



Международное Общество по маркшейдерскому делу
International Society for Mine Surveying
Internationale Gesellschaft für Markscheidewesen

Seat of the ISM:

Chair and Institute for Mine Surveying, Mining Subsidence
Engineering and Geophysics in Mining
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Agenda

41th Presidium Meeting in Aachen, Germany **16. – 19. September 2013**

1. The Opening of the 41th Presidium Meeting of the ISM and welcome by the host of the meeting
2. Confirmation of Attendees
3. Apologies for Absence
4. Acceptance of Agenda
5. Obituaries
6. Personal Notes
7. Approval of the Minutes of the 40th Presidium Meeting held on 11-13 September 2012 in Yekaterinburg, Russia
8. Matters arising from the Minutes of the 40th Presidium Meeting
9. Admission of new members
10. Correspondence
11. Cooperation with national institutions
 - Australia
 - Russia
12. Remember on the 15th International ISM - Congress
13. Report on the 16th International ISM - Congress preparation to be held 2013 in Aachen, Germany



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14. Confirmation of future International Congress and Presidium Meetings
15. Proposals of Honorary Membership
16. Nominations and acceptance of new members to commissions
17. Commission Reports
 - a. Commission 1: Dr. Ralf Schulte
 - b. Commission 2: Prof. Dr. Vladislav Popov
 - c. Commission 3: Mr. Norbert Benecke
 - d. Commission 4: Prof. Dr. Ryszard Hejmanowski
 - e. Commission 5: Dr. Martin Vrubel
 - f. Commission 6: Prof. Dr. Yu Chang Xing
18. Short reports and presentations from representatives of ISM member countries on new and important changes affecting mining activities and of the prospects for mining and Mine Surveying development in their respective countries
19. Information regarding national events of interest to minerals surveyors (all presidium members)
20. Future of ISM
21. Date and venue of next presidium meeting
22. Miscellaneous
23. Closure

Acttings of Commission 6 from 2012-2014

In 2012, Commission 6 have 2 acts.

- 1) 2012 International Symposium on Mining and Mapping for Sustainable Mining in Sebel Cairns Queensland Australia, in August 9, 2012, during the Conference (9-11)of the Australia Institute of Mining Surveyors(AIMS)
- 2) 2012 Joint International Workshop on Mine Surveying in China hosted by China University of Mining and Technology, in Xuzhou, China, in 20 - 21 October, 2012
Sponsored by International Society for Mine Surveying (ISM), Commission 6
International Association for Geodesy (IAG)
China Society for Mine Surveying

In 2013, according original planning, Commission 6 have 2 acts

- 3) the Symposium Session and Forum of mining surveyig must be held by Cheng Gong University of Taiwan in June 20⁰13, and Zhang AN University in Xi An.in October 2013.
But, due to proposing some reasons of Holder- Prof.Shi Hui Shun of Taiwan Cheng Gong University, and because of ISM will hold 15th Congress in Aachen, so the Mine Surveying Forum of Zhang AN University(to be supported by Commission 6 in Xi An.in October 2013. will be postponed to 2014,
- 4) Such, Commission 6 will have 2 acttings in 2014:
 - a) Host by Zhang AN University in Xi An, may be June or September.
 - b) Delegate of Vietnam Prof. Wu Zhi My had suggested ever to me in end of last year(2012), he hope Commisison 6 to support a International Meeting in Vietnam in 2013 about the “Surveying for Climate Changing”. If it would be possible, Commission 6 will do it.



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41st Presidium Meeting of the International Society for Mine Surveying **September 2013, Aachen, Germany**

Institute of Mine Surveyors of South Africa Report – 2013

The Institute of Mine Surveyors of South Africa (IMSSA), the association representing mine surveyors and allied disciplines in South Africa, will hold its 91st Annual General Meeting on the 11th of October 2013 in Johannesburg, marking 90 years of advancing the knowledge and practice of mine surveying and representation at national level. A special edition publication of the African Mining Brief will be published in celebration of this event. This is a significant achievement and sees IMSSA enjoying a continued strong influence in South Africa on all matters related to mine surveying. The meeting will coincide with a short conference and workshops on mine surveying technology, practice and impact of changing legislation on the profession.

The 90th Annual General Meeting and conference was held in October 2012. The event was a great success with many attendees and sponsors showing support to the Institute.

A positive development in the South African mining industry has been a remarkable 66% reduction in fatal accidents, however this is still short of the targeted 87%. Less positively, foreign mining investment in South Africa is being deterred by factors such as regulatory uncertainty, poor labour relations, labour militancy, reduced productivity and work disruptions. The country is now ranked 64th out of 97 countries as a destination for foreign mining investment vs. Botswana (our neighbour) which is ranked 17th globally and number one in Africa.

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Summary of IMSSA activities October 2012 to September 2013

Legislation

The Geomatics Profession Bill [B4-2013] is currently in the process of being enacted. This bill will replace the Professional and Technical Surveyors Act, Act 40 of 1984, and with it replace the current Council for Professional and Technical Surveyors with a new Geomatics Council. Due to the current wording of the Bill, approximately 150 registered Mine Surveyors and Professional Mine Surveyors may be (unintentionally) impaired in the performance of their duties regarding applications for prospecting and mining rights. They may also lose their recognition as Competent Persons and Competent Valuers in terms of the SAMREC and SAMVAL Codes, as well as equivalent international codes (again, unintentionally). The Institute will continue to engage with the South African Council for Professional and Technical Surveyors and government, to have the Bill amended to ameliorate the concerns of mine surveyors. A presentation by IMSSA to a special portfolio committee of Parliament on the deficiencies of the Bill was positively received.

Certification as Professional Organisation

The South African Qualifications Authority (SAQA) certified IMSSA as a Professional Organisation on the 7th November 2012, valid for a period of 5 years. Consequently, all members registered with IMSSA will be registered according to one of the following designations: Professional Mine Surveyor, Mine Surveyor and Associate Mine Surveyor (each linked to specific qualifications and experience).

The Council is currently in the process of registration with the Australian Stock Exchange (ASX) and the Joint Ore Reserves Committee (JORC) for the purposes of being a Recognised Professional Organisation (RPO). This registration is as a result of deficiencies in the proposed Geomatics Professions Bill and will enable IMSSA retain national and international recognition, irrespective of IMSSA representation on the proposed national Geomatics Council (which will replace the current Council for Professional and Technical Surveyors).

IMSSA Leadership Succession

In terms of succession, the next President of the IMSSA, Mr. Nape George Mojapelo, will take over the leadership of the Institute on the 11th October 2013 from Mr. Donovan Andersen. He studied mine surveying in South Africa and geostatistics at the Paris School of Mines in Fontainebleau, and is highly respected for his commitment and contribution to the profession. He is a past Director of Mine Surveying in the Department of Mineral Resources and will be the first black President of IMSSA

ISM Presidium Succession – South African Representation

In terms of the Statutes of the ISM, Mr Michael Livingstone-Blevins ends his term as Vice President four months after the Members' Assembly to be held on the 19th September 2013, effectively ceasing duties on the 18th of January 2014.

It is planned that he will be succeeded as Presidium Member for South Africa by Mr. Donovan Andersen, the current President of the Institute of Mine Surveyors of South Africa. Mr. Andersen holds MSc and MBA degrees from the University of the Witwatersrand and is currently the group survey manager for Anglo American Platinum. Unfortunately, Mr. Andersen is unable to attend the 41st Presidium meeting in Aachen due to current work priorities. Mr Livingstone-Blevins will continue to support the ISM through IMSSA and will advise Mr Andersen on ISM matters as and when required.

Education and Knowledge Transfer Activities

A series of three Practical Geostatistics textbooks by Dr. Isobel Clark will be sold through the Institute, and royalties paid to Dr. Clark. The universities are currently in the process of making these text books prescribed material for the South African mine surveyor.

The revision of mine surveying qualifications at tertiary education institutions is ongoing, with the support of the Education Committee of IMSSA and the Education Advisory Committee of the Council for Professional and Technical Surveyors. Higher and Advanced Certificates in Mine Surveying are being developed at the University of South Africa. A new Bachelor of Mine Surveying degree has been approved by the Senate of the University of Johannesburg for introduction in 2015, to be followed in 2018 with an Honours degree programme, allowing for direct progression from the Bachelor degree to the Honours degree. Post-graduate programmes (Master and Doctorate) will continue to be offered by the University of the Witwatersrand, as well as certificates of competency in Mine Planning and in Mineral Resource Management.

Work on updating two reference books continues: *Problems and Solutions for Mine Surveyors* and *South African Mine Valuation*. Work is progressing slowly on a comprehensive update of *South African Mine Valuation*, with new chapters and authors of these chapters identified.

The Institute will be publishing its Journal in a digital format, which will be accessible via IOS and Android systems.

South African Mining Commodity Summary

Please see the attached summary which details quantities and revenue (currency shown in ZAR; South African Rands) of minerals mined during the period January 2012 to December 2012.



Michael G Livingstone-Blevins Pr. M.S. (SA), FRICS

South Africa Representative to the ISM

ISM Vice President

| | | | | | | | | | | |
|---|----------|--------------------|--------------------|-----------------------|------------|-------------------|------------------------|---------------|--------------------|------------------------|
| Zinc (M.I.C.) | t | 37 034 | 0 | 0 | | 37 646 | 444 536 163 | 11 808 | 37 646 | 444 536 163 |
| Coal | t | 258 575 791 | 185 668 669 | 43 921 276 970 | 237 | 76 008 648 | 52 226 904 339 | 687 | 261 677 313 | 96 148 181 309 |
| Anthracite (Total) | t | 3 005 136 | 1 520 530 | 1 455 443 714 | 957 | 1 226 571 | 1 179 215 473 | 961 | 2 747 101 | 2 634 659 187 |
| Bituminous (Total) | t | 255 570 655 | 184 148 139 | 42 465 833 256 | 231 | 74 782 077 | 51 047 688 866 | 683 | 258 930 212 | 93 513 522 122 |
| Bituminous steam | t | 255 231 496 | 181 925 345 | 40 432 378 612 | 222 | 74 074 767 | 50 546 433 596 | 682 | 256 000 108 | 90 978 812 208 |
| Bituminous low ash | t | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bituminous coking coal | t | 339 159 | 2 222 794 | 2 033 454 644 | 915 | 707 310 | 501 255 270 | 709 | 2 930 104 | 2 534 709 914 |
| Bituminous lean coal | t | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total (above) | | | ZAR | 72 509 051 161 | | ZAR | 254 989 599 855 | | ZAR | 327 498 651 016 |
| Average ZAR / US\$ (8.20 / 1.00) | | | USD | 8 842 567 215 | | USD | 31 096 292 665 | | USD | 39 938 859 880 |

Mineral Resources does not hold itself responsible for any errors or omissions

United Kingdom's Mineral Report ISM Congress 2013 Aachen Germany

This report covers the current position for which statistics are available regarding the mineral industry in the UK. These are available for the period leading up to the summer of 2011. The facts and figures contained within are as derived from the UK Agg-Net, The Coal Authority, The Minerals Products Association, Office for National Statistics, British Geological Survey and the BBC.

Construction Materials

According to the Mineral Products Association, UK mineral products industry makes the following contribution to the economy:

1. Annual production is 250mt with an industry turnover of £9bn
2. Turnover for industries that are supplied comes to £400bn employing 2.5 million.
3. The construction industry itself is worth £120bn and employs 70,000 individuals.

According to the MPA quarterly report of July 2013, there was an improvement in the sales of aggregates, ready mixed concrete and asphalt in the second quarter. Following a poor first quarter, second quarter sales volumes increased by 14% for crushed rock aggregates, 9% for sand and gravel aggregates, 18% for ready-mixed concrete and 9% for asphalt, all compared with the same period of 2012. The report goes on to indicate that when comparisons are made between June 2012 and June 2013, the overall aggregate trend has been down 1%, this is made up of a 6% decrease in sand and gravel and a 2% increased in crushed rock production. It is felt that the industry has now bottomed out and is starting to recover. House building activity is continue to improve, however asphalt sales volumes are down due to the 41% decrease in road construction in 2012.

The UK aggregates supply mix is made up of the following in 2012:

| | |
|----------------------------|-----|
| Crushed rock | 44% |
| Land won sand and gravel | 22% |
| Marine won sand and gravel | 5% |
| Recycled | 29% |

Other mineral products such as agricultural lime, cement, silica sand, dimension stone, precast concrete totalled sales of 48 million tonnes.

Marine aggregates



In 2012, 21% of the UK sand and gravel needs in England and Wales were derived from marine sources. The Minerals Products Association report "the mineral products industry key facts at a glance" indicates that licensed dredging areas are around six miles offshore and are in water more than 20 metres deep, so avoiding any possibility of coastal erosion. It also indicates that of some 1,344 square kilometres of seabed licensed for marine aggregate extraction in 2007, only 134.7 square kilometres was actually dredged, equivalent to just 0.016% of the UK continental shelf area.

Recycled and Secondary Aggregates

Materials suitable for use as recycled or secondary aggregates fall into two broad groups:

1. Demolition and construction materials - 60 per cent are already used as aggregates and fill
2. Industrial by-products such as:
 - colliery spoil - widely used for bulk fill
 - china clay waste - used in some areas as mortar and concreting sands
 - power station ash (PFA) - used as a cement substitute within Ready Mixed concrete and for block making
 - blast furnace slag from the iron and steel industries - used as aggregates and when ground to form Ground Granulated Blast-furnace Slag as cementitious materials
 - slate

The use of recycled aggregates in the UK continues to grow, with the share now being 29% of aggregate supply, compared to 26% in 2011. However, production levels are down which reflects the overall reduction in the aggregate market due to the on-going recession.

The Mineral Products association further indicate that The use of recycled and secondary materials in the GB aggregates market has increased rapidly, rising from 30 million tonnes pa in 1990 to over 70 m tonnes in 2007. Over that period the share of the aggregates market supplied from recycled and secondary sources has risen from 10% to 25%. This 25% market share is three times higher than the European average, highlighting the fact that the use of recycled and secondary materials in Britain is close to full potential.

The “Construction, demolition and excavation waste arisings, use and disposal for England 2008” report by WRAP published in April 2010 is the most recent account regarding construction, demolition and excavation waste (CDE). The report indicates that from 2005 to 2010 there has been a 7% decrease in inert CDE waste from 89.63 to 83.64 tonnes.

Energy Minerals

In 2011, UK oil and gas currently was 55m tonnes for natural gas and 58m tonnes for crude oil being produced from the continental shelf. A further 0.7 m tonnes was produced from onshore production. The BBC (August 21st 2013) reporting on the annual report of the Trade body Oil and Gas UK indicates that there has been record investment in 2013 of £13.5bn. However its annual report on the industry's economic impact highlights the sharp fall in output of 19% during 2011 and 14% in 2012. The BBC further reports that the report indicates that the industry's latest estimates of the continuing decline, suggest a further fall of at least 8.5% during 2013 year, with no recovery in 2014. It is important to indicate that the value of this sector to the UK economy is £40bn a year, including £7bn in export earnings.

In 2008 the UK ranked 14th in the list of major oil- and gas-producing countries. To date, 40 billion barrels have been produced and it is thought that there could still be another 20 billion, or more, still producible.

Metalliferous Minerals

Currently there are no metalliferous mines in the UK.

Coal

The UK still depends heavily on coal as a source of fuel for power stations, however due to a reduction in the coal price per tonne and a major underground fire at the largest production deep mine Daw Mill in March 2013 saw a considerable reduction in production when compared to 2009 annual production levels of just under 18mt. The Daw Mill colliery represented one third of UK Coal's revenue. As a result, UK Coal Holdings Ltd and UK Coal Operation Ltd have now been placed into administration. The business is now under the control of a new company, UK Coal Production Ltd. In April 2013, Scottish Coal went into liquidation with the loss of 600 jobs. The company operated six opencast sites in Scotland.

Total employment in the coal sector for June 2013 was 4,443. The following table is based on Coal Authority and Department of Trade and Industry data and indicates production up to June 2013:

| Year | Underground | Opencast | Total UK | Underground mines | Opencast sites |
|------|-------------|-------------|-----------|-------------------|----------------|
| 2013 | 1,124,404 t | 2,267,754 t | 3,392,158 | 10 | 25 |

Education

Mine surveying education in the UK is focussed on MSc awards in minerals surveying at Northumbria University and at Cambourne School of Mines, Exeter University. The Northumbria course is a part time distant learning award, while the Cambourne course is a full time award. Both awards are accredited by the Royal Institution of Chartered Surveyors and enable graduates to obtain their professional qualification and membership of the Minerals and Waste Management Faculty of the RICS. In total, both awards have around 18 students currently enrolled. Employability for both awards is excellent with most graduates entering the Minerals surveying and land surveying industry, both in the UK and abroad.