MM:SS format] | [type time in UTC HH:MM:SS format] | [type time in UTC HH:MM:SS format] |

| Provide times for each communication technology when the message is read and understood by the operator: |
| --- | --- | --- | --- |
| **Primary E-MAIL** | **Alternate E-MAIL** | **Primary FAX** | **Alternate FAX** |
| [type e-mail address] | [type e-mail address] | [type fax number] | [type fax number] |
| [type time in UTC HH:MM:SS format] | [type time in UTC HH:MM:SS format] | [type time in UTC HH:MM:SS format] | [type time in UTC HH:MM:SS format] |

Was the provider e-mail address as expected?

Was the e-mail message complete as expected? If not, report the differences.

Was the provider fax number as expected?

Was the fax message complete as expected? If not, report the differences.

Was the GTS message complete as expected? If not, report the differences.

Did the operator that received the messages understood its content and knew how to respond to it?

Describe briefly the preparation made in your agency for the Communication Test Exercise.

Did you synchronize the PC before distributing the email messages? If yes, describe briefly the procedure used.

Did you synchronize the fax machine before receiving the messages? If yes, describe briefly the procedure used.

Did you find the exercise useful in confirmation communication contacts and delays?

Do you have any comments on the exercise, including the exercise manual and/or information received related to the exercise?

Do you have any suggestions for the next exercises?

Have you and/or your institution been contacted by media concerning the exercise before/during/after the exercise? Please provide brief information if applicable.
ANNEX IV

GENERAL OVERVIEW OF GTS

WMO's Global Telecommunication System (GTS) is the communications and data management component that allows the World Weather Watch Programme (WWW) to operate through the collection and distribution of information critical to its processes. GTS is defined as: "The co-ordinated global system of telecommunication facilities and arrangements for the rapid collection, exchange and distribution of observations and processed information within the framework of the World Weather Watch." It is implemented and operated by National Meteorological Services (see Annex VI) of WMO Members and International Organizations, such as ECMWF and EUMETSAT.

GTS also provides telecommunication support to other WMO programmes, facilitating the flow of data and processed products to meet requirements in a timely, reliable and cost-effective way, ensuring that all Members have access to all meteorological and related data, forecasts and alerts. This secured communication network enables real-time exchange of information, critical for forecasting and warnings of hydrometeorological hazards in accordance with approved procedures.

The GTS has a hierarchical structure on three levels. The Main Telecommunication Network (MTN), linking together 3 World Meteorological Centres (Melbourne, Moscow and Washington) and 15 Regional Telecommunication Hubs (Algiers, Beijing, Bracknell, Brasilia, Buenos Aires, Cairo, Dakar, Jeddah, Nairobi, New Delhi, Offenbach, Toulouse, Prague, Sofia and Tokyo). This core network has the function of providing an efficient, rapid and reliable communication service between the Meteorological Telecommunication Centres (MTCs).

The Regional Meteorological Telecommunication Networks (RMTNs) is an integrated network of circuits covering the six WMO regions – Africa, Asia, South America, North America, Central America & the Caribbean, South-West Pacific, Europe and Antarctic – and interconnecting the MTCs thus ensuring the collection of observational data and regional selective distribution of meteorological and other related information to Members. Until the integrated network is completed, HF-radio-broadcasts may be used in order to meet the requirements of the WWW for the dissemination of meteorological information.
The National Meteorological Telecommunication Networks (NMTNs) enable the National Meteorological Centres (NMCs) to collect observational data and receive and distribute meteorological information on a national level.

Satellite-based data collection and/or data distribution systems are also integrated in the GTS as an essential element of the global, regional and national levels of the GTS. Data collection systems operated via geostationary or near-polar orbiting meteorological/environmental satellites, including ARGOS, are widely used for the collection of observational data from Data Collection Platforms. International data distribution systems operated either via meteorological satellites such as the Meteorological Data Distribution (MDD) of METEOSAT, or via telecommunication satellites, such as RETIM or FAX-E via EUTELSAT are efficiently complementing the point-to-point GTS circuits. Several Countries, including Argentina, Canada, China, France, India, Indonesia, Mexico, Saudi Arabia, Thailand and the USA, have implemented satellite-based multi-point telecommunication systems for their national Meteorological Telecommunication Network.

The MTCs function is to accommodate the volume of meteorological information and its transmission within the required time limits for global and interregional exchange of observational data, processed information and any other data required by its Members. Regional Telecommunication Hubs (RTHs) on the MTN perform an interface function between the RMTNs and the MTN.

The GTS is an integrated network of surface-based and satellite-based telecommunication links of point-to-point circuits, and multi-point circuits, interconnecting meteorological telecommunication centres operated by countries for round-the-clock reliable and near-real-time collection and distribution of all meteorological and related data, forecasts and alerts. This secured communication network enables real-time exchange of information, critical for forecasting and warning of hydrometeorological hazards.

WMO GTS is the backbone system for global exchange of data and information in support of multi-hazard, multipurpose early warning systems, including all meteorological and related data; weather, water and climate analyses and forecasts; tsunami related information and warnings, and seismic parametric data. WMO is building on its GTS to achieve an overarching WMO Information System (WIS), enabling systematic access, retrieval, and dissemination and exchange of data and information of all WMO and related international programmes.
ANNEX V

GTS HEADER FORMAT FOR TSUNAMI MESSAGES

GTS Header Format for Tsunami Messages

Detailed information for the GTS format can be found at Manual on the Global Telecommunication System, Volume I (WMO-No. 386). In general, the abbreviated GTS header has the following format:

\[ T_1T_2A_1A_2ii \text{ CCCC YYGGgg BBB} \]

Where:

- **T1T2** data type and/or form designators
  - \( T_1=W \) (Warning)*
  - \( T_2=E \) (Tsunami, when \( T_1=W \))

*In the case of NEAMTWS, this WMO terminology applies to all levels of NEAMTWS Tsunami messages.*

- **A1A2** geographical and/or data type and/or time designators
  - A1A2 is one of the following:
    - ME Eastern Mediterranean area
    - MM Mediterranean area
    - MP Central Mediterranean area
    - MQ Western Mediterranean area
    - NT North Atlantic area

- **ii** A number with two digits. When an originator or compiler of messages issues two or more messages with the same T1T2A1A2 and CCCC the ii shall be used to differentiate the messages and will be unique to each message.

- **CCCC** International four-letter location indicator of the station or centre originating or compiling the message, as agreed internationally, and published in WMO-No. 9, Volume C1, Catalogue of Meteorological Messages. Examples are:
  - LFPW Toulouse (Centre Régional de Télécommunications)
  - LPMG Lisboa (MET COM Centre)
  - LTAA Ankara (Turkish State Meteorological Service)

- **YYGGgg** International date-time group, where
  - YY Day of the month.
  - GGgg UTC time of the compilation of the message.

- **BBB** An abbreviated heading defined by T1T2A1A2 ii CCCC YYGGgg shall be used
only once. Consequently, if this abbreviated heading has to be used again for an addition, a correction or an amendment, it shall be mandatory to add an appropriate BBB indicator, identified by a three-letter indicator which shall be added after the date-time group. The BBB indicator shall have the following forms:

- RRx for additional or subsequent issuance of messages;
- CCx for corrections to previously relayed messages;
- AAx for amendments to previously relayed messages; where x is an alphabetic character of A through X.

For example,

WEME40 LTAA YYGGgg CCA; for the same hour, when the warning message is updated for the first time.

WEME40 LTAA YYGGgg CCB; for the same hour, when the warning message is updated for the second time.

Example Headers for France, Portugal and Turkey are the following:

<table>
<thead>
<tr>
<th>Tsunami Watch, Advisory and Tests</th>
<th>France</th>
<th>Portugal</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEMQ40 LFPW</td>
<td>WEME40 LTAA</td>
<td>WEMQ40 LFPW</td>
<td>WEME40 LTAA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tsunami Information Message</th>
<th>France</th>
<th>Portugal</th>
<th>Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEMQ42 LFPW</td>
<td>WEME42 LTAA</td>
<td>WEMQ42 LFPW</td>
<td>WEME42 LTAA</td>
</tr>
</tbody>
</table>

The first type of message with the header format xxxx40 request an action from the recipient (Watch-Advisory or respond to the communication test); hence these messages are the highest priority. The second type of message with the header format xxxx42 do not request action; it is only an information.

Sample GTS message for NEAMTWS-CTE is given in Annex-I.B. Any candidate Tsunami Watch Provider has to inform WMO, via an official letter from IOC/NEAMTWS Secretariat and from its national weather service, on the GTS headers used and requesting the prioritization and re-routing of all tsunami messages.
**ANNEX VI**

**LIST OF NATIONAL METEOROLOGICAL SERVICES IN NEAM REGION**

<table>
<thead>
<tr>
<th>Country</th>
<th>Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>The Hydrometeorological Institute</td>
</tr>
<tr>
<td>Algeria</td>
<td>Ministère des Transports</td>
</tr>
<tr>
<td>Belgium</td>
<td>Institut Royal Météorologique</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>Meteorological Institute</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>National Institute of Meteorology and Hydrology</td>
</tr>
<tr>
<td>Croatia</td>
<td>Meteorological and Hydrological Service</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Meteorological Service</td>
</tr>
<tr>
<td>Denmark</td>
<td>Danish Meteorological Institute</td>
</tr>
<tr>
<td>Egypt</td>
<td>The Egyptian Meteorological Authority</td>
</tr>
<tr>
<td>Estonia</td>
<td>Estonian Meteorological and Hydrological Institute</td>
</tr>
<tr>
<td>Finland</td>
<td>Finnish Meteorological Institute</td>
</tr>
<tr>
<td>France</td>
<td>Météo-France</td>
</tr>
<tr>
<td>Georgia</td>
<td>Department of Hydrometeorology</td>
</tr>
<tr>
<td>Germany</td>
<td>Deutscher Wetterdienst</td>
</tr>
<tr>
<td>Greece</td>
<td>Hellenic National Meteorological Service</td>
</tr>
<tr>
<td>Iceland</td>
<td>Icelandic Meteorological Office</td>
</tr>
<tr>
<td>Ireland</td>
<td>The Irish Meteorological Service</td>
</tr>
<tr>
<td>Israel</td>
<td>Israel Meteorological Service</td>
</tr>
<tr>
<td>Italy</td>
<td>Servizio Meteorologico</td>
</tr>
<tr>
<td>Latvia</td>
<td>Latvian Environment, Geology and Meteorology Agency</td>
</tr>
<tr>
<td>Lebanon</td>
<td>Service Météorologique</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Lithuanian Hydrometeorological Service</td>
</tr>
<tr>
<td>Libyan Arab Jamahiriya</td>
<td>Libyan National Meteorological Centre</td>
</tr>
<tr>
<td>Malta</td>
<td>Meteorological Office</td>
</tr>
<tr>
<td>Monaco</td>
<td>Mission Permanente de la Principauté de Monaco</td>
</tr>
<tr>
<td>Montenegro</td>
<td>Hydrometeorological Institute of Montenegro</td>
</tr>
<tr>
<td>Morocco</td>
<td>Direction de la Météorologie Nationale</td>
</tr>
<tr>
<td>Netherlands (the)</td>
<td>Royal Netherlands Meteorological Institute</td>
</tr>
<tr>
<td>Norway</td>
<td>Norwegian Meteorological Institute</td>
</tr>
<tr>
<td>Poland</td>
<td>Institute of Meteorology and Water Management</td>
</tr>
<tr>
<td>Portugal</td>
<td>Instituto de Meteorologia</td>
</tr>
<tr>
<td>Romania</td>
<td>National Meteorological Administration</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Russian Federal Service for Hydrometeorology and Environmental Monitoring</td>
</tr>
<tr>
<td>Serbia</td>
<td>Republic Hydrometeorological Service of Serbia</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Meteorological Office</td>
</tr>
<tr>
<td>Spain</td>
<td>Agencia Estatal de Meteorologia</td>
</tr>
<tr>
<td>Sweden</td>
<td>Swedish Meteorological and Hydrological Institute</td>
</tr>
<tr>
<td>Syrian Arab Republic</td>
<td>Ministry of Defence Meteorological Department</td>
</tr>
<tr>
<td>Tunisia</td>
<td>National Institute of Meteorology</td>
</tr>
<tr>
<td>Turkey</td>
<td>Turkish State Meteorological Service</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Ukrainian Hydrometeorological Center</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Met Office</td>
</tr>
</tbody>
</table>
EXAMPLE OF MESSAGE DETAILS AVAILABLE IN THE SERVER MAIL BOX

In this example (from CTE1, June 2010) the sequence of message routing is as follows:

<table>
<thead>
<tr>
<th>Delivery</th>
<th>Reception</th>
<th>Time UTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>hl_ntwc</td>
<td>NOA-local machine</td>
<td>09:04:55</td>
</tr>
<tr>
<td>NOA-local machine</td>
<td>egelados.gein.noa.gr</td>
<td>09:05:06</td>
</tr>
<tr>
<td>egelados.gein.noa.gr</td>
<td>mx.anubis.local</td>
<td>09:05:18</td>
</tr>
<tr>
<td>mx.anubis.local</td>
<td>ste.anubis.internal</td>
<td>09:05:19</td>
</tr>
<tr>
<td>ste.anubis.internal</td>
<td>eris.meteo.pt</td>
<td>09:04:20*</td>
</tr>
<tr>
<td>eris.meteo.pt</td>
<td>afrodite.meteo.pt</td>
<td>09:05:47</td>
</tr>
<tr>
<td>afrodite.meteo.pt</td>
<td>&lt;pc operacional&gt;</td>
<td>09:05:46</td>
</tr>
</tbody>
</table>

It should be noted that the time stamp that the mail servers usually report is the first one in the table which represents indeed the delivery time by the Message Provider, not the reception time. The reception time is the last one in the table and that is the one that it is requested to provide in the Evaluation Questionnaire as TS1. If all computers are synchronized, a time delay in the delivery of the message of 51 seconds could be measured. Also remark that many servers do intervene in the message routing and not all are synchronized.
ANNEX VIII

EXAMPLE OF TIME STAMPS ON A FAX MESSAGE

Only the bottom line provides the reception time.

In this example, taken from CTE1 June 2010, the time stamp shown on the top of the page is indeed the delivery time of the message and the reception time is found at the bottom of the message. It is this second time that has to be reported in the Evaluation Questionnaire as TS1.
ANNEX IX

CTE FIRST ANNOUNCEMENT MESSAGE TEMPLATE

We have the pleasure to announce the next NEAMTWS Communication Test Exercise (NEAMTWS-CTE), which will be conducted on [DD/MM/YYYY]. The NEAMTWS-CTE will involve the National Tsunami Warning Centres (NTWC), the Tsunami Warning Focal Point (TWFP) and the Tsunami National Contacts (TNC) for Member States (MS) without a designated TWFP.

The Candidate Tsunami Watch Providers (CTWP), National Tsunami Warning Centres (NTWC) and Tsunami Warning Focal Points (TWFP) must keep a high level of readiness so as to be able to act efficiently and effectively to provide for the public’s safety during fast-onset and rapidly-evolving natural disasters like the tsunamis. To maintain this high state of operational readiness, and especially for infrequent events such as tsunamis, tsunami watch/warning centres and emergency agencies must regularly practice their response procedures to ensure that vital communication links work seamlessly, and that agencies and response personnel know the roles that they will need to play during an actual event.

This NEAMTWS-CTE will consist of the broadcast of a Tsunami Communication Test Message by [MESSAGE PROVIDER] that will act as the Message Provider. This message will be distributed by e-mail, fax and GTS. The details of the Message Provider are given in Annex IIA so that each CTE participant can recognize the authority and validity of the messages received. It is suggested that the exercise participants check beforehand that their communication systems do not block the messages originated by the Message Provider. For GTS users, the exercise participants should verify that they are able to receive the appropriate message header identifiers.

The NEAMTWS-CTE messages will be delivered to the TWFP (TNC in the absence of a designated TWFP) operational addresses as provided by MS to the IOC secretariat. MS are invited to verify that these addresses are accurate and up-to-date. Any changes, corrections or amendments should be sent to the IOC secretariat through the official channels described in UNESCO IOC TWFP and TNC nomination forms. They will be used in the NEAMTWS-CTE if received one week before the exercise.

All agencies participating in the NEAMTWS-CTE (TWFPs and optionally TNCs) are requested to fill in the evaluation questionnaire sent as Annex III.B, one questionnaire for each agency. The questionnaires should be sent to the Message Provider address, given in Annex IIA within one week after the exercise. It is the responsibility of the Message Provider to collect all evaluation questionnaires and produce the first version of the NEAMTWS-CTE Evaluation Report to be distributed to all exercise participants. The Message Provider will fill a similar questionnaire that will be part of the Evaluation Report.

More information on the nature of exercise together with technical details concerning the conduct and evaluation of the exercise can be found in the NEAMTWS-CTE Manual, attached to this Circular Letter. NEAMTIC website has also a dedicated section on CTE where all relevant information and documentation can be accessed http://neamtic.ioc-unesco.org/. 
ANNEX X

CTE SECOND ANNOUNCEMENT MESSAGE TEMPLATE

To whom it may concern;

This e-mail message is sent to you from the CTE message provider [MESSAGE PROVIDER] e-mail address [e-mail address] in order to ensure that the anti-spam and firewall software operating at the message recipient side do not block the CTE message on the day of the exercise, [DD/MM/YYYY].

You have received this e-mail because either you have provided your e-mail address in AnnexII.B of the NEAMTWS-CTE Manual or your e-mail address was provided in TWFP/TNC forms submitted by your State/Government to UNESCO/IOC.

Please be so kind to confirm the receipt of this message.

Best regards,

[MESSAGE PROVIDER NAME]