

1.3.3 NA4 : Distributed Archive of Historical Earthquake Data

Participant number	11	14	20	3	16				
Participant short name	INGV	BGS	IGC	ETHZ	ITSAK				Total
Person-months	20(4)	14	7.8	10 (6.3)	8				59.8(10.3)

Summary

With reference to the detailed implementation plan for the first 18 years, the first year activities were devoted to: i) retrieve, analyse and update the material already inventoried in the frame of previous national and international projects; ii) to start compiling the reference earthquake data inventory and collecting the inventoried material, with main attention to the time-window 1000-1600, also interacting with the seismological institutions not taking part in the project; iii) to start the assessment of the criteria for the establishment of a common, macroseismic intensity database and the determination of the earthquake parameters according to which the European parametric earthquake catalogue will be compiled.

Achievements

After the kick-off workshop, with respect to the first goal all the partners performed their task and started to make information, material and related explanation available to the project. BGS took care of UK and Scandinavia; IGC of the whole Iberian Peninsula; INGV of Italy and of European countries which are not partner of the project, using funds of INGV: Slovakia, Hungary, Bulgaria, Slovenia, Greece (additional contribution expected from NKUA, Athens), Russia. With respect to the second goal, the main efforts were in charge to INGV, who interacted with partners and associated partners for the compilation of the general Working File 1000-1600, which is now available through a dedicated internal website, open to partners only. As for the third goal, the initiative was taken by BGS, who organised a dedicated workshop devoted to survey the varied approaches used by the European institutions to determine earthquake parameters from macroseismic data. INGV took care of analysing the existing intensity databases and started developing a provisional version, based on D-Space open source software, of the electronic archive which will store the supporting literature.

Impact

At the end of the first 12 months we have a rather clear view of the situation at a European level which, unfortunately, is very inhomogeneous. A working file has been compiled, covering the time-window 1000-1600, merging together the most useful parametric catalogues together with the most recent studies not yet used by the previously mentioned catalogues. This working file provides an inventory of the basic material (also called roots) from which the new earthquake parameters can be determined. It clearly shows a major, very well known problem: in many cases, the roots are not available, so that the parameters cannot be determined according to alternative methods and the methods according to which they have been determined at a national level are only partly transparent. However, the main achievement is represented by clearly showing the situation, so that it can be clear to anybody and, mostly, to the end-users; and, of course, the situation will be improved in the next years of the project.

Two partners (INGV and ETHZ) already maintain national, dedicated websites (<http://histserver.ethz.ch/> and <http://emidius.mi.ingv.it/DBMI04/>), which are constantly upgraded.

Problems and remedies

There have been no main deviations from the work planned. Although the goals have been achieved, the main problems found are: a) the permanent difficulties from the European institutions to make the data available, and in some cases to retrieve their own basic data; b)

the highly inhomogeneous methods used for the parameters determination, and the scarce willingness of some partners to allow multiplicity; c) last but not least, the scarce number of partners of the module with respect to the number of European countries and institutions. This problem has been partly tackled by the initiative and separate funding of INGV, but it has not completely solved.

Milestones and deliverables

Deliverable/ Milestone No	Deliverable/Milestone Name	Workpackage /Task No	Lead Contractor(s)	Planned (in months)	Achieved (in months)
D1	Reference catalogue and guidelines ("Working file 1000- 1600" *)	1,3	INGV	18	12
M1	Kick-off meeting	all	INGV	-	4

*) The report is essentially contained in the web page.

Meetings and workshops

Date	Title/subject of meeting /workshop	Location	Number of attendees	Website address
29-30. 09.06	Kick-off	Milano	15	Minutes ¹
26-27 02.07	Earthquake parameters assessment	Edinburgh	10	Minutes ¹
23-24 04.07	Review of Iberian data	Barcelona	5	Minutes ¹
26.04.07	Review of Greek data	Athens	4	Minutes ¹

¹ Made available in the NERIES Intranet site (<http://neries.knmi.nl>)