QUESTIONNAIRE

Please, fill in the Questionnaire and return it to contact person in Moldova:

depintrel@asm.md. Phone: 272254

	Details about organisation
* **Organisation name**	Institutue of Geology and Seismology
Organisation acronym	
* **Organisation Activity** Type (**RES** - Research, **HE** - University, **SME** - Small and Medium Enterprise, **IND** - Industry, **OTH** - Other)	**RES**
* **Keywords of main research areas**	Geology, Seismology, Hydrogeology
* **Head of organisation (first name, family name)**	Vasile Alcaz
* **Post code**	MD-2028
* **Country**	Republic of Moldova
* **City**	Chishinau
* **Street, House**	Academiei, 3
* **Telephone (+ country & city codes)**	(+37322)739027
* **Fax (+ country & city codes)**	(+37322) 739663
* **E-mail**	alcazv@yahoo.com

* **Description of organisation and its research achievements for the last five years (~ 5000 signs)**
Institute of Geology and Seismology. **Laboratories:** Seismology; Earthquake Engineering; Complex Research of the Earth Crust; Geochemistry; Hydrogeology and Engineering Geology; Center of Experimental Sseismology. The Institute was established in 1967 on the basis of the Institute of Geology and Minerals of the former USSR and of the seismic station "Chisinau". The specialists of the Institute have systematized and subjected to detailed analysis the data obtained via registration of seismic processes that occurred on the territory of the Republic of Moldova. These data constitute the basis for studying the seismic hazard on the territory of the Republic, the mechanism of the Vrancea deep seismic earthquake focus in the Oriental Carpathian Mountains, as well as the evaluation of seismic prognosis. Using such data the Institute has drawn up the map of Moldova's territory seismic macrozoning, as well as the maps of seismic microzonation of some cities and located in zones with different degrees of seismicity. These maps and other valuable elaborations in seismology are used by numerous institutions and organizations in housing, industrial and social designing and building. In their scientific researches the specialists of the Institute utilize modern seismic devices and modern computers thus making it possible to accelerate essentially the efficient analysis of seismic events and to establish the earthquake focus parameters of Vrancea and world earthquakes . In the regional geology the collaborators of the Institute have drawn up the tectonic map of Moldova at the scale of 1:500000, which reflects the evolution of land crust from archaic till Neocene. It is used by different organizations with geological profile for planning and geological prospecting on the territory of the republic. Also, the map of gullies and land-slides on the same territory has been drawn up, which can be used for design of constructions in the rural area. Concrete proposals have been elaborated for improving the lands affected by destructive geological processes and for minimizing the danger of soil erosion. The activity of the Institute in recent years has been also characterized by the obtaining of certain fundamental and applied results in studying the underground water, the geochemical technogene processes and the processes of riverbed of small rivers. At present, the collaborators of the Institute are engaged in fundamental researches aimed at determining the seismic parameters of Vrancea earthquakes, elaboration of seismic hazard prognosis on the territory of the Republic of Moldova as well as its supply with local raw material.

	Contact Information
* **Contact person (first name, family name)**	Vasile Alcaz
* **Department / Laboratory**	Laboratory of Earthquake Engineering
* **Position**	Director of Institute and Head of Laboratory
* **Qualification and research experience**	Seismologist, research experience- 30 yr
* **Post address (house, street, city, code, country)**	Academiei, 3, Chishinau MD-2028, Republic of Moldova
* **Telephone (+ country & city codes)**	(+37322)739027
* **Fax (+ country & city codes)**	(+37322) 739663
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International co-operation / Participation in EU RTD programmes or other bilateral / multilateral actions INTAS, TACIS, TEMPUS, COST, EUREKA, other RTD programmes (please specify programme/s, project title/s and year/s
1)TACIS Project "Prut River Water Management" (1999-2000); 2) INTAS Project "Numerical analysis of 3D seismic wave propagation using Modal Summation, Finite Elements and Finite Difference methods (2006-2008); 3) NATO Project "Harmonization of Seismic Hazard and Risk Reduction in Countries Influenced by Vrancea Earthquakes" (2006-2008); 4) NATO Project "Quantification of Earthquake Action on Structures(2006-2008)

	* **Please, use "X" to indicate the scientific area/s of your potential project**
CHEMISTRY	
SOCIAL AND HUMAN SCIENCES	
ECONOMIC SCIENCES	
ENGINEERING SCIENCE	
ENVIRONMENT	X
AGRICULTURE AND FOOD	
HEALTH	
MATHEMATICS	
INFORMATION SCIENCE	
PHYSICS	
NANOTECHNOLOGIES	
ENERGY	
TRANSPORT	
SPACE	

* **Summary of potential research project envisaged hosting of European researcher for the period of between 1 and 2 years**
The joint research project concerning urban seismic risk assessment is proposed. The primary objective of the proposed research is to develop, test and implement new procedures and software for assessment of seismic risk for urban areas. GIS-oriented risk analysis models, based on probabilistic concepts will be developed. Existence of rich geophysical and geotechnical data, earthquake, special blasts and microseisms records for the cities in Moldova as well as databases of buildings' damages will be used to validate accepted techniques and methodology for risk forecasting. The main anticipated results of the project are completion of: (i) a methodology for estimation of seismic risk for urban areas, (ii) Geographical Information System (GIS) summarizing seismic ground motions

and databases of geotechnical and building stock information, with emphasis on construction vulnerability assessment and mapping of losses due to future events, (iii) establishment of the relationships between local soil conditions and earthquake impact, and (iv) an assessment of damages to built facilities from scenario earthquakes for two case study areas.

	Please, confirm your agreement on data publication and dissemination
I agree with the publication of the data on the web-site **http://www.inco-eeca.net**, and **dissemination** among Mobility National Contact Points of the EU MS and AC **(YES / NO)**	Yes, confirm
Date 11/06/2008	