

## 15<sup>th</sup> Meeting of the Association of European Geological Societies

# MAEGS-15

### *Georesources and public policy: research, management, environment*

### Third Circular and Programme, August 2007

MAEGS-15, the 15th Meeting of the Association of European Geological Societies, will take place on 16–20 September 2007, in Tallinn, Estonia, organised by the Geological Society of Estonia.

The conference will be devoted to georesources and their management, which are among the key issues not only in present-day Earth sciences but also in politics and the world economy. MAEGS-15 is closely connected with the International Year of Planet Earth, an initiative of IUGS and UNESCO aiming to increase the knowledge and public awareness in geosciences.

As of August 2007, nearly 90 participants have been registered and nearly 60 presentations are scheduled. Topics of presentations range from state-of-art overviews to regional examples of exploitation and management of various georesources.

This circular provides some practical information as well as detailed scientific programme of the conference. If you have any questions not answered here, please do not hesitate to contact the organisers by e-mail: [maegs15@maegs15.org](mailto:maegs15@maegs15.org) (optionally [Olle.Hints@gi.ee](mailto:Olle.Hints@gi.ee) or [Olle.Hints@gmail.com](mailto:Olle.Hints@gmail.com)), phone: **+372 620 30 10 / +372 505 48 23** or Skype Internet Phone: [olle.hints](http://olle.hints).

### Checkpoints

- General talks will be **20 minutes** including questions and discussion. The preliminary schedule of talks is provided below. Please check if the title is correct and let us know if the first author is not the corresponding author.
- Please let us know if you prefer vegetarian food or have any special requirements.
- Please let us know about your arrival and departure dates (e-mail: [maegs15@maegs15.org](mailto:maegs15@maegs15.org)) so that we can arrange the Ice Breaker Party on September 15th, and arrival time from the excursion on September 20th.
- If you haven't arranged your accommodation we urge you to do so at the earliest possibility (see below the list of some options).

### The programme at a glance

<b>15. September, Saturday</b>	Registration of participants and Ice Breaker Party and walking tour in the UNESCO World Heritage Old Town of Tallinn
<b>16. September, Sunday</b>	Technical sessions
<b>17. September, Monday</b>	Technical sessions AEGS EC meeting
<b>18. September, Tuesday</b>	Technical sessions AEGS General Assembly Conference Dinner
<b>19 September, Wednesday</b>	Geological excursion, northern Estonia
<b>20 September, Thursday</b>	Geological Excursion, western Estonia

## About Estonia

Estonia (Republic of Estonia) is a country in Northern Europe. Its area is 45 227 km<sup>2</sup>. The capital of Estonia is Tallinn, famous by its medieval Old Town. The population of the country is 1.4 million and about 0.4 million people live in Tallinn. Estonia has land borders with Latvia to the south and Russia to the east. It is separated from Finland in the north by the Gulf of Finland and from Sweden in the west by the Baltic Sea. Estonia is a member of the European Union.

The currency is Estonian Kroon (EEK) and **1 EURO equals to 15.65 EEK**.

You should check out if you need visa for Estonia ([www.vm.ee/eng](http://www.vm.ee/eng)). If you need an official invitation, please let the organisers know.

Please note that the organisers cannot accept responsibility for accidents that might occur in connection with the conference or excursion. Delegates are encouraged to purchase travel insurance before leaving their home country.

For more information about Estonia and Tallinn see [www.visitestonia.com](http://www.visitestonia.com) and [www.tallinn.ee](http://www.tallinn.ee).

## Accommodation

Participants will be responsible for arranging their accommodation. If you haven't yet arranged your accommodation we urge you to do so at the earliest possibility. Below are some options and others can be found at Tallinn's website at [www.tallinn.ee](http://www.tallinn.ee).

<b>Hotel Mihkli ***</b>	5 minutes walk from the conference centre <b>Ask MAEGS special rate!</b> single room: EUR 58 double room: EUR 63 breakfast included	Phone: +372 666 4800 Fax: +372 666 4888 E-mail: <a href="mailto:reservationsmihkli@uniquestay.com">reservationsmihkli@uniquestay.com</a> Homepage: <a href="http://www.uniquestay.com">www.uniquestay.com</a> Address: Endla 23, 10122 Tallinn
<b>Hotel St. Barbara ***</b>	3 minutes walk from the conference centre <b>Ask MAEGS special rate!</b> single room: EEK 1240 (ca EUR 80) double room: EEK 1780 (ca EUR 90) breakfast included	Phone: +372 640 0042, +372 640 0040 Fax: +372 640 0041 E-mail: <a href="mailto:reservations@stbarbara.ee">reservations@stbarbara.ee</a> Homepage: <a href="http://www.stbarbara.ee">www.stbarbara.ee</a> Address: Roosikrantsi 2A, 10119 Tallinn
<b>Hotel Scandic Palace ****</b>	5 minutes walk from the conference centre <b>Ask for "birthday rate"!</b> single and double room: EEK 1400 (ca EUR 90) breakfast included	Phone: +372 6407300 Fax: +372 6407299 E-mail: <a href="mailto:eve.saar@scandic-hotels.com">eve.saar@scandic-hotels.com</a> Homepage: <a href="http://www.scandic-hotels.com/palace">www.scandic-hotels.com/palace</a> Address: Vabaduse Väljak 3, 10141 Tallinn
<b>Tatari Hostel</b>	10 minutes walk from the conference centre double room: EUR 33 breakfast: EUR 3 shared bathroom	Phone: +372 646 6287 Fax: +372 646 6287 E-mail: <a href="mailto:admin@tatarihostel.ee">admin@tatarihostel.ee</a> Homepage: <a href="http://www.tatarihostel.ee">www.tatarihostel.ee</a> Address: Tatari 21B, 10116 Tallinn
<b>Hostel Vana Tom</b>	5 minutes walk from the conference centre single room: EUR 42 double room: EUR 42 room for 3: EUR 57 room for 4: EUR 72 no breakfast, shared bathroom	Phone: +372 6313252 Fax: +372 6070099 E-mail: <a href="mailto:hostel@hostel.ee">hostel@hostel.ee</a> Homepage: <a href="http://www.hostel.ee">www.hostel.ee</a> Address: Väike-Karja 1, 10140 Tallinn
<b>Old House Hostel &amp; Guesthouse</b>	10 minutes walk from the conference centre 10% discount for ISIC and ITIC card owners single room: EUR 29-35 double room: EUR 41-42 shared bathroom, breakfast only in guesthouse	Phone: +372 641 1464 Fax: +372 641 1604 E-mail: <a href="mailto:info@oldhouse.ee">info@oldhouse.ee</a> Homepage: <a href="http://www.oldhouse.ee">www.oldhouse.ee</a> Address: Uus 22 (guesthouse), Uus 26 (hostel), Tallinn

## Venue

The conference will be held at the Conference Centre of the **Estonian National Library** ([www.nlib.ee](http://www.nlib.ee)), located in the centre of Tallinn, close to the historical Old Town, many hotels, restaurants and shopping centres. The Library Conference Centre has all technical facilities needed for presentations, free WiFi service etc. Lunches will be served in the library restaurant.

## Travel information

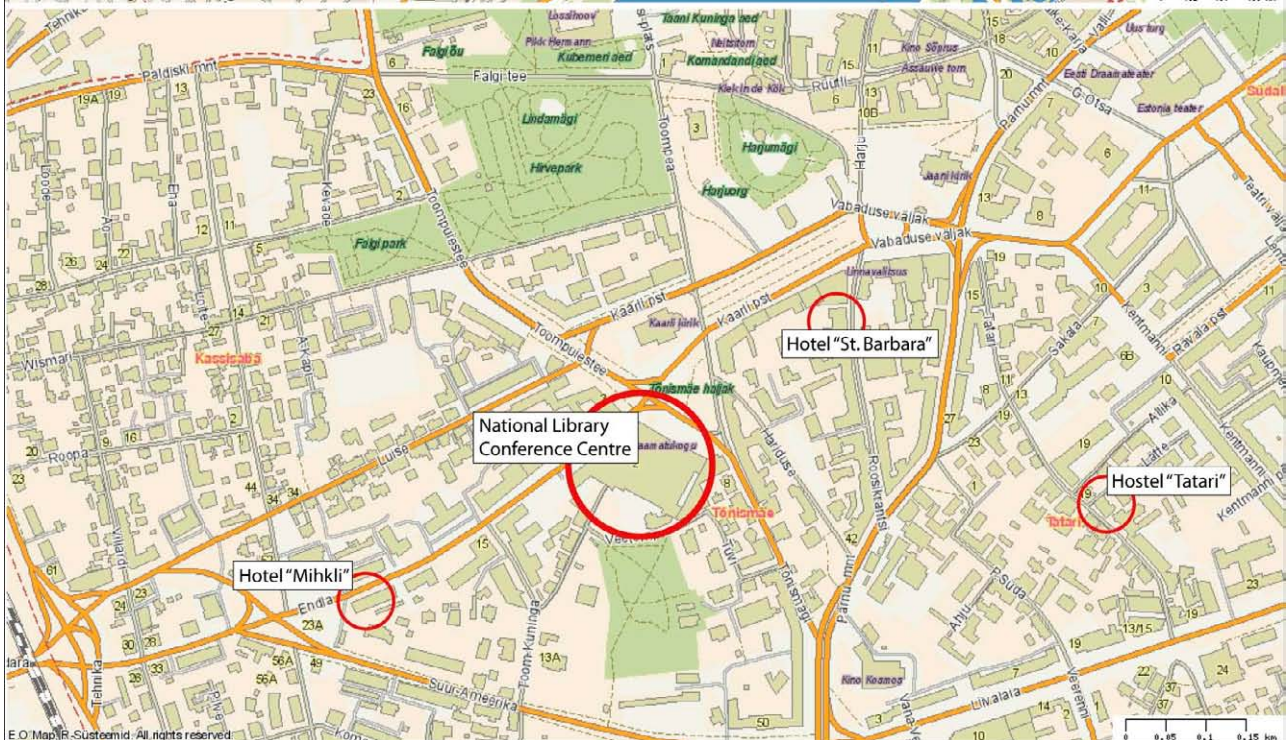
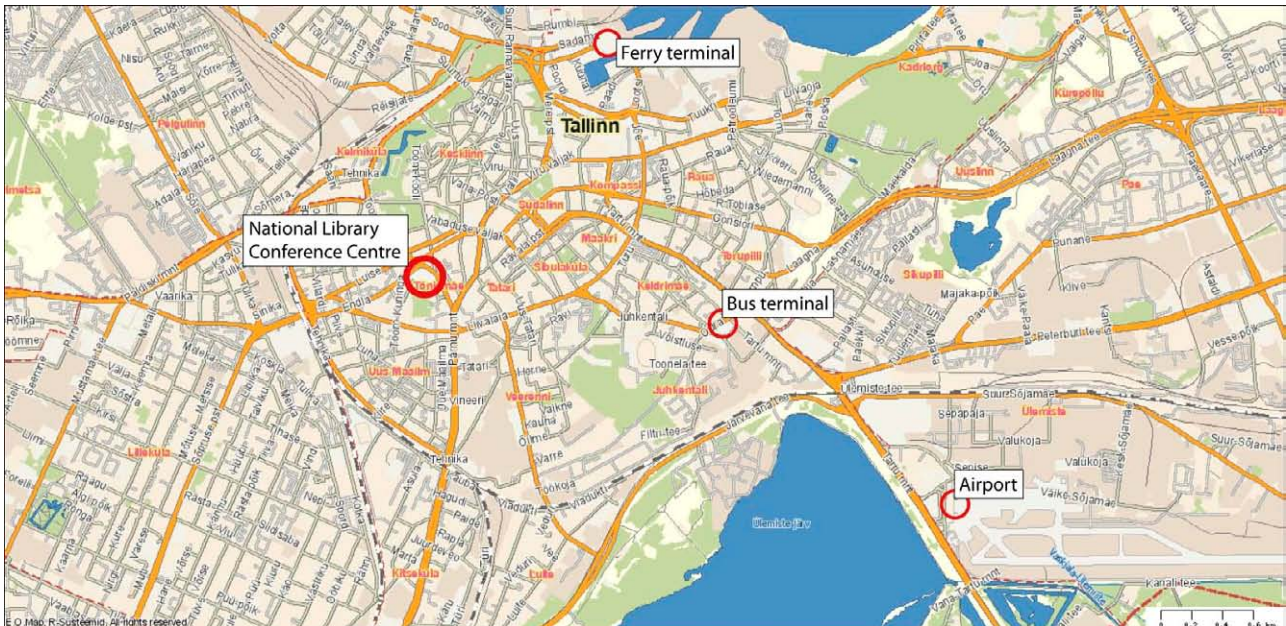
Tallinn has direct flight connection with many European cities. Ferries from Stockholm and Helsinki, numerous bus lines, and car transport are other options. Airport, ferry and bus terminals are located close to the city centre. The hotels and conference hall can be reached by taxi, public transportation or on foot. Check also [www.tourism.tallinn.ee/fpage/travelplanning/transportation](http://www.tourism.tallinn.ee/fpage/travelplanning/transportation).

**From airport.** The easiest way would be taxi (it would normally cost EEK 100-150). The other option is bus line 2, you need to get off at the stop "Laikmaa". Bus tickets can be purchased from the driver for EEK 15.

**From ferry terminal.** The old town is in walking distance. Bus line 2 (to stop "Laikmaa") or taxi can also be used.

**From bus terminal.** Take bus line 17A, 23 or 23A and get off at the stop "Vabaduse valjak". Bus tickets can be purchased from the driver for EEK 15.

**By car.** If you travel by car please note that the parking costs from EEK 12-24 per hour in most part of Tallinn city centre but hotels usually have their own parking lots.



Map of Tallinn City Center showing location of the National Library and some of the hotels. Please check [www.tallinn.ee](http://www.tallinn.ee) for interactive map to locate your hotel.

## Presentations

The official language of the conference will be English and no translation services will be provided.

Please note that slide shows of all oral presentations and images of posters will be published on the website after the conference under the Creative Commons License that allows using, modifying and distributing them for non-commercial purposes and with appropriate credit to the original author(s). If you feel incompatible with this, please let us know.

## Talks

Please prepare your talk for **20 minutes** including questions and discussion. Keynote speakers will have 30 minutes for their presentation. The LCD projector and PC computers will be available. Slide and overhead projectors could also be arranged but only if you let us know in advance. Please prepare your presentation in *Microsoft Power Point*, *OpenOffice.org Impress* or *Adobe Acrobat*. Network access and Internet connection will also be available. Presentations requiring special software please bring your own laptop. Users of Macintosh computers please ensure compatibility with PC.

The participants will be asked to copy their files well before their talk is scheduled, preferably already at the registration desk on September 15.

## Posters

Posters are to be prepared in standard A0 size (841 × 1189 mm), portrait. **Please provide the poster with a photo of the corresponding author** to ensure that anyone interested in your research can find you. Posters will preferably be hanged during the Ice Breaker on September 15 (from 17.00 to 21.00) or on September 16 before 9.00. Posters will be available during the entire conference and can be presented during the coffee breaks.

## Publication of selected papers

The papers to be published in the thematic issue of international geological journals will be selected during and shortly after the conference. Special issues in two international peer-reviewed journals, *Oil Shale* and *Estonian Journal of Earth Sciences* are planned. *Oil Shale* is ISI Current Contents indexed journal devoted primarily to oil shales and other combustible georesources, their geological and technological aspects whilst the *Estonian Journal of Earth Sciences* is a journal aiming at a broad range of geosciences. The balance between the two journals will be decided upon arrival of manuscripts.

The deadline for submitting the manuscripts will be **31 December 2007**, and publication of the volume(s) is expected in 2008. Please note that all papers will be peer-reviewed and edited as regular papers of the journals and acceptance of manuscripts cannot be guaranteed.

## Geological Excursion

The aim of the post-conference geological excursion on 19-20 September 2007 is to acquaint the participants with geology and major georesources of Estonia, government regulations regarding environment protection and particular production processes. The excursion will be guided by experts in regional geology, mining and protection of environment.

On the first day participants will visit NE Estonia to see localities and production of **oil shale** — a type of Upper Ordovician kerogene-rich rock that is used in power-plants and oil industry. It is worth mentioning that Estonia gets nearly 95% of its electricity from the oil-shale, being the leading country to utilize this georesource. Wide use of oil shale has introduced a number of environmental and social problems which will be also discussed during the excursion. Both opencast and underground oil shale mines will be visited. In addition the production of Middle Ordovician **building limestone** will be shown in the Vão quarry. This richly fossiliferous thin-bedded rock has been used in construction of the World Heritage Old Town of Tallinn. Lower Cambrian to Middle Ordovician succession of sandstones and limestones will be demonstrated at the **Baltic Klint** — a nearly 1200-km long landform that provides some of the most attractive geosites in Estonia.

Please note that participants will return to Tallinn and need to arrange their accommodation accordingly, as necessary.

The second excursion day will head to western and SW Estonia. First, the Vasalemma quarry exposing Ordovician **reef limestones** will be visited. Since peatlands are widespread in Estonia covering more than 20% of the territory, **peat** is also an important and widely utilised georesource. Production of peat will be demonstrated at a commercial Lavassaare deposit. After that a peatland in its natural state will be shown in beautiful and protected Tolkuse mire.

Participants will return to Tallinn at about 18.00.

The excursion is planned so that only moderate walking is needed. The temperature in September is usually between 10–20°C. Participants should however prepare for windy weather and possible showers.

## Social programme

The social programme includes Ice Breaker Party, a guided tour in UNESCO World Heritage Old Town of Tallinn, and the Conference Dinner (please note that the dinner is not included in regular conference fee).

Accompanying persons will visit museums and other tourist attractions and take part of the Conference Dinner.

## Registration and fees

If you are not yet registered but wish to take part of MAEGS-15 please contact the Conference Secretary by e-mail

[maegs15@maegs15.org](mailto:maegs15@maegs15.org), fax +372 620 30 11 or phone +372 505 48 23.

It will be possible to pay the conference fee, excursion fee and Conference Dinner at the registration desk by cash or credit card. However, if you need to use this option, please ensure that we know about your coming to make all necessary arrangements.

The conference fee (EUR 250 on-site) includes access to all sessions, abstract volume, coffee-breaks, lunches, excursion field guide and the Ice Breaker Party. It does not include accommodation, Conference Dinner, and field excursion, which have to be paid separately.

## Organising Committee

- Dr. Rein Raudsep, Chairman, President of AEGS, Estonian Ministry of the Environment
- Saima Peeterman, Secretary, Institute of Geology at Tallinn University of Technology
- Tarmo All, Geological Survey of Estonia
- Heikki Bauert, NGO Geoguide Baltoscandia
- Dr. Olle Hints, Institute of Geology at Tallinn University of Technology
- Dr. Ene Kadastik, Estonian Ministry of Education and Research
- Anne Põldvere, Geological Survey of Estonia
- Kalmer Sokman, Eesti Põlevkivi Ltd.
- Prof. Ingo Valgma, Department of Mining, Tallinn University of Technology

## Scientific Committee

- Prof. Dimitri Kaljo, Chairman, Institute of Geology at Tallinn University of Technology
- Prof. Kalle Kirsimäe, Institute of Geology, University of Tartu
- Dr. Vello Klein, Geological Survey of Estonia
- Dr. Vassili Kolka, Kola Science Centre, Russian Academy of Sciences
- Dr. Keijo Nenonen, Geological Survey of Finland
- Dr. Erik Puura, Institute of Technology, University of Tartu
- Prof. Anto Raukas, Institute of Geology at Tallinn University of Technology
- Dr. Jonas Satkunas, Geological Survey of Lithuania
- Prof. Alvar Soesoo, Institute of Geology at Tallinn University of Technology

## Sponsors

- Eesti Põlevkivi AS ([www.ep.ee](http://www.ep.ee))
- maxit Estonia AS ([www.maxit.ee](http://www.maxit.ee))
- AS Kunda Nordic Tsement ([www.knc.ee](http://www.knc.ee))
- Environmental Investments Centre ([www.kik.ee](http://www.kik.ee))
- Geological Society of Estonia ([www.egeos.ee](http://www.egeos.ee))
- Association of European Geological Societies ([www.aegs.org](http://www.aegs.org))
- Institute of Geology at Tallinn University of Technology ([www.gi.ee](http://www.gi.ee))
- Geological Survey of Estonia ([www.egk.ee](http://www.egk.ee))
- Institute of Geology, University of Tartu ([www.ut.ee/BGGL](http://www.ut.ee/BGGL))
- Department of Mining, Tallinn University of Technology ([mi.ttu.ee](http://mi.ttu.ee))
- NGO GEOGuide Baltoscandia

## Contact

Should you have any questions or need further information please check the conference website and do not hesitate to contact the organisers.

**Website:** [www.maegs15.org](http://www.maegs15.org)

**E-mail:** [maegs15@maegs15.org](mailto:maegs15@maegs15.org)

**Phone:** +372 620 30 10, +372 505 48 23

**Fax:** +372 620 30 11

**Address:**

MAEGS-15 Secretary  
Geological Society of Estonia  
Ehitajate tee 5, 19086 Tallinn  
ESTONIA

# MAEGS-15 Scientific Programme (draft)

15. Sept.	16:00–21:00	<b>Registration and Ice Breaker Party</b> (in National Library)	
	16:00–17:30	Walking tour in the UNESCO World Heritage Old Town of Tallinn	
16. September 2007 (Sunday)	09:00–09:20	<b>Opening Ceremony</b>	
	09:20–09:30	Session 1	T. Nield: International Year of Planet Earth
	09:30–10:00		M. G. Petterson: Minerals, sustainability, emerging economies, the developing world and the 'truth' behind the rhetoric
	10:00–10:30		K. Sundblad: Which metals and minerals will be our future resources?
	10:30–10:50		K. Jarmolowicz-Szulc: Remarks on management and networking for the active research in the environmental field
	10:50–11:20	<b>Coffee break</b>	
	11:20–11:40	Session 2	R. Raudsep: Estonian georesources in the European context
	11:40–12:00		V. Seglins, A. Gilucis & A. Murnieks: Geological mapping in Latvia: from useful minerals and structures to georesources
	12:00–12:20		V. E. Gasiūnienė: Lithuanian mineral resources and their usage: today, future and problems
	12:20–12:40		B. Radwanek-Bak: Some problems of sustainable management of mineral resources in Poland
	12:40–13:00		K. Nenonen & O. Breilin: Geological heritage in Finland as an example of sustainable use of geosites
	13:00–14:00	<b>Lunch</b>	
	14:00–14:30	Session 3	V. Puura & E. Puura: Origins, compositions, and technological and environmental problems of utilization of oil shales
	14:30–14:50		E. Reinsalu & I. Valgma: Usage of Estonian oil shale
	14:50–15:10		J. Leveinen, B. Aneshkin, F. Blanchard, M. Staudt, G. Van den Dool, S. Sapon & O. Kruglova: Modelling impacts of oil-shale mining on groundwater resources in the Slantsy region, Russia
	15:10–15:30		K. Sokman, E. Väli, R. Iskül, K. Erg, J.-R. Pastarus, H. Lind: Sustainable groundwater resource management in Estonian oil shale deposit
	15:30–15:50		S. Sabanov, K. Sokman, H. Lind: Environmental impact assessment of oil shale excavation in Estonia
	15:50–16:20	<b>Coffee break</b>	
	16:20–16:40	Session 4	I. Valgma, V. Karu, A. Västrik, V. Väizene: Future of oil shale mining
	16:40–17:00		J.-R. Pastarus, K. Erg, O. Nikitin, S. Sabanov, E. Väli, T. Tohver: Geological aspects of risk management in oil shale mining
17:00–17:20	S. Sabanov, J.-R. Pastarus, O. Nikitin, A. Viil: Risk assessment of selective extraction of oil shale layers in "Estonia" mine		
17:20–17:40	Y. J. Systra, K. Sokman, V. Kattai & R. Vaher: Tectonic dislocations of the Estonian kokersite deposit and their influence on oil shale quality and quantity		
17:40–18:00	A. Shogenova, S. Sliupa, K. Shogenov, R. Sliapiene, R. Vaher, A. Zabele: Geological storage of industrial CO <sub>2</sub> emissions in the Baltic States: problems and prospects		
17. September 2007 (Monday)	09:00–09:30	Session 5	R. Schlüter: Options of post-mine utilization of hard coal deposits
	09:30–09:50		K. Jarmolowicz-Szulc: Fluid inclusion studies in search for hydrocarbons in marine and mountain regions – the Baltic Sea and Carpathian cases
	09:50–10:10		O. Zdanaviciute, M. V. Dakhnova, T. P. Zheglova : Geochemistry of oil and source rocks and petroleum potential of the western part of Baltic Syncline
	10:10–10:30		M. Beric & M. Francuski: Correlation of petroleum-geological characteristics between Velebit and Cantavir structures on the basis of 3D seismics
	10:30–10:50		H. Lehtinen, J. Sorvari & T. Assmuth: Multi-dimensional and multi-disciplinary approach to the regional risk management of arsenic in Pirkanmaa, Finland
	10:50–11:20	<b>Coffee break</b>	
	11:20–11:40	Session 6	V. Steinbach: The importance of the mineral raw materials supply in respect to the competitiveness of the European economy
	11:40–12:00		J. Kaija, J. Baker, M. Bálint, G. Gaál, K. Gondar, J. Leveinen, P. Medgyesi, L. Réti, L. Savici : Sustainable management and treatment of arsenic-bearing groundwater in southern Hungary
	12:00–12:20		P. Šottník, O. Lintnerová, S. Šoltés: Catchment area affected by mining activities – abandoned Smolník mine (Slovakia)
	12:20–12:40		M. Orru: Sustainable use of Estonian peat resources and environmental challenges
	12:40–13:00		E. Niitlaan: Peat production and its regulation in the Baltic states
13:00–14:00	<b>Lunch</b>		

17. September 2007 (Monday)	13:00–14:00	<b>Lunch</b>	
	14:00–14:30	Session 7	P. Schmidt-Thomé: Integration of natural hazards, risk and climate change into spatial planning practices
	14:30–14:50		M. Staudt, G. Van den Dool, S. Sapon & J. Leveinen: GIS data management structure for international co-operation projects – an example from the EU LIFE project “Narva Groundwater Management Plan”
	14:50–15:10		S. Bonetto, A. Fiorucci, M. Fornaro, B. Vigna: Subsidence hazards connected to quarrying activities in karst area: an up-dating of the Moncalvo Sinkhole Event (Piedmont - NW Italy)
	15:10–15:30		B. Lalinská, P. Šottník, J. Majzlan, M. Chovan, S. Milovská: Contamination generated by antimony mining in Slovakia: Evaluation and strategies for remediation
	15:30–15:50		G. O. Iancu, N. Buzgar, L. Apostoae, C. Popa, C. Secu, M. Lungu & O. Stan: The distribution of heavy metals from the soils of the Iasi city and its surroundings
	15:50–16:20		<b>Coffee break</b>
	16:20–16:40	Session 8	T. Ruskeeniemi, K. Loukola-Ruskeeniemi, J. Sorvari, B. Backman, E. Rossi, H. Lehtinen, E. Schultz, Å. Bilaletdin and R. Mäkelä-Kurto: Use of geochemical data in land use planning and exploitation of georesources – experience from the RAMAS project, Finland
	16:40–17:00		M. Radulescu & G. Buia: Natural attenuation of volatile organic compounds as feasible environmental remediation strategy – case study of a complex landfill leachate contaminating the groundwater system
	17:00–17:20		E. Kovacevic, S. Miko, Ž. Dedic, O. Hasan, B. Lukšić & Z. Peh: Impacts of past mining and present aggregate quarrying on the Dalmatian karst environment, Croatia
17:20–17:40	M. Marinescu, A. Popescu, R. Maftei & M. Matei: Complete management of resources: from the discovery of solid mineral and energetic material deposits to obtaining raw materials		
17:40–18:00			
16:00–18:00	<b>AEGS EC meeting</b>		
18. September 2007 (Tuesday)	09:00–09:20	Session 9	M. Šutriečka: The geochemical study of the bottom sediments of selected water reservoirs in Slovakia
	09:20–09:40		T. Eerola: The use of boulders in urban landscaping at Espoo, Finland
	09:40–10:00		H. Luodes: Natural stone assessment with ground penetrating radar
	10:00–10:20		P. Härma & O. Selonen: Surface weathering of rapakivi granite outcrops – implications for natural stone exploration and quality
	10:20–10:50	<b>Coffee break</b>	
	10:50–11:10		T. Eerola: NGOs, local people, and uranium exploration in Finland. The anatomy of a new challenge
	11:10–11:30		A. McMillan: Development of sustainable georesources for the built environment in the UK
	11:30–12:00	<b>AEGS General Assembly</b>	
	12:00–12:30	<b>Award Ceremony of Percival Allen Medal</b>	
	12:30–13:30	<b>Lunch</b>	
13:30–17:00	Spare time		
17:00–22:00	<b>Conference Dinner</b>		
19. Sept.	08:30–19:00	<b>Geological excursion, northern Estonia</b>	
20. Sept.	08:30–18:00	<b>Geological Excursion, northern and western Estonia</b>	

#### Poster presentations:

S. Devoto & E. Castelli: Slope stability in a old limestone quarry interested by a tourist project
S. Kondratjeva: Latvian dolomite – building stone and road construction material
M. Mafteiu, M. Marinescu, R. Maftei & D. Stefanescu: Pollution and environment degradation during the georesources recovery process, revealed using geophysical methods. Case studies in Romania
M. Marinescu, A. Popescu, R. Maftei & M. Matei: The complete management of travertine resources. Case study: Carpinis deposit (Romania)
M. Marinescu: Geomanagement: the meeting between management and geology
V. Strupl: Czech Geological Survey-Geofond: profile of the organization
Y.J. Systra, V.G. Spungin: Postglacial seismic activity of the SE Fennoscandia and Estonia
W. Trela: The Middle/Upper Ordovician phosphorites in the Łysogóry Unit (central Poland) – response to the late Llanvirn sea-level rise