

International Trends in Valuation of Mineral Projects

– Standards and Regulations

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International Valuation Standards Committee

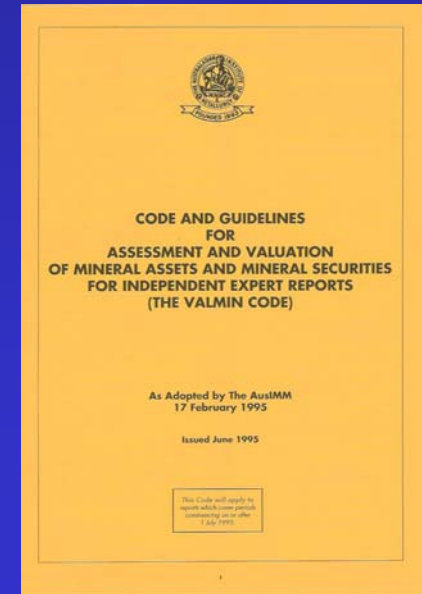
www.ivsc.org

Mineral Property Valuer
Ellis International Services, Inc.
Denver, Colorado, USA
www.minevaluation.com



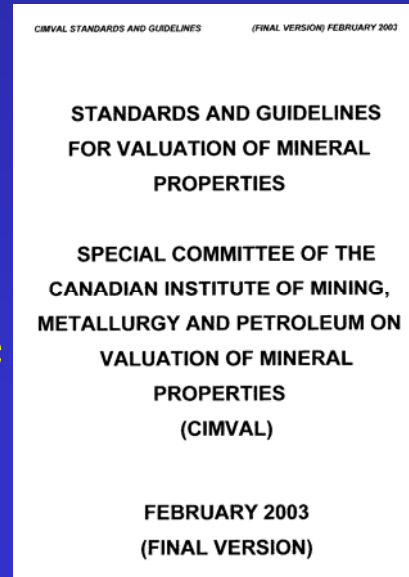
Main Developments of Mineral Valuation Standards — VALMIN Code, Australia

- 1995 first published, by The Australasian Institute of Mining and Metallurgy (AusIMM)
- Introduced important ethical principles:
 - transparency, materiality, competence, and independence
- Major focus on technical assessment of mineral properties
- Enforceable on AusIMM members for financial reporting
- 2005 edition, 23 pages



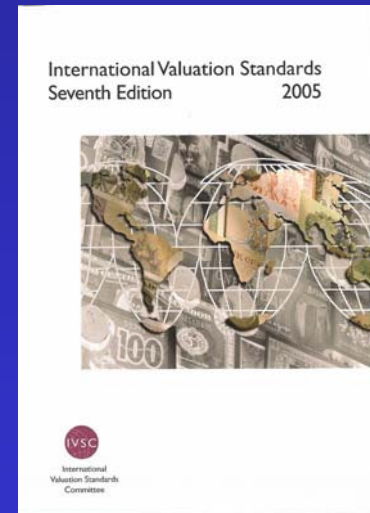
Main Developments of Mineral Valuation Standards — CIMVal Standards, Canada

- 2003, published by The Canadian Institute of Mining, Metallurgy and Petroleum (CIM)
- the first set of mineral valuation standards to incorporate the three valuation Approaches
 - Cost Approach
 - Market (Sales Comparison) Approach
 - Income (Capitalisation)Approach
- Instructions only for Market Valuation of the Real Property portion of mineral holdings
- 33 pages



Main Developments of Mineral Valuation Standards — International Valuation Standards (IVSs)

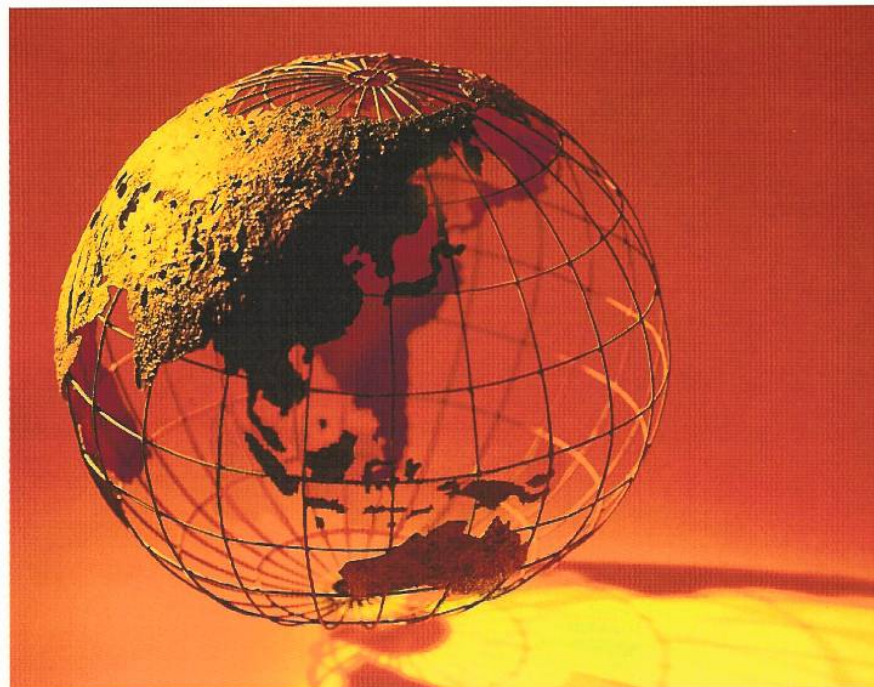
- 2005, the Seventh Edition of the IVSs contains mineral and petroleum valuation standards
 - Published by the International Valuation Standards Committee (IVSC)
- Designed for worldwide use
- Based on comprehensive Generally Accepted Valuation Principles (GAVP)
- 2007, the Eight Edition, 462 pages



International Valuation Standards

Eighth Edition

2007



International
Valuation Standards
Committee

International Valuation Standards (IVSs)

- Valuation of all asset types:
 - Real Property
 - Includes mineral rights, mineral deposits, land, buildings
 - Personal Property
 - Includes machinery and equipment, working capital and securities
 - Businesses
 - Includes mine and quarry operating entities
 - Financial Interests
 - Intangible assets, including options to buy or sell real property and personal property

International Valuation Standards (IVSs)

- Market-based and Non-Market valuations
- Valuations for most purposes
 - Including private sector (non-government) financial reporting (corporate accounting), particularly with the International Financial Reporting Standards (IFRSs)
 - and public sector (government) accounting, particularly with the International Public Sector Accounting Standards (IPSAS)

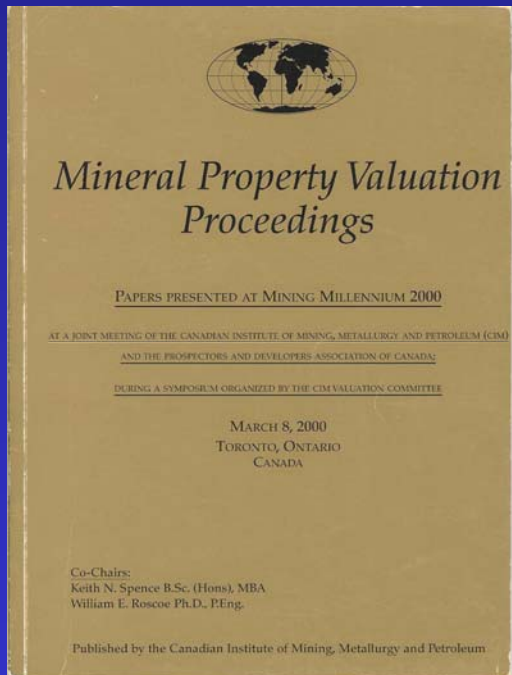
International Valuation Standards (IVSs)

- Principles-based standards, not rules-based
 - Minimizes loopholes for abuse of standards
 - Minimizes obsolescence with changing legislation, economy, and professional practice
 - The basic principles are common across all professional sectors of valuation
 - Minimizes conflicts of theory, principles, and modes of application between valuation sectors

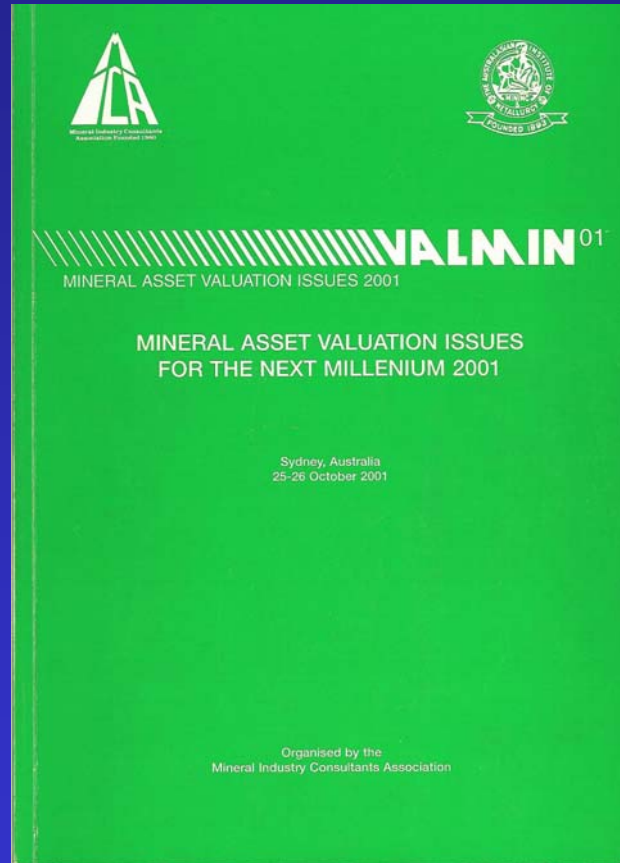
International Valuation Standards Committee (IVSC)

- Published the first set of IVSs in 1985
 - Mainly for valuation of land and buildings
- United Nations NGO, working closely with World Bank, EU, BIS, OECD, IMF, WTO, Basel Banking Committee
- 50 nations participate in developing and maintaining its standards
 - The IVSs are translated into a number of languages
- China Appraisal Society is a Full Board Member and a significant sponsor

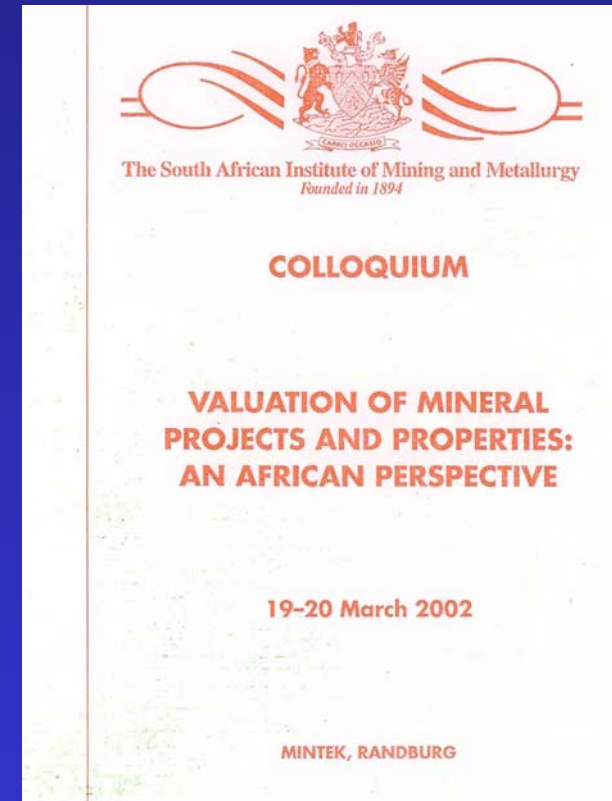
Participation Globally in Minerals Valuation Conferences



Canada 2000



Australia 2001



South Africa 2002

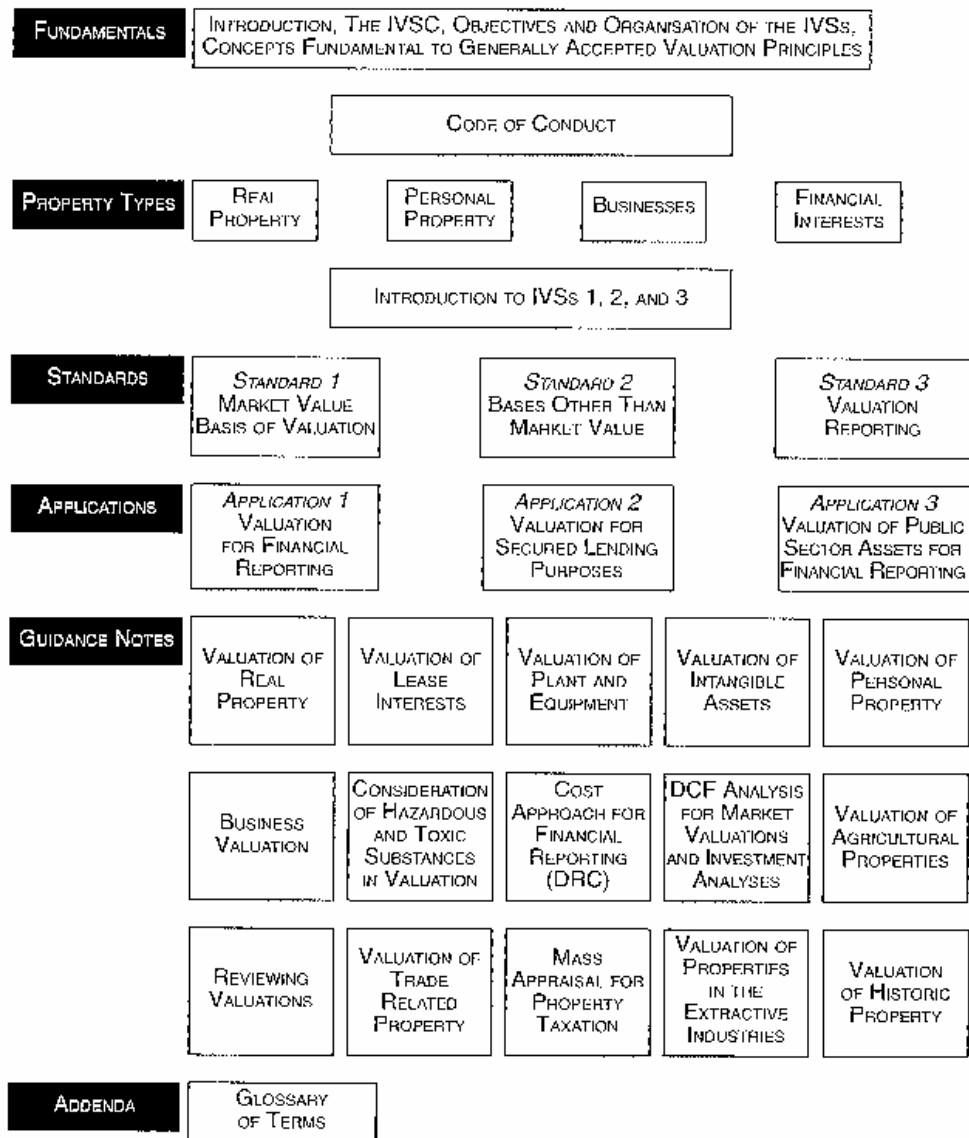
Participation, United Nations, Geneva



Need for a Global Extractive Industries Valuation Standard

- Minerals and petroleum companies work internationally
- Minerals and petroleum valuers (appraisers) work internationally
- Companies report internationally to:
 - Securities markets
 - Investors
 - Lenders
- Investors and lenders compare projects internationally
- Governments compete when leasing out or privatizing mineral properties
- 150+ countries need standards
- Required to support *current value* accounting for the extractive industries adopting the IFRSs

Structure of the IVSs



IVSC Undergoing Change

- Demand for the IVSs and IVSC interpretation support is rapidly increasing
- Increasing needs to support the rapid global adoption of the IFRSs (such as in China)
- In November 2007, changing name to International Valuation Standards Council
- Paid staff replacing volunteer professionals
- A new International Valuation Standards Board within IVSC.

IVSC Best Practice Technical Paper

- IVSC Extractive Industries Technical Paper is scheduled for publication in 2008
 - After three years of development by IVSC's Extractive Industries Task Force
- Provides comprehensive, best practice guidelines for valuations in the extractive industries (minerals and petroleum)
- Explains the application and implications of many of the IVS standards to minerals valuations

Standards Trends Internationally

- Globalisation is driving global uniformity of standards
 - Global uniformity is necessary in measurement and classification systems for all industry sectors for efficient, competitive international markets
- Global convergence of private sector accounting standards on the IFRSs, supplemented by local guidance.
 - Globalised stockmarkets and banking demand uniform financial reports.
 - In Feb. 2006, China issued 39 new IFRS-based accounting standards for business enterprises.
 - Globalisation demands uniform valuations of assets and liabilities for those reports

Standards Trends Internationally

- Reduction from approximately 200 minerals and petroleum reserve-resource classification systems worldwide, towards harmonised SPE-UNFC-CRIRSCO combined classification
- Merging of valuer certification bodies nationally and internationally, with need for uniform valuer education and certification

Minerals Valuation Trends Internationally

- Globalisation by mining and petroleum companies, commodities markets, stockmarkets, financiers, and professionals working within those, is causing trends towards:
 - uniform minerals and petroleum valuation standards worldwide
 - Supplemented to meet national needs
 - uniform qualifications and competency requirements for minerals and petroleum valuers worldwide
 - Certification or licensing of those valuers by self-regulating organisations with demonstrated enforcement of a strong Code of Ethics.

Minerals Valuation Trends Internationally

- Increasing demand for extractive industries valuers to work across borders
- Growing shortage of competent extractive industries valuers
- Continued proliferation of national/state/provincial certification/license requirements for engineers, geologists, and land valuers
- Inconsistencies in these requirements, lack of reciprocity, and varying land and mineral laws, continue to increase the difficulty for extractive industries valuers to work legally across borders.
 - For example, within the USA, Canada, and Australia
- Barriers to trade in professional services need to be minimized
 - A system of international reciprocity for certification and licensing of qualified persons should be developed

Extractive Industries Valuer Education

- Minerals and petroleum valuation short courses teaching market valuation principles based on the GAVP are rare worldwide
 - No university programs
- No comprehensive textbook is available for teaching such

Extractive Industries Valuer Education

- Comprehensive minerals/petroleum valuer education must be made available
- Instructional materials based on IVSs must be written
- Appropriately qualified instructors must be groomed to teach them
- Continuing education courses are needed

Extractive Industries Valuer Education

— Alternatives

- Students and interested professionals can learn much from published professional papers on extractive industries valuation.
 - Some available at: www.mineralsappraisers.org and www.minevaluation.com
- Minerals industry professionals seeking education in market valuation commonly take short courses in real property or business valuation, offered by professional societies and educational institutions.

Recommendations

- Nations and institutes should not develop their own valuation standards
- Valuation standards setters should adopt the complete set of IVSs by reference (allowing automatic updating), to avoid valuation sector and international conflicts of standards and inappropriate rules
- Supplement the IVSs as needed for local conditions and to provide enforcement of a Code of Ethics
- Support the development of educational materials and courses for student extractive industries valuers
- Remove or lower certification/licensing and other barriers, that prevent or impair entry by qualified and competent extractive industries valuers, to work in their specialization across state and national borders

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