

Minutes of the NEAREST Kick-off Meeting

October 9 - 11, 2006

Venue

CNR - Bologna Research Area
Via Gobetti, 101 – 40129 Bologna (Italy)
Aula 215

List of Participants

Participant name	acronym	9 Oct	10 Oct	11 Oct
Maria Ana Batipsta	FFCUL	X	X	X
Livia Moreira	FFCUL	X	X	X
Luis Matias	FFCUL	X	X	X
Pedro Terrinha	FFCUL	X	X	X
Cesar Andrade	FFCUL	X	X	
Juan Jose Dañobeitia	CSIC	X	X	X
Eulalia Gracia	CSIC	X	X	X
Valenti' Sallares	CSIC	X	X	X
Willfried Jokat	AWI	X	X	X
Mechita Schmidt-Aursch	AWI	X	X	X
Marc-André Gutscher	UBO	X	X	X
Paolo Favali	INGV	X	X	X
Laura Beranzoli	INGV	X	X	X
Davide Embriaco	INGV	X	X	X
Hans W.Gerber	TFH	X	X	X
Fernando Carrilho	IM	X	X	X
Herculano Caetano	XISTOS	X	X	X
Azelarab El Mouraouah	CNRST	X	X	X
Abdelouahad Birouk	CNRST	X	X	X
Mohamad Hafid	CNRST	X	X	X
Jose' Morales	UGR	X	X	
Nevio Zitellini	ISMAR	X	X	X
Francesco Chierici	ISMAR	X		X
Fabiano Gamberi	ISMAR	X	X	
Michael Marani	ISMAR	X		X
Giuseppe Stanghellini	ISMAR	X	X	
Luigi Vigliotti	ISMAR		X	X
Gabriela Carrara	ISMAR	X	X	X
Luca Pignagnoli	ISMAR	X	X	X
Luca Bellucci	ISMAR	X	X	X
Alina Polonia	ISMAR	X	X	
Luca Gasperini	ISMAR		X	
Lucilla Capotondi	ISMAR	X	X	X
Alessandra Borgatti	ASTER	X	X	X
Maria Grazia Zucchini	ASTER	X	X	X

Day 1 - Monday 9 October 2006

09:30- 10:30 Opening session

The meeting was opened by the project coordinator Mr.Zitellini. After a warm welcome address to everybody in CNR – ISMAR facilities, Mr.Zitellini presented a short project overview, illustrating the Nearest key original concepts, the project overall objectives, basic project structure and main expected results (see Project presentation slides on the project website). Importance of a good cooperation among partners was stressed and links with other European projects outlined, in particular taking into consideration the SWIM project supported by the European Science Foundation and the TRANSFER project coordinated by the University of Bologna.

10.30- 12.45 Partners presentation

Each partner provided a brief presentation of its organization, pointing out the most relevant experience in the topic of the project and the main expectations from the project implementation. A mention to the internal staff assigned to the project execution was provided as well. Each presentation was supported by Power point slides or PDF files, available on the project website (<http://nearest.bo.ismar.cnr.it/>).

Introductory speeches were provided by

Nevio Zitellini	ISMAR	Partner_01_ISMAR.ppt
Maria Ana Batipsta	FFCUL	Partner_02_FFCUL.ppt
Juan Jose Dañobeitia	CSIC	
Mechita Schmidt-Aursch	AWI	Partner_04_AWI.pdf
Marc-André Gutscher	UBO	Partenr_05_UBO.ppt
Paolo Favali	INGV	Partenr_06_INGV.ppt
Hans W.Gerber	TFH	Partenr_07_TFH.ppt
José Morales Soto	UGR	Partenr_08_UGR.ppt
Fernando Carrilho	IM	Partenr_09_IM.ppt
Azelarab El Mouraouah	CNRST	Partenr_10_CNRST.ppt
Herculano Caetano	XISTOS	

Finally it was introduced the Italian organisation (Aster) supporting Ismar in the general project management: and the reference persons in charge of carrying out project assistance Ms. Zucchini and Ms. Borgatti.

12.45 – 13.00 Introduction to WP analysis sessions

The last morning session was devoted to the introduction of the afternoon session related to a careful analysis of all technical work packages, putting emphasis on the expected outputs. Actually the output of the WP session was intended to be a list of specific matters and issues to be discussed on Tuesday morning by a dedicated working groups.

13:00 – 14:00 Lunch break

14.00 – 18.30 Workpackage analysis sessions

Per each technical workpackage (WP1 to WP8) a 30 minute session was organized. Each session was opened by an introduction from the WP leader, outlining activities to be carry out, main goals to be achieved, the scientific aspects to be tackled, deliverable to be produced and foreseen milestones. The WP leader in some cases was supported by further speakers, illustrating specific tasks. In most cases presentations were supported by Power Point slides, available on the project website.

Maria Ana Baptista	FFCUL	NEAREST_WP01_Baptista.ppt
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Pedro Terrinha	FFCUL	NEAREST_WP01_Terrinha.ppt
Valenti Sallares	CSIC	NEAREST_WP02_Valenti.ppt
Luis Matias	FFCUL	NEAREST_WP03_Matias.ppt
Laura Beranzoli	INGV	NEAREST_WP04_Favali.ppt
Jose' Morales Soto	UGR	NEAREST_WP05_Morales.ppt
Eulalia Gracia	CSIC	NEAREST_WP06_Gracia.ppt
Maria Ana Baptista	FFCUL	NEAREST_WP07_Baptista.ppt

An open discussion phase took place at the end of each WP session in order to let the main criticalities emerge as detailed here below:

WP1 Analysis -Tsunami source identification (Leader: FFCUL)

presentations made by Maria Ana Baptista and Pedro Terrinha)

Task 1.1 Review of sources of tectonic origin

Task 1.2 Review of sources due to slope instabilities

Task 1.3 Synthesis on tsunamigenic sources, characterisation and selection of the site for the deployment of a seafloor platform based on the GEOSTAR technology

Critical aspects to be taken in careful consideration:

- 1) Interaction with WP2
- 2) Collection of the whole available MCS data set
- 3) Acquire some TGS data? Permission to have access to it?

WP2 Analysis: Tsunami source characterisation (WP 2 Leader: CSIC)

presentations made by Valenti Sallares)

Task 2.1 Reprocessing and Pre-stack depth migration of existing MCS data

Task 2.2 Wide-Angle reflection/refraction acquisition experiment

Task 2.3 Processing and modelling of wide-angle seismic data

Critical aspects to be taken in careful consideration:

- 1) Which pre-stack MCS line to be processed ?
- 2) To choose the location of refraction line (on top of pre-existing MCS, new lines?)
- 3) Time required for the processing ?
- 4) Ship time (different possible scenario)
- 5) Application for LSF of Geomar !!
- 6) Number of OBS available by the team (different scenario) ?
- 7) Shooting on top of AWI OBS (do we have to plan a separate cruise for that, can we do it at the end of the 12 months deployment ?

WP3 Analysis Seismological monitoring (WP3 Leader: AWI)

presentations made by Luis Matias)

Task 3.1 Application for the broadband OBS

Task 3.2 Preparation of the cruises

Task 3.3 Cruise for deployment of the broadband OBS

Task 3.4 Cruise for recovery of the broadband OBS

Task 3.5 Pre-processing and database compilation

Task 3.6 Processing of the OBS data

Critical aspects to be taken in careful consideration:

- 1) Calibration campaign (see above) ?
- 2) PhD student to be planned for other two years after the termination on NEAREST
- 3) Who can give help on this matter ?
- 4) Planning to embark equipment on board Urania

WP4 Analysis Tsunami signal detection (WP4 Leader: INGV)

presentations made by Laura Beranzoli)

- Task 4.1 Definition of sensor requirements and sensor selection; requirements of the detection software (e.g., detection algorithm, triggering threshold, messages) .
- Task 4.2 Design and development of modifications (e.g., sensor supports of the frame); design and development of the software .
- Task 4.3 Integration of new sensors/devices and new software in the seafloor observatory, tests of the functionality in laboratory .
- Task 4.4 Preparation planning and implementation of a long-term (about 1 year) mission; cruises for deployment and recovery. .
- Task 4.5 Data back-up, quality checks, preparation of the data base to be integrated with other data; pre-analysis of 'parent' tsunami signals.

Critical aspects to be taken in careful consideration:

- 1) Which kind of sensors have to be installed on the "GEOSTAR" ?
- 2) Kind of signal we have to send to the shore
- 3) Remember the restriction: max deployment depth= 3.500 meters
- 4) Planning to embark equipment on board Urania

WP5 Data integration / Integrated Tsunami Detection Network (WP5 Leader: UGR)

presentations made by Jose' Morales Soto)

- Task 5.1 Establishment of 3 data collectors for real-time automatic processing of data (one in Portugal, the other in Spain and a 3rd one in Morocco). This will involve i) Waveform sharing between data collectors, integration of seismic data including OBSs; ii) 1b Integration of tide gauge data; iii) Integration of multiparameter data from seafloor observatory.
- Task 5.2 Development of automatic procedures for rapid determination of seismic parameters and definition of thresholds for triggering the tsunami detection procedures .
- Task 5.3 Development of an effective tsunami detection methodology. Definition of thresholds for issuing different levels of alarm messages .
- Task 5.4 Testing the tsunami warning system using synthetic data streams generated at WP8 .

Critical aspects to be taken in careful consideration:

- 1) Water level data integration
- 2) Common format of recording seismological data
- 3) Include GPS data/people ?

WP6 Analysis - Paleotsunami and Paleoseismic records (WP6 Leader: CSIC)

presentations made by Eulalia Gracia)

Task 6.1 Onshore sedimentological evidence of tsunami records

Task 6.2 Offshore sedimentological evidence of earthquake events

Task 6.3 Onshore-Offshore Correlation: Paleoseismicity and recurrence rate

Critical aspects to be taken in careful consideration:

- 1) Make a connection with the Spanish Geological Survey?
- 2) Campaign at sea ? Possible scenario !!
- 3) Planning of field work/selection of sites

WP7 Analysis Modelling of tsunami impact in SW Portugal (WP7 Leader: FFCUL)

presentations made by Maria Ana Baptista)

Task 7.1 Collation of the New Bathymetric Data

Task 7.2 Implementation of a numerical tsunami model for SW Portugal

Task 7.3 Simulation of the 1755 tsunami in the Boca do Rio area

Task 7.4 Production of inundation maps for Lagos-Sagres

Task 7.5 Validation of models

Critical aspects to be taken in careful consideration:

- 1) Cruise for multibeam acquisition? Who is going to organize (Scenario)?

WP8 Analysis - Feasibility study and prototype for an EWS (WP8 Leader: FFCUL)

presentations made by Luis Matias?)

Task 8.1 Simulation of tsunami generation scenarios

Task 8.2 Simulator for the decision-maker authorities

Critical aspects to be taken in careful consideration:

- No major problems envisaged at this stage !

Day 2 - Tuesday 11 October 2006

09:00 – 10:00 Definition of the Nearest Working Groups

Mr. Zitellini summarized the main outputs from the technical Workpackage sessions.-For each set of major problems pointed out during the WP analyses, a Working Group was established to identify the most proper strategies to face each possible difficulty during the project execution. Eventually it was decided to arrange 3 Working groups. For each Working group a coordinator and a rapporteur has been identified, moreover the complete list of participants was agreed as well.

WG1 took into considerations main critical issues relate to WPs 1-2-3

WG2 took into considerations main critical issues relate to WPs 4-5-8

WG3 took into considerations main critical issues relate to WPs 6-7

10:00-11:30 The Cooperation Agreement

Before starting the Working groups activity, a specific session was devoted to the final discussion related to the Nearest Cooperation Agreement (CA), starting from the initial version of the document sent to all partners before the meeting.

A special focus was put to the main critical CA issues (see the a specific CA Power point presentation illustrated by Ms. Zucchini), to obtain final consensus on terms, conditions and procedures to be adopted for a proper project management and implementation. All the modifications and integrations proposed by the partners to the initial CA version were discussed and final agreement was obtained for each specific issue. Decisions taken were reported in the CA Power Point presentation available on the Nearest website (file: consortium_agreement.ppt).

Finally Ms Zucchini described the procedure to be followed to get signatures of the definitive CA version and obtain the complete original signed documents to be sent to each project partner.

12:00 -13:00 Working Groups meetings Part I

14:00 - 16:00 Working Groups meetings PartII

3 parallel sessions were arranged

16:00 -17:00 Working Groups report elaboration according to a common format, taking into consideration technical planning for the whole project General

17.00 - 18.00 The Working Groups outputs: presentation of the WG reports to the general assembly

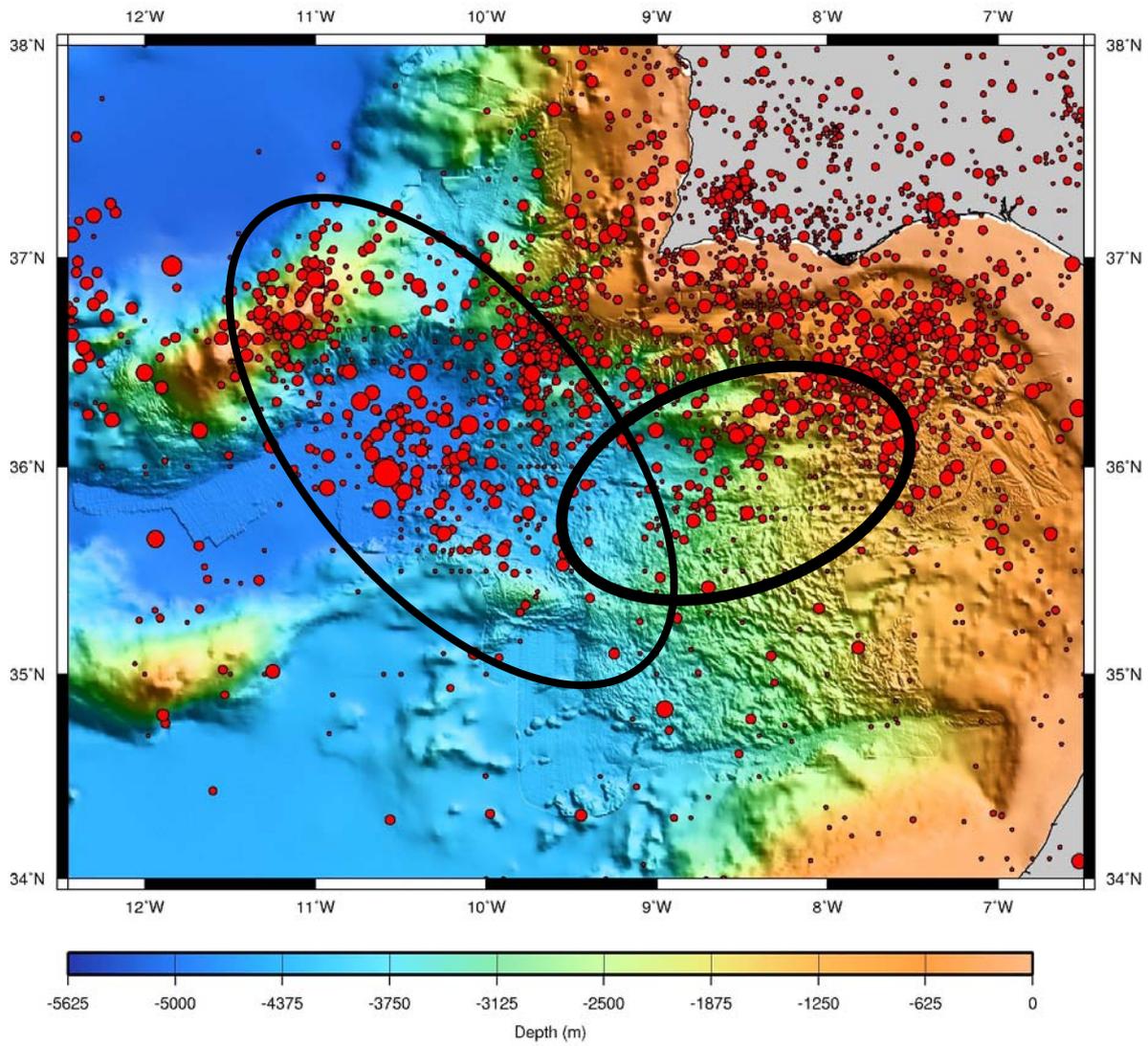
The output of the 3 working sessions are reported hereinafter:

NEAREST KICK-OFF MEETING

Working group	1
Focus on	WP1, WP2, WP3
Participating organisations	Participant names
CNR-ISMAR	Luca Gasperini - Gabriela Carrara
FFCUL	Pedro Terrinha
CSIC	Juanjo Danobeitia - Valenti Sallares
AWI	Wilfried Jokat - Mechita Schmidt-Aursch
UBO	Marc Andre Gutscher
INGV	/
TFH	/
UGR	/
IM	/
CNRST	Alzelarab El Moraouah
XISTOS	/
Meeting room	213
WG facilitator	Juanjo Danobeitia
WG rapporteur	Pedro Terrinha
WG Report	
Problems analysed	<p>01. Interaction between WP1- WP2</p> <p>02. Collection of the whole available MCS data set</p> <p>03. Acquire some TGS data? Permission to have access to it?</p> <p>04. Which pre-stack MCS line to be processed ?</p> <p>05. To choose the location of refraction line (on top of pre-existing MCS, new lines?)</p> <p>06. Time required for the processing ?</p> <p>07. Ship time (different possible scenario)</p> <p>08. Application for LSF of Geomar</p> <p>09. Number of OBS available by the team (different scenario) ?</p> <p>10. Shooting on top of AWI OBS (do we have to plan a separate cruise for that, can we do it at the end of the 12 months deployment ?</p> <p>11. Calibration campaign (see above) ?</p> <p>12. PD to be planned for other two years after the termination on NEAREST</p> <p>13. Who can give help on this matter ?</p> <p>14. Planning to embark equipment on board Urania</p>
Solving methods identified	<p>01. Interaction between WP1- WP2:</p> <ul style="list-style-type: none"> - 1st make tectonic map (FFCUL and discuss with others); - 2nd select set of MCS of key geological features; - 3rd select MCS which to be depth migrated. (see sheet1). <p>02. Collection of the whole available MCS data set</p> <p>03. Acquire some TGS (commercial MCS) data? Permission to have access to it? (FFCUL will inquire).</p>

	<p>04. Which pre-stack MCS line to be processed ? Check which have been pre-stack migrated and after tectonic map is completed decide upon which to migrate. Obtain velocity model and apply to convert TWT tectonic map into depth tectonic map.</p> <p>05. To choose the location of refraction line.</p> <p>06. Time required for the processing ? 2 months for each line.</p> <p>07. Ship time Question will remain open until end of WP1 because Hesperides won't be free until 15th Oct. - 2nd Nov. 2008. Urania time slot will be know at end of 2006.</p> <p>08. Application for LSF of Geomar. CSIC will apply ASAP.</p> <p>09. Number of OBS available by the team? 24 broad band (AWI) possibly one more from UTM to characterize noise in study area.</p> <p>10. Shooting on top of AWI's OBS. For selected area see figure sheet 2.</p> <p>11. Calibration campaign. Hesperides will shoot in June 2008. Urania can eventually shoot after deployment in September 2007.</p> <p>12. PhD to be planned for other two years after the termination on NEAREST. Nevio will search for extra funding for PhD-AWI. UTM has funding for PhD in geophysics; advertise all contracts on NEAREST web page.</p> <p>13. Who can give help on this matter? Each team will look for adequate candidates.</p> <p>14. Planning to embark equipment on board Urania. ISMAR will take care of this issue.</p>
Checking points	
Responsible/s	
SC-decision	
AB involvement	

Prestack depth migration lines							
mcs-lines	actions done		criteria	line-quality	source	responsible	2month for altogether
IAM-3	depth converted		st. Vicent Cape-Coral Patch Ridge			FFCUL/CSIC	2 months
IAM-4	to be checked		Accross Gorringe				2 months
CG-1			Perpendicular to Guadalquivir B.			FFCUL/CSIC	2 months
SW-1			N-S Portimao B.			CSIC	2 months
SW-2			NW-SE Coral Patch Ridge			CSIC	2 months
SW-13			NW-SE Coral Patch Ridge			UTM	2 months
SISMAR-22	pre-stack depth mig.		NW-SE cont. AR-10			UBO	
AR-10	depth-converted		Acrooss M. Pombal			ISMAR	2 months
AR-01	pre-stack depth mig.		E-W Gibraltar				
AR-06	partially done		NW-SE Cora Patch Smt.				2 months
REFRACTION LINES PROPOSED							
OBS DEPLOYMENT (LONG LASTING)							
AWI	24 OBS	2x20 f container					
first location area for seismicity network (see map)							
	first approach		calibration shot				
ship	deployment time	recovery time	June 2008 (Hesperides ?)			AWI/ CSIC	
R/V Urania	september 07	september 08				ISMAR/AWI	



Working group	2																												
Focus on	WP4,WP5, WP8																												
Participating organisations	Participant names																												
CNR-ISMAR	Francesco Chierici - Luca Pignagnoli																												
FFCUL	Luis Matias																												
CSIC	/																												
AWI	/																												
UBO	/																												
INGV	Paolo Favali - Laura Beranzoli-Davide Embriaco																												
TFH	Hans Gerber																												
UGR	Jose' Morales																												
IM	Fernando Carrillho																												
CNRST	Abdelouahad Birouk																												
XISTOS	Herculano Caetano																												
Meeting room	216																												
WG facilitator	Paolo Favali																												
WG rapporteur	Laura Beranzoli																												
WG Report																													
Problems analysed	<p>01. Kind of signal we have to send to the shore</p> <p>02. Which kind of sensors have to be installed on the "GEOSTAR" ? Remember the restriction: max deployment depth= 3.500 meters. Planning to embark equipment on board Urania</p> <p>03. Water level data integration</p> <p>04. Common format of recording seismological data</p> <p>05. Include GPS data/people ??</p>																												
Solving methods identified	<p>A working Group is established among WP 4-5-8 over the whole project duration: participants will exchange mails on most important aspects. Participants are:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Paolo Favali</td> <td style="width: 50%;">paolofa@ingv.it</td> </tr> <tr> <td>Laura Beranzoli</td> <td>beranzoli@ingv.it</td> </tr> <tr> <td>Birouk Abdelouahad</td> <td>birouk@cnrst.ma</td> </tr> <tr> <td>Daniel Stich</td> <td>Daniel@bo.ingv.it</td> </tr> <tr> <td>Fernando Carrilho</td> <td>Fernando.carrilho@meteo.pt</td> </tr> <tr> <td>Luis Matias</td> <td>lmacias@fc.ul.pt</td> </tr> <tr> <td>Herculano Caetano</td> <td>herculano.caetano@xistos.com</td> </tr> <tr> <td>Jose Morales</td> <td>morales@iag.ugr.es</td> </tr> <tr> <td>Hans Gerber</td> <td>hwgerber@tfh-berlin.de</td> </tr> <tr> <td>Giuseppe Stanghellini</td> <td>g.stanghellini@ismar.cnr.it</td> </tr> <tr> <td>Francesco Chierici</td> <td>chierici@ira.inaf.it</td> </tr> <tr> <td>Davide Embriaco</td> <td>embriaco@ingv.it</td> </tr> <tr> <td>Luca Pignagnoli</td> <td>l.pignagnoli@isac.cnr.it</td> </tr> <tr> <td>Gerardo Alguacil</td> <td>alguacil@iag.ugr.es</td> </tr> </table> <p>WP4 (refer items to Problems analysed)</p> <p>01. The types of signal to be acquired by GEOSTAR are: ground motion, water pressure.</p>	Paolo Favali	paolofa@ingv.it	Laura Beranzoli	beranzoli@ingv.it	Birouk Abdelouahad	birouk@cnrst.ma	Daniel Stich	Daniel@bo.ingv.it	Fernando Carrilho	Fernando.carrilho@meteo.pt	Luis Matias	lmacias@fc.ul.pt	Herculano Caetano	herculano.caetano@xistos.com	Jose Morales	morales@iag.ugr.es	Hans Gerber	hwgerber@tfh-berlin.de	Giuseppe Stanghellini	g.stanghellini@ismar.cnr.it	Francesco Chierici	chierici@ira.inaf.it	Davide Embriaco	embriaco@ingv.it	Luca Pignagnoli	l.pignagnoli@isac.cnr.it	Gerardo Alguacil	alguacil@iag.ugr.es
Paolo Favali	paolofa@ingv.it																												
Laura Beranzoli	beranzoli@ingv.it																												
Birouk Abdelouahad	birouk@cnrst.ma																												
Daniel Stich	Daniel@bo.ingv.it																												
Fernando Carrilho	Fernando.carrilho@meteo.pt																												
Luis Matias	lmacias@fc.ul.pt																												
Herculano Caetano	herculano.caetano@xistos.com																												
Jose Morales	morales@iag.ugr.es																												
Hans Gerber	hwgerber@tfh-berlin.de																												
Giuseppe Stanghellini	g.stanghellini@ismar.cnr.it																												
Francesco Chierici	chierici@ira.inaf.it																												
Davide Embriaco	embriaco@ingv.it																												
Luca Pignagnoli	l.pignagnoli@isac.cnr.it																												
Gerardo Alguacil	alguacil@iag.ugr.es																												

	<p>02. The sensors that are necessary to acquire the signals are: broad band seismometer, hydrophone, Differential Pressure Gauge (DPG), accelerometer (to overcome clipping problems, continuous and threshold);</p> <p>In order to send to a shore stations significant signals/parameters for tsunami warning, seafloor signal processing is needed on seismometer (100 Hz sampling rate recommended), DPG (1 Hz sampling rate, threshold is set according to the difference between the predicted tyde signal and actual DPG signal), accelerometer (triggered by seismometer). Transmission shall be trough the buoy equipped with radio link (max distance about 100 km) and satellite. Meteorological conditions do not affect the radio and satellite transmission up to 6+ sea state;</p> <p>Signal/parameter transmission mode from seafloor to shore: i) 1 automatic message per hour or day; ii) transmission upon request from shore iii) the seismometer and DPG independently shall trigger the warning message transmission. Trigger algorithm can be first tested on SN-1 signals.</p> <p>Separation of the real situation (event occurring) and of procedure for message transmission.</p> <p>In case of event trigger by the seismometer, the DPG time signal (time window could be in total 1 hour segmented in different messages) and a decimated signal of the seismometer (5-20 Hz, time window could be 30s—60s with a pre-event time of 3s-5 s) should be transmitted for warning purpose.</p> <p>03. Signals from operating tyde gauges are sample once every 2 -10 minutes; there is the need to increase the sampling rate (either 1 Hz or 1 sample every 15 s).</p> <p>WP5</p> <p>04. Each country among Portugal, Spain and Morocco will have Data Collector (e.g., IM site in Lisbon for Portugal) and each sensors shall have an IP address to allow the Data Collector to poll the sensors and retrieve data by accessing to the dedicated computer and convert in suitable format. Data Collector of each country will work on the seismological data format homogeneity. In principle all data will have the same format as seismological data.</p> <p>Data to make available for Data Collector are meteo data (e.g., temperature, pressure, wind velocity; wave height could be too expensive).</p> <p>MINI-SEED will be the standard format for data exchange (OBS data included)</p> <p>To establish in the Atlantic part of Morocco some sensors, sites are already selected; however noise studies are necessary.</p> <p>By the end of 2006 three more Broad band seismometers will be installed in real time transmission to Lisbon by IM.</p> <p>SEISCOMP system will be the best collector; it has to read the data from CNRST and UGR seismological networks. Related acquisition systems will be homogenised.</p> <p>Explore the possibility to cooperate with Western-Med and FOMAR projects (Luis Matias, Jose Morales).</p> <p>How to integrate the OBS data (50 Hz sampling rate) in the general data base?</p>
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	<p>Deliverables D19-requirements and design of tsunami triggering system and D20 -specification of the tsunami detection system can be the base of a document to be produced within the end of the project as reference on a general architecture of which NEAREST will build only a part as a step toward a TEWS.</p> <p>WP8 Need to define the target of the simulator (Xistos and FFCUL). The simulator will give the max run-up based on a simplified description of the coasts. The steepness of the coasts is a necessary input data. This will make the simulator as real as possible. Eventually partners will be asked to provide information on the coasts shape. Inundation maps are input to the simulator only where we know the topography of the coastal areas. Simulator will be further based on different domains (e.g., distribution of population, location of main services like hospitals). Simulator could be a training tool to understand which are the weak rings of the chain from inundation map, to communication with civil protection, to test the procedures aimed at starting actions for population safety. The simulator is not a crisis management tool but it will simulate a crisis to estimate the consequences of a tsunami. A second module of simulator will provide synthetic data streams to Data Collector for testing.</p>
Checking points	<p>WP4 1.5 -2 month circulation of a document of INGV about the requirements of sensors and measurements at the seafloor, requirements on the transmission. 2.5-3 reaction from partners and final version of the document issued. D10 will be anticipated in month 3.</p> <p>WP5 By the end of 2006 three more Broad band seismometers will be installed in real time transmission to Lisbon by IM. Installation of new broad-band sensors in Morocco will be after 1.5 year of the project beginning. Sensors (at least 1) will be provided by UGR.</p> <p>WP8 Definition of the target of the simulator on side Xistos and FFCUL. WHEN</p>
Responsible/s	<p>INGV, Paolo Favali – specifications of the seafloor signal sensors, acquisition and transmission. UGR, Josè Morales – installation of broad band sensors in Morocco FFCUL, Luis Matias, and UGR, Josè Morales – tray to establish link with Western-Med and FOMAR projects Xistos, Caetano, and FFCUL, Luis Matias - . target of the simulator</p>
SC-decision	The participants to the working group accept the proposal from UGR, IM and

	FFCUL to make the following changes for deliverables of WP5: D16 IM instead of UGR D17 FFCUL+IM instead of UGR D18 IM instead of UGR D20 FFCUL instead of UGR The proposal will be submitted to the project Coordinator.
AB involvement	

Working group	3
Focus on	WP6, WP7
Participating organisations	Participant names
CNR-ISMAR	Micael Marani- Fabiano Gamberi, Luca Bellucci Alina Polonia- Lucilla Capotonti Vigliotti Luigi
FFCUL	Maria Ana Baptista - Cesar Andrade
CSIC	Eulalia Gracia
AWI	/
UBO	/
INGV	/
TFH	/
UGR	/
IM	/
CNRST	Mohamad Hafid
XISTOS	
Meeting room	214
WG facilitator	Maria Ana Baptista
WG rapporteur	Eulàlia Gràcia
WG Report – WP6	
Problems analysed	<ul style="list-style-type: none"> - Planning the field work /selection of sites for tsunami deposit studies - Connection with IGME for drilling onland - New coring /HR seismic campaign at sea (different scenarios) - Correlation work / synthesis of onshore/offshore data
Solving methods identified	<p>Task 6.1.: Onshore sedimentological evidence of tsunami deposits</p> <p>a) We plan an onshore sampling during the 1st year. Suggestion of a 1st meeting on the 24-26 November 2006. Topics to discuss:</p> <ul style="list-style-type: none"> - State of the Art of knowledge: Sites/Reliability of pre-existing data; - How to core: equipment to be used and to be constructed (UNED) - Site Selection/Planning the field work: Spain, Portugal, Morocco - Transfer of expertise and analytical methodologies <p>b) We have also discussed about looking for tsunami deposits offshore (no previous experience):</p> <ul style="list-style-type: none"> - Tsunami deposits offshore can be first approached based on core BIGSETS (offshore Portimao) by Luigi Vigliotti (ISMAR) - Possibility to combine with the bathymetric cruise planned for WP7 to do some exploration survey for tsunami deposits offshore using a CHIRP system in very shallow areas (> 50 m depth) (e.g. Boca do Rio area, Cadiz area?) <p>Task 6.2.: Offshore sedimentological evidence of earthquake events</p> <ul style="list-style-type: none"> - Need to organize with Nevio about the possibility of taking some new gravity cores during the URANIA cruise in the Gulf of Cadiz in 2007 (deployment of GEOSTAR and OBS). Select to key areas for high-priority coring - There is a request for Hesperides / Sarmiento de Gamboa shiptime for Fall 2007 to Spring 2008 (NEAREST CORE). The cruise will be devoted to

	<p>piston coring, multicoring, high resolution seismics, heat flow profiles during 15-20 days in channels, near fault areas (Horseshoe Fault, Coral Patch Ridge), Seine Abyssal Plain and Moroccan Margin.</p> <ul style="list-style-type: none"> - Coordinate with UBO team (M.A.Gutscher) for the high-res. cruise and coring on the Moroccan shelf (sedimentation rates, fault activity?) <p>Task 6.3. Onshore / Offshore correlation: Paleoseismicity and recurrence rate</p> <ul style="list-style-type: none"> - Importance of time correlation, chronology and precise dating - We will contribute to the historical tsunami catalogue for Portugal, Spain and Morocco, with the sedimentological data we will get onshore and offshore
Checking points	<p>Task 6.1.: Onshore sedimentological evidence of tsunami deposits</p> <ul style="list-style-type: none"> - Mohamed Hafid will do a preliminary field survey in Morocco (fall 2006) - We will explore the possibility of collaboration with IGME for the long (200-30 m cores) in Doñana area (J. Lario, UNED) - Need to discuss on our potential contribution on the definition of a tsunami deposit based on different proxies (see Task 6.3) <p>Task 6.2.: Offshore sedimentological evidence of earthquake events</p> <ul style="list-style-type: none"> - Need to produce a map of existing sediment cores from the Gulf of Cadiz (Eulàlia / Nevio) - Need to produce a map of existing CHIRP /TOPAS profiles from the Gulf of Cadiz (Eulàlia / Nevio) - Need to organize with UBO-Bordeaux first results of their cores and comparison with UTM-CSIC results in SW Portuguese margin. <p>Task 6.3. Onshore / Offshore correlation: Paleoseismicity and recurrence rate</p> <ul style="list-style-type: none"> - To explore the historical events catalogue of GITEC project (INGV-Rome) - From existing samples onshore and offshore, ISMAR team will explore the x-ray internal structure and magnetic signature of sediments as a potential diagnostic to differentiate high-energy deposits (storm deposits, washover deposits, turbidites, tidal inlets...)
Responsible/s	<p>6.1. Cesar Andrade / Javier Lario / M. Hafid 6.2. Eulàlia Gràcia 6.3. Eulàlia Gràcia / Luigi Vigliotti / M. Hafid</p>
SC-decision	
AB involvement	

WG Report WP7	
Problems analysed	<p>7.1 Bathymetric data for inundation model</p> <p>i) Input from sedimentologists ii) Input from sedimentologists iii) Datum collation</p> <p>7.2 Implementation of a numerical tsunami model for SW Portugal.</p> <p>7.3 Simulation of the 1755 tsunami in the Boca do Rio area</p> <p>7.4 Inundation Maps</p> <p>7.5 Model Parameters: Inputs to tsunami source calculations WP1 and WP5</p>
Solving methods identified	<p>7.1 Collation of the New Bathymetric Data with a dedicated cruise. Homogenize data (Datum problem)</p> <p>7.2 Implementation of a numerical tsunami model for SW Portugal. Grid Nesting: Implement computing techniques to obtain the best grid nesting To choose among different techniques to calculate run up: TsuN2, SWAN, other codes; CGUL in collaboration with CNRST Scholarship Close cooperation and exchange data with TRANSFER (Mauricio Gonzales + Miguel Miranda)</p> <p>7.3 Simulation of the 1755 tsunami in the Boca do Rio area Input from sedimentologists: -Permission for data coring in the Algarve; Responsible Cesar Andrade; - Data from GITEC coring; Responsible Cesar Andrade; This should be complete by the end of 2007. - Reconstruction of the Paleo topographic surface upon which the tsunami run on, including contemporaneous erosion; Responsible Cesar Andrade. - Secular Variation of the earth magnetic field to identify the differential gaps upward the Boca do Rio valley; Estimated time for field work: 2 days Input costs: ISMAR (?) Responsible Luigi Vigliotti;</p> <p>7.4 - Production of inundation maps for Lagos-Sagres Sites selection depending on pre-existing DEM Roughness parameters in collaboration with TRANSFER</p> <p><i>Task 7.5 - Model parameter validation</i> Ocean bottom pressure data and focal parameters+magnitude+ epicenter provided by Input from ISMAR Francesco Chiericci/LMatias</p>
Checking points	<p>7.1 Produce the bathymetric map</p> <p>7.2 Grid Nesting; Inundation Model</p> <p>7.3 Simulation of the 1755 tsunami Production of Virtual Tide Gages for several points at Boca do Rio Valley</p>

	<p>Check the results against historical and sedimentological data compare run in. distances estimated by sedimentologists and data from historical eyewitnesses</p> <p>7.4 Inundation Maps Site Selection Existence and availability of DEM Production of preliminary map Inundation Maps</p>
Responsible/s	<p>7.1 Miguel Miranda/ Joaquim Luis</p> <p>7.2 Maria Ana Baptista/Miguel Miranda/M Gonzales (TRANSFER)</p> <p>7.3 Maria Ana Baptista/Cesar Andrade Gracia/Luigi Vigliotti</p> <p>7.4 MiguelMiranda /Maria Ana Baptista/Pedro Soares</p> <p>7.5 Maria Ana Baptista/FrancescoChiericci/Luis Matias</p>
SC-decision	
AB involvement	

Day 3 - Wednesday 11 October 2006

9.00-10.30 Financial and administrative procedures

Mrs. Zucchini presented the main key issues related to the project financial administration, pointing out budget composition, cost models, payments modalities and financial reporting schemes (see the slides supporting the intervention are available on the project web site, file: Financial_issues.ppt). The Coordinator added some specifications about the pre-financing's bank transfer, distributing to everybody a paper copy of the budget breakdown with indication of the pre-financing amount to be transfer to each partner.

During the open discussion that followed, the partners had the opportunities to obtain clarification to a number of financial / administrative issues.

10:30-11:00 Project management issues

Mrs. Borgatti presented the management structure of Nearest as foreseen in the Consortium Agreement. A specific focus was made on reporting issues: periods, documents to be prepared and deadlines with an overview on the three year of the project (see the slides supporting the intervention are available on the project web site, file: management_issues.ppt). No specific questions raised from the partners.

The composition of the **Steering Committee** was agreed as follows:

Partner n.	Acronym	Steering Committee member
1	ISMAR	Nevio Zitellini
2	FFCUL	Maria Ana Baptista
3	CSIC	Juan Jose Dañobeitia
4	AWI	Willfried Jokat
5	UBO	Marc-André Gutscher
6	INGV	Paolo Favali
7	TFH	Hans W. Gerber
8	UGR	José Morales Soto
9	IM	Fernando Carrilho
10	CNRST	Azelarab El Mouraouah
11	XISTOS	Herculano Caetano

A initial list of scientists to be involved in the **Advisory Board** was drafted out with the contribution of all the partners. The Coordinator will circulate the list in order to obtain the complete references of all the proposed scientists. Each partner will have the possibility to propose further scientist.

11:00-11.30 During the **coffee break**, the Coordinator presented some logo proposals. A female jury selected two of the most representative logos and the general assembly took the final decision.

11:30-12:00 Communication and promotion issues

The coordinator presented the project website, on-line since the starting date of the project, and described the upcoming implementation of the restricted area. After an open discussion, the partners suggested that a specific proposal on the communication and dissemination development would be prepared by ISMAR as work package leader.

As for internal communication, it was proposed that the database of the relevant contact persons in each partners' institutions (collected during the meeting) would be made available in the restricted area. Moreover, the Coordinator distributed one web camera per partner in order to ease the communication flow in some specific occasions.

12:00-13:00 The TRANSFER project and its potential links with NEAREST

Mr. Tinti, coordinator of Transfer project (Tsunami Risk ANd Strategies For the European Region), presented an overview of the main objectives and activities that will be tackled during his project

and explained the possible collaboration with Nearest. The assembly of partners expressed a considerable interest and next steps of collaboration were agreed (back link, invitation to meetings, exchange of data, etc). Nearest Coordinator reminded to the partners the importance of these collaborations mentioning other EU funded projects with possible connection to Nearest one. (A copy of the presentation is available on the project website, file: TRANSFER.ppt)

14:00 End of the kick-off meeting

At the end of the session, it was agreed that the next meeting will be hosted by FFCUL in Lisbon. Taking into consideration a number of constraints, the best period was identified in the third week of May (between 14th and 18th).