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A new International Standard for Mining Engineers - Consultation

The International Competence Centre for Mining Engineering Education under the auspices of UNESCO, at St Petersburg Mining University, and the Institute of Materials, Minerals and Mining are developing a new global competence framework for Mining Engineers.

The outline framework was announced to a global audience during a web-forum on 19 November 2020. Now we are consulting on the proposal and we want to hear your thoughts.

The proposal

The enclosed briefing paper describes the proposed framework, which has the working title of ISME (International Standard for Mining Engineers). However, we have summarised the key points, below.

What is it? ISME is a new global competence framework for Mining Engineers. It will build on and sit above the relevant national standards already in place in countries around the world and, therefore, will not conflict with them. It will require Mining Engineers to demonstrate that they are competent in specific areas; these areas are chosen in response to the demands being made by key stakeholders in mining. ISME's core value lies in the fact that it responds directly to the areas of concern that stakeholders have highlighted.

Why is a new framework needed? ISME is a direct response to the changing world and to the increasing pressure on mining engineering to change. One key issue is that major investors want to reduce the risks associated with mining. They are increasingly demanding that mining must clearly demonstrate an ethical stance, be safer, and do less damage to the environment while being financially viable. Operating to a higher level in each of these four areas could reduce the risks to business reputation, of harm to people involved in and affected by mining, to the world that supports our way of life, and to mining's financial base.

How will it work? ISME identifies these four broad areas of competence, Ethics, Safety, the Environment and Financial Planning. Within each of these is a series of more detailed competences.

For each competence there is a statement that describes something that an individual Mining Engineer should be able to do in their professional practice. Although competences are built on a foundation of knowledge and understanding, the focus is on the professional abilities of Mining Engineers, rather than studies or academic achievements as these are best covered elsewhere.

Mining Engineers will only be able to apply if they are already registered with or are a member of a relevant national body that is a partner in the ISME programme. This will reinforce good relationships between ISME and the national regulatory and/or membership bodies. Successful applicants would be awarded a title and the right to use the appropriate letters after their name to indicate their status.

The consultation

We want to hear your response to the proposal. You should feel free to comment on any aspect of the proposal, although we would be grateful if you could answer our questions, shown at Annex A. These are also available online at: www.iom3.org/resource/iom3-consultation-a-new-international-standard-for-mining-engineers.html

Dates The consultation is open now and closes at 1700 GMT on 31 March 2021.

How to respond Please respond by email, to: iom3-unesco@iom3materialscycle.org
It would be helpful if you let us know as soon as possible if you plan to respond to the consultation.

Keeping in touch When you respond please tell us whether you would you be willing to answer any further questions if we have any when we have reviewed your responses to this consultation?

Please let us know if you have any questions about the proposal or this consultation. We look forward to hearing from you and to working with you in the future.

Yours sincerely,



Ian Bowbrick CEng CEnv FIMMM
Director of Membership & Professional Standards

Encl. 'Driving change through higher mining engineer competence'.

The General Data Protection Regulation (GDPR) and Data Protection Act 2018

The Institute will hold and use the personal data provided in your response for the purposes of this project only. It will be retained on a secure server for a period of 2 years and used for any follow-up work related to the project only.

We are committed to protecting your personal data and will process it in compliance with Data Protection law. For more information on how we process and protect your data and your rights under the new General Data Protection Regulation (from 25 May 2018), please see our Privacy Notice at www.iom3.org/privacy.html.

ANNEX A

What we want you to tell us?

We want to hear your response to the proposal, and you should feel free to comment on any aspect of it. However, we would be grateful if you could answer the questions below.

1. Do you agree that the proposal addresses a real need for change in Mining Engineering practice around the world?
2. Are the four areas of competence, Ethics, Safety, the Environment and Financial Planning the right areas to include? If not, what should they be?
 - a. Looking at each of the four broad areas, are the example competences shown in each of these the right competences to include? If not, what would you add, remove or change?
 - b. What changes should be made to the knowledge and understanding requirements shown below each of the four broad areas of competence?
3. We have included an example of how these competences could be mapped to the phases of a mining project.
 - a. Does the example used adequately represent the structure of mining in broad terms? If not, what would you change?
 - b. We have included examples of where Mining Engineers need competence to provide an input or to take the lead. Are these realistic? If not, what would you change?
4. What general observations do you have on the following areas of the proposal?
 - a. ISME should sit alongside each country's national standards.
 - b. National organisations can become ISME partners.
 - c. Applications from Mining Engineers only to be permitted if the individual is a registrant or member of an ISME partner.
 - d. A requirement for applicants to demonstrate relevant knowledge through either a recognised Masters' level qualification that can underpin a career in mining engineering, or the equivalent knowledge gained through other means.