NATIONAL REPORT OF HUNGARY, 2012

40TH ISM PRESIDIUM MEETING

Yekaterinburg, Russia, September 10-13, 2012

In the frame of the ***Hungarian National Report*** the following topics will be discussed shortly:

1. Training at the Department of Geodesy and Mine Surveying (Faculty of Earth Science and Engineering, University of Miskolc).
2. Present situation referring to mine surveying/mine surveyors in Hungary.
3. Professional event(s) which can be connected to home mine surveying and matters of legal regulation.
4. Production of mineral raw materials in 2011.

1. My department works in training structure of the Faculty of Earth Science and Engineering. At present all the students study in Bologna (BSc, MSc) multi-cycle linear training system either full time or part time schedule. The training time is, in general, 3.5 years for BSc students and 2 years for MSc ones. As far as ***my Department*** is concerned our teaching activity (***1st term of 2012/2013*** *and 2nd term of 2011/2012*) can be seen in Table 1.

Table 1. Bologna training at the ***Department of Geodesy and Mine Surveying*** in the last year

BSC TRAINING		
Subject	**Branch**	**Term/Number of students**
Geodesy (2 l + 2 p, 4 credit)	Earth Science and Engineering	autumn (1st term) ***102***
Mine Surveying (1 l + 2p, 3 credit)	Earth Science and Engineering, Mining and Geotechnical Specialization	autumn (5th term) ***15***
Basic knowledge in GIS (2 l + 2 p, 4 credit)	Earth Science and Engineering	spring (2nd term) *126 + 6 (part time)*
Geodetic basics in GIS (2 l + 2 p, 4 credit)	Environmental Engineering	autumn (1st term) ***18***
Mapping (2 l + 2 p, 4 credit)	Geography	spring (2nd term) *25*
Geodesy and GIS (2 l + 2 p, 4 credit)	Geography	autumn (5th term) ***25***
Digital mapping (2 p, 2 credit)	Geography	spring (6th term) *29*

MSC TRAINING		
Subject	**Branch**	**Term** **Number of students**
GIS (2 l + 2 p, 4 credit)	Petroleum and Natural Gas Engineering; Mining and Geotechnical	autumn (1st term) ***25+11****(part time)*
Geodesy and GIS (2 l + 2 p, 4 credit)	Hydro-geological Engineering	autumn (1st term) ***15***
Mine Surveying (part time, 4 credit)	Mining and Geotechnical Engineering	autumn (1st term) ***8***
Operation systems (1 l + 1 p, 1 credit)	Earth Science and Engineering (Geo-information Engineering Specification)	spring (2nd term) ---
Data base systems (1 l + 1 p, 2 credit)	Earth Science and Engineering (Geo-information Engineering Specification)	spring (2nd term) ---

2.

- On **September 1, 2012** there were **165** chartered mine surveyors in Hungary.
- The certificates of **57** chartered mine surveyors are valid for both surface and underground mining.
- The number of chartered mine surveyor's certificates for surface mining issued by the Hungarian Mining Bureau is: **108**.

3.

- The ***LI Conference on Mine Surveying*** was organized in Székesfehérvár on June 13-15, 2012. The reason to select this location was that the training of land surveyors has celebrated the 50th anniversary at the High School of Székesfehérvár this year. At the conference there were about

110 participants, and 16 presentations were delivered. Of course, there were other professional, traditional and cultural programmes as well.

- ***XII Forum on Mine Surveying*** was hold in Budapest on October 23, 2012. There were more than ***50 participants***. At the forum actual professional and legal questions were discussed which refer to measuring, mapping and entrepreneurial activities of chartered mine surveyors in a circle of the concerned specialists.
- ***Reviewing of legal regulations*** referring to mine surveying has been started again since the second half of 2011.
  It relies on the governmental decrees as follows:

10/2010.(III.4)KHEM
about the scale and content of mining maps and

12/2010.(III.4)KHEM
about the chartered mine surveyor.

Their revision is expected. One of the main reasons is that the mineral resource management has become a task of crucial importance in Hungary recently since the energy prices are very high. ***Volume computation*** of the ***exploited material*** and ***its accuracy*** can strongly be connected to the ***mining annuity***.

4.

As far as the production of various mineral raw materials are concerned, data of the last two years can be found in Table 2. In connection with ***solid mineral raw materials*** you can see that there was a decrease of nearly ***6%*** (***5.6***) in total production. Changes in percentage of each material are involved in the last column of Table 2. Examining these, a ***larger increase*** is characteristic for ***peat***, ***clay*** and ***other materials***, however, production of ***coals*** and ***construction materials decreased significantly*** (an average of ***15%***). A ***decrease*** of about ***12%*** can be established in production of ***crude oil***, ***natural gas*** and ***carbon dioxide***. The production of raw materials for a ***period of 2004 and 2011*** are illustrated in Figures 1 and 2.

Table 2. Comparing the production of mineral raw materials in Hungary considering the last two years

Mineral raw materials	2010 [m^3]	2011 [m^3]	
Coals	555 298	**467 797**	*(-15.8%)*
Lignite	6 479 452	**6 843 521**	*(+5.6%)*
Ores	155 013	**143 200**	*(-7.6%)*
Peat	175 395	**250 375**	*(+42.7%)*
Clay	863 834	**1 169 125**	*(+35.3%)*
Sand and gravel	14 334 220	**12 901 782**	*(-10.0%)*
Stones	6 596 363	**5 520 905**	*(-16.5%)*
Other	398 182	**603 868**	*(+51.7%)*
Total [Mm^3]	29,56	***27.90***	***(- 5.6%)***
Crude oil [Mt]	0,73	**0.67**	*(-8.2%)*
Natural gas [Gm^3]	3,05	**2.67**	*(-12.5%)*
Carbon dioxide [Gm^3]	0,14	**0.12**	*(-14,3%)*

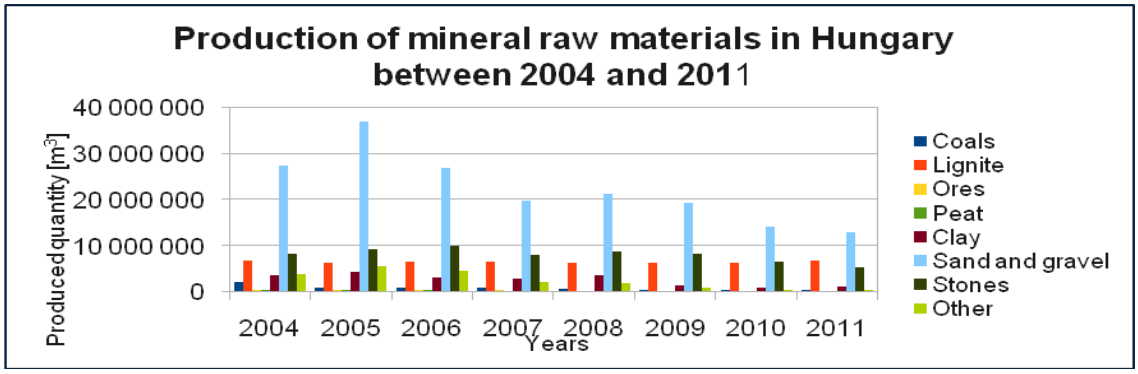

Figure 2. Production of solid raw materials

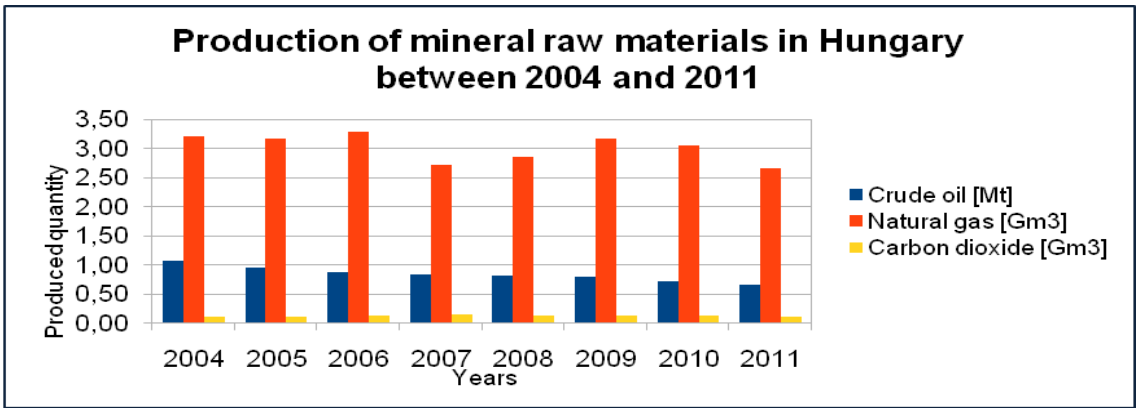

Figure 3. Oil and gas production