



COMMITTEE FOR MINERAL RESERVES  
INTERNATIONAL REPORTING STANDARDS





COMMITTEE FOR MINERAL RESERVES  
INTERNATIONAL REPORTING STANDARDS

# PERC Report

Eddie Bailey, PERC Chair  
CRIRSCO AGM,  
Brasilia, 30<sup>th</sup> November 2015



## EFG Members

Click on the map

- Belgium-Luxembourg
- Croatia
- Cyprus
- Czech Republic
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Netherlands
- Poland
- Portugal
- Russia
- Serbia
- Slovakia
- Slovenia
- Spain
- Sweden
- Switzerland
- Ukraine
- United Kingdom



# Pan-European Reserves and Resources Reporting Committee ([www.percstandard.eu](http://www.percstandard.eu))

- 2006: PERC set up to replace the previous IMM Reserves Committee and an *ad hoc* European working group. Four parent organisations: EFG, IOM3, GSL, and IGI
- 2008: CRIRSCO-aligned PERC Reporting Standard
- 2011: European Securities and Marketing Authority (ESMA) ratified PERC Standard
- 2013: A registered not-for-profit organisation, now based in Brussels (EFG offices within Belgian GS) - legal status.
- 2013: Revised PERC Reporting Standard published (includes specific provision for industrial and construction minerals, coal, historic estimates, ...)
- 2015: Draft revision prepared (includes new, more user friendly format, and reference to risk – all to be discussed with CRIRSCO committee)



## European Federation of Geologists

Ruth Allington (Treasurer/Sponsorship)  
Markku Iljina (FRB)  
Carlos Almeida (Secretary/EU Projects)  
Pim Demecheleer

## Institute of Geologists of Ireland

Paul Gordon  
Eibhlin Doyle  
Andy Bowden  
John Barry

## Co-opted members

Gordon Riddler  
John Clifford  
Juan Leon Coullaut (FEANI – Spain)

## Institute of Materials, Minerals & Mining

Neil Wells (Deputy Chair)  
Paul Gribble  
Liv Carroll (Finance/Regulators)  
Steve Henley

## Geological Society

Bill Gaskarth  
Mark Howson  
Paul Lusty  
Eddie Bailey (Chair)

Marco Cosi (Dimension Stone)  
Jay Hambro  
Ed Sides (Training)



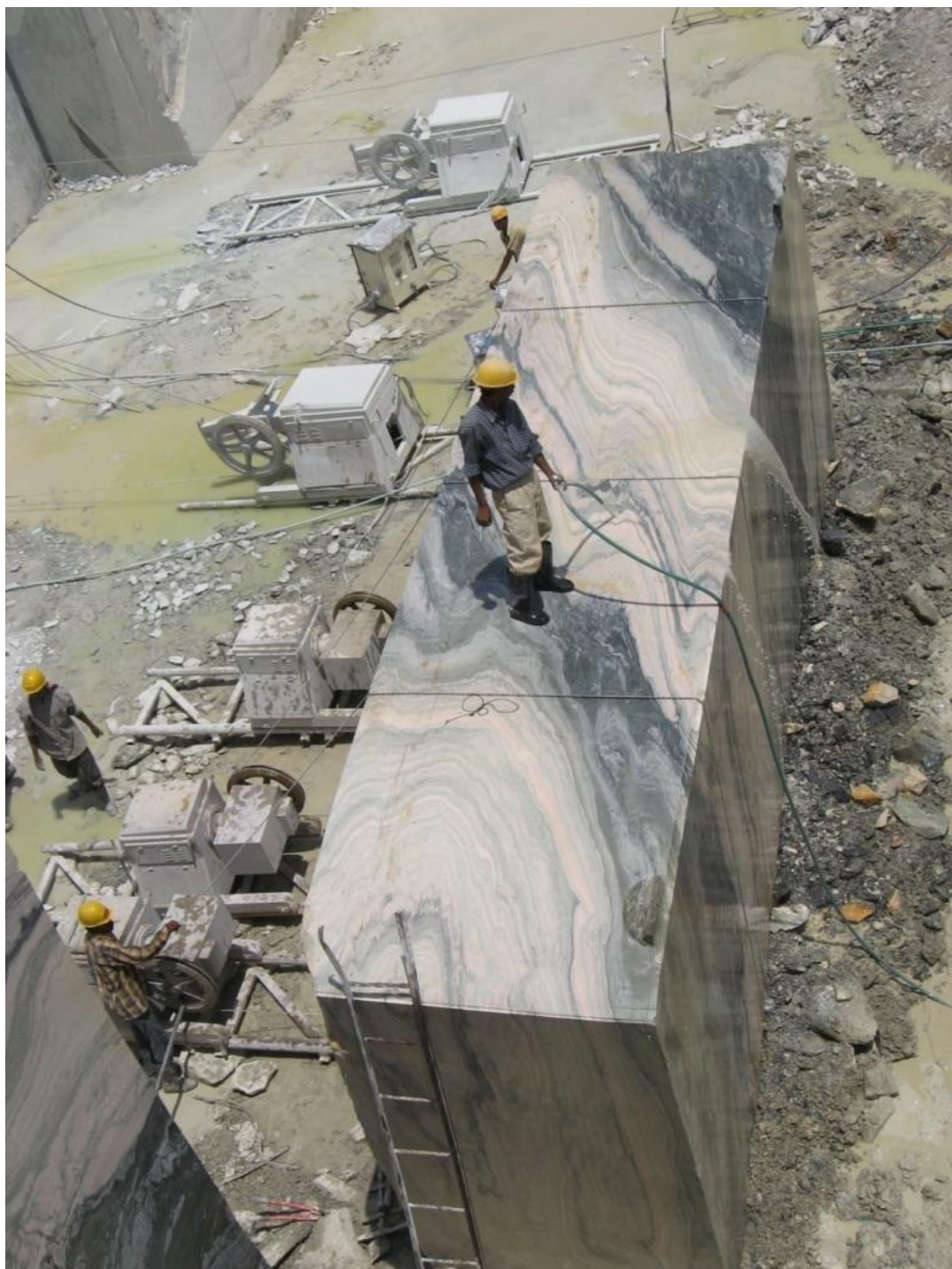
- Standard Update
- Sub-Committees
  - Training
  - Financial and Regulator
  - Sponsorship
- EU Projects
- Supporting CRIRSCO



- New clause 61 and Appendix 6: **Non-Public Reporting**. Needed for adoption of PERC as a governmental standard across Europe
- New section on **Mineral Wastes**: proposed by Neil Wells. Needed for industrial/construction minerals companies and for EU governmental reporting
- New section on **Dimension Stones**. Requirements significantly different from other construction minerals
- FRB integration. Agreed in principle.



# Dimension Stone





## 3 Competence and Responsibility

### Competent Persons

3.1	<b>Definition</b>	<p>A Competent Person is a minerals industry professional, defined as a corporate member, registrant or licensee of a recognised professional body (including mutually recognised international professional organisations) with enforceable disciplinary processes including the powers to suspend or expel a member.</p> <p>A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking. Acceptable professional bodies and classes of membership under the Standard, which meet these requirements, within Europe or elsewhere (an 'RPO') are listed in Appendix 5 or in updated lists which may be published from time to time.</p> <p>This definition of 'Competent Person' is subject to any additional restrictions or conditions which may be required by the appropriate stock exchange or regulatory authority.</p>
-----	-------------------	---

- 3.2 Documentation detailing Exploration Results, Mineral Resource and Mineral Reserve estimates, from which a Public Report is produced, must be prepared by or under the direction of, and signed by, a Competent Person or Persons.

<b>Guidance</b>	The terms "Competent Person" and "Qualified Person" are considered synonymous, and wherever the term "Competent Person" is used in this Standard, it is to be understood that "Qualified Person" is an acceptable alternative term.
-----------------	---

### Competent Person's Report

3.3	<b>Definition</b>	A Competent Person's Report is any report prepared by a Competent Person for a company, and may contain estimated Exploration Targets, Exploration Results, or estimates of Mineral Resources and/or Mineral Reserves.
-----	-------------------	--

- 3.4 Although the Competent Person's Report may or may not be a Public Report, information from it may be included in other reports which are public, including Scoping Studies, Pre-feasibility Studies, Feasibility Studies, company annual reports, press releases, and websites.

- 3.5 A Public Report concerning a company's Exploration Results, Mineral Resources and/or Mineral Reserves is the responsibility of the company acting through its Board of Directors. Any such report must be based on, and fairly reflect the documentation which has been prepared by, a Competent Person or Persons.
- 3.6 A company issuing a Public Report shall disclose the name(s), qualifications, professional affiliation(s), and relevant experience of the Competent Person or Persons, state whether the Competent Person is a full-time employee of the company, and, if not, name the Competent Person's employer. The report shall be issued with the written consent of the Competent Person or Persons as to the form and context, including the effective date, in which it appears.
- 3.7 If there is any direct or indirect relationship between the Company and the Competent Person, for example shares, bonds, or options issued by the Company held by the Competent Person or by members of his or her close family, then this must be disclosed. Such disclosure should be made in the same section of any report as the Competent Person's consent statement.
- 3.8 Where all or part of another Public Report is included in a Public Report, the written approval of that Report's author should be obtained as to the form and context in which that report is to be included.
- 3.9 A standard consent form is provided for the use of Competent Persons in Appendix 4. The structure and wording of this form, or equivalent statement as specified in Appendix 4, is the only acceptable form of Competent Person consent and is to be retained and made available if required by regulatory bodies.

### Competent Person's experience

- 3.10 If the Competent Person is preparing a report on Exploration Results, the relevant experience must be in exploration.
- 3.11 If the Competent Person is estimating, or supervising the estimation of Mineral Resources, the relevant experience must be in the estimation, assessment and evaluation of Mineral Resources.
- 3.12 If the Competent Person is estimating, or supervising the estimation of Mineral Reserves, the relevant experience must be in the estimation, assessment, evaluation and economic extraction of Mineral Reserves.
- 3.13 The relevant experience of the Competent Person must also be current and, where practical, continuous within the industry.

<b>Guidance</b>	It is expected that the Competent Person will usually be a geoscientist for reporting Exploration Results or Mineral Resources, but for reporting Reserves may be qualified in other fields such as mining engineering or mineral processing.
-----------------	---

The Competent Person may of course have relevant qualifications or experience in more than one field or type of work.

The key qualifier in the definition of a Competent Person is the word 'relevant'. Determination of what constitutes relevant experience can be a difficult area and common sense has to be exercised. For example, in estimating Mineral Resources for vein gold mineralisation, experience in a high-nugget, vein-type mineralisation such as tin, uranium etc. will probably be relevant whereas experience in (say) massive base metal deposits may not be relevant.

As a second example, to qualify as a Competent Person in the estimation of Mineral Reserves for alluvial gold deposits, considerable (probably at least five years) experience in the evaluation and economic extraction of this type of mineralisation would be needed. This is due to the characteristics of gold in alluvial systems, the particle sizing of the host sediment, and the low grades involved. Experience with placer deposits containing minerals other than gold may not necessarily provide appropriate relevant experience.

Similarly, sulphidic nickel deposits form a type of their own with nickel being distributed between silicate and sulphide minerals, only the latter being economically extractable. Experience with other types of sulphide deposits may not have given sufficient background in evaluating nickel deposits.

The key word 'relevant' also means that it is not always necessary for a person to have five years' experience in each and every type of deposit in order to act as a Competent Person if that person has relevant experience in other deposit types. For example, a person with (say) 20 years' experience in estimating Mineral Resources for a variety of **metalliferous** hard-rock deposit types may not require as much as five years specific experience in (say) porphyry copper deposits in order to act as a Competent Person. Relevant experience in the other deposit types could count towards the experience in relation to porphyry copper deposits.

In addition to experience in the style of mineralisation, a Competent Person taking responsibility for the compilation of Exploration Results or Mineral Resource estimates should have sufficient experience in the sampling and analytical techniques relevant to the deposit under consideration to be aware of problems which could affect the reliability of data. Appropriate appreciation of extraction and processing techniques applicable to that deposit type may also be important.

Those being called upon to act as Competent Persons should be clearly satisfied in their own minds that they could face their peers and demonstrate competence in the commodity, type of deposit and situation under consideration. If doubt exists, the person should either seek opinions from appropriately experienced colleagues or should decline to act as a Competent Person.



- “To promote the development and delivery of training aimed at raising awareness of the PERC Standard and to promote professional development in the assessment and reporting of Solid Raw Mineral Assets in accordance with the requirements of the PERC Standard and other CRIRSCO codes and standards.”
- MIN WIN WIN (PERC/EFG) Conference Workshop, Brussels November 2014 – Establishing Europe Wide Minerals Reporting Standards – the key to reducing risk and increasing opportunity. Attended by over 70 mining professionals
- PERC AGM Workshop, Helsinki March 2015 attended by over 50 mining professionals
- PERC BDG Workshop, Germany July 2015 attended by over 30 German mining professionals



# Training – Recommended Approach

- Courses must be endorsed by PERC whether organised by PERC or otherwise, and branded as PERC
- List of trainers must be available
- Course to include 5 PERC core slides Key principles, relationship to other reporting standards, Competent Person requirements, committees, relevant contacts/references
- Monitoring course performance
- Development of on-line training support methods is encouraged
- Accepted as Continuing Professional Development



# Result of training? Confidence in Reserves and Investment





- To support mineral companies of European stock exchanges with reporting standards, governing regulations and guidelines.
- Established to form closer links with stock exchanges and draw attention to the application of PERC Standard. Meetings held with LSE in November 2014 and June 2015 and one planned for January 2016 in relation to updating guidelines on AIM
- To highlight that PERC is now recognised by the European Market and Securities Authority for use on all European stock exchanges.



- Sponsorship of 6,000 euros in 2013 enabled the establishment of the PERC office in Brussels and for registration as a not-for-profit organisation.
- This now enables PERC to make a charge for training events etc.
- Small surplus generated from training events.
- Key role in INTRAW will also provide significantly more funding in 2015/16
- Sponsorship either directly or in-kind from two of the world's leading aggregate and cement companies Heidelberg Cement and LafargeHolcim

**HEIDELBERGCEMENT**





- An EU “Horizon 2020” project, led by EFG to establish a European “Raw Materials Observatory” on mineral non-energy raw materials
- PERC is a core participant, responsible for designing the database, aligning the deliverables to the PERC Standard (CRIRSCO template) and providing native English proof-reading.
- Emphasis on collaboration with some non-European countries (including SA, USA, Aus).
- A panel of experts has been appointed with special thanks to Harry Parker, Deborah McCombe and John Clifford, the insights of whom have proven invaluable and are taken account of in the Country Reports



- *The overall objective of MINATURA 2020 is to develop a harmonised European regulatory, guidance, and policy framework for defining and subsequently safe-guarding “mineral deposits of public importance” in order to ensure their “best use” in the future.*
- *Providing a policy planning framework that comprises the “**principles of sustainability and societal acceptance**” for mining are the key driving forces behind MINATURA.*



# Sustainability and societal acceptance





- Review of member country updates
- Review of applications to join CRIRSCO
- Providing quarterly reports to ICMM
- Presenting the CRIRSCO template at MIN WIN WIN

*EFG/PERC Conference*

**MIN WIN-WIN: ESTABLISHING EUROPE-WIDE MINERALS RESOURCES  
AND RESERVES REPORTING STANDARDS - THE KEY TO REDUCING RISK  
AND INCREASING INVESTORS' CONFIDENCE**

*Brussels - 20 & 21 November 2014*



- Presenting 'CRIRSCO - The responsible reporting of sustainable and socially acceptable reserves and resources' at the Euromines Lifecycle Assessment Conference and Workshop, Brussels October 2015



- Hosting delegations
- China November 2014
- Kazakhstan October 2015

