International Mines Rescue Competitions and their impact on the development of safety in underground mining

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Historical events of XIX, XX and XXI century has repeatedly confirmed that no country and no field of science and technology can be developed in isolation only inside one country.
As a part of the rescue activities, specialists with CSRG participated in many rescue operations, among others in:

- Czech mines „CSA“, „Cingr“, „Fucik“, Dukla, „Doubrava“ and „1-Maja“ and „Zarubek“,
- Bulgarian mine „Babino“,
- „Libanon“ mine – RPA,
- „Deelkral“ mine – RPA,
- US mines,
- „Zasiadzko“ mine – Ukraine.
Here are only some aspects of international cooperation, its necessity, which have a direct impact on the development of underground mining safety in the scope of:

- sharing knowledge and experience in the field of mine rescue,
- ways of rescue actions management,
- conclusions based on analysis of rescue operations,
- methods and rescue training principles,
- technical equipment and the progress of the research.
This is especially justified in the context of gradually decreasing the number of accidents in underground mines, and the need for proper preparedness, security and efficiency of rescue operations. Also crucial for the development of the mine rescue services is the ability to knowledge exchange (experiences in the implementation and use of new strategies and technologies) between rescuers from different countries.
MEMBERS OF INTERNATIONAL MINES RESCUE BODY

2001: Poland, Czech Republic, France, United States, Romania, Slovakia, South Africa, Australia, United Kingdom (9).

2003: Canada, China, Germany, India, Ukraine (14).

2005: New Zealand, Norway (16).

2011: Austria, Mongolia, Russia, Viet Nam, Zambia (21).

2013: Kazakhstan (22).
The organizers of International Mines Rescue Competitions in last years were:

- 1998 r. Louisville, Kentucky, US
- 2000 r. Las Vegas, Nevada, US
- 2002 r. Reno, Nevada, US
- 2004 r. Głogów, Poland
- 2006 r. Pingdingshan, China
- 2008 r. Reno, Nevada, US
- 2010 r. Wollongong, Australia
- 2012 r. Donieck, Ukraine
- 2014 r. Bytom, Katowice, Poland
FORMULA OF THE COMPETITIONS

According to the IMRB formula, International Mines Rescue Competition are organized in accordance with regulations, standards and equipment used in the country which is hosting the event.

That’s why in year 2014, first time as a task was 'simulated rescue operation' inside longwall mining system excavations, which is commonly used in Poland.
Time:
6 - 13 September 2014.

Place:
Regional Mine Rescue Station in Bytom
Silesia EXPO - Trade Fair and Conference Centre in Sosnowiec

Organizers:
Central Mines Rescue Station
Mining Authority

Honorary Patronage:
President of the Republic of Poland - Bronisław Komorowski

Honorary Committee:
Deputy Prime Minister and Minister of Economy - Janusz Piechociński
Minister of the Treasury - Włodzimierz Karpiński,
Under-secretary of State, Min. of Environment, Chief National Geologist
- Sławomir Brodziński
Marshal of Silesia - Mirosław Sekuła,
Silesian province governor - Piotr Litwa.
Movie no.1
MAIN OBJECTIVES OF THE COMPETITION:

- increasing the professional qualifications and exchange of technical and organizational knowledge,
- during preparation for this event, competitors become familiar with different organizational structures of mine rescue services, formal and legal regulations, technology and rescue equipment. This knowledge could be used in the future in defining needs and choosing the equipment for mines rescue teams,
- integration of international mines rescue circles.
Movie no.2
Five competition:
• simulated rescue operation,
• rescue knowledge test,
• mechanic of the breathing apparatus,
• mechanic of metering equipment,
• first aid.

21 teams of mining rescuers from 13 countries:
Russia, Australia, Canada, Romania, Turkey, Kazakhstan, Vietnam, Mongolia, Slovakia, India, China, Colombia and Poland.
General classification (first three places)
IX International Mines Rescue Competition IMRC' 2014:

**Competition „simulated rescue operation”:**

1st place: team Bytom Team (Poland).
2nd place: team HBP, a.s., SLOVAKIA (Slovakia),
3rd place: team Kestrel Mine (Australia),

**Competition „first aid”:**

1st place: team Black Hawks (Poland).
2nd place: team Black Gold (Poland),
3rd place: team Bytom Team (Poland),

**Competition „mechanic of metering equipment”:**

1st place: Muharrem Atik Black Diamond (Turkey).
2nd place: Mirosław Studniczek Black Hawks (Poland),
3rd place: Grzegorz Lniany Bytom Team (Poland),
General classification (first three places)
IX International Mines Rescue Competition IMRC’ 2014:

Competition „mechanic of the breathing apparatus”:

W-70 apparatus:
1st place: Miroslaw Dłucik Black Hawks (Poland).
2nd place: Piotr Wojtyla Black Gold (Poland),
3rd place: Piotr Musioł Sharks (Poland),

P-30 EX apparatus:
1st place: Zbigniew Palkij Black Gold (Poland).
2nd place: Igor Yakutin KOMIP (Kazakhstan),
3rd place: Purevsuren Daucha Soyombo (Mongolia),

BG-4 Plus apparatus:
1st place: Piotr Wojtyla Black Gold (Poland).
2nd place: Marek Kosina Bytom Team (Poland),
3rd place: Piotr Cukrowski White Eagles (Poland),

Rescue knowledge test: There were not selected winners but all of participants received confirmation of participation and information about the number of correct
Conclusions

Knowledge and experiences exchange between foreign industry partners, who have the relevant experience and valuable knowledge are extremely valuable (good rescue practice). It was confirmed /demonstrated in past practice when rescuers from different countries at the same time cooperated jointly within mine rescue operations in order to liquidation of mining disasters.
Therefore appropriate is continuing the exchange of experience, in particular through the International Mines Rescue Body, International Mines Rescue Competition, Rescue Workshops, joint rescuers exercises, expert seminars and other events, during which it is possible to exchange knowledge in the field of mining rescue safety in the mine industry.

Mining rescuers is the elite among the profession, where sacrifice for the other is inscribed in a profession code and the rate of the well done job is sometimes the highest, therefore continuous improvement and development of the profession are particularly important.
Thank you for your attention

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