

**BUSINESS PLAN
ISO/TC 27
SOLID MINERAL FUELS**

N 1651

1 INTRODUCTION.

1.1 ISO technical committees and business planning.

The extension of formal business planning to ISO Technical Committees (ISO/TCs) is an important measure which forms part of a major review of business. The aim is to align the ISO work programme with expressed business environment needs and trends and to allow ISO/TCs to prioritise among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development. Your role in the implementation of the Business Planning concept will contribute significantly to the overall effectiveness of international standardization.

We express our sincere appreciation and thanks for your time in reviewing this Business Plan.

1.2 International standardization and the role of ISO.

The foremost aim of international standardization is to facilitate the exchange of goods and services through the resolution of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: ISO (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical, which is the responsibility of IEC (International Electrotechnical Committee), and most of the Telecommunications Technologies, which are largely the responsibility of ITU (International Telecommunication Union).

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 130 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the International Standard.

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its Technical Committees are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

ISO offers also the Industry Technical Agreement (ITA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the ITA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.

2 BUSINESS ENVIRONMENT OF THE ISO/TC.

2.1 Description of the Business Environment.

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this ISO/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

Coal is a heterogeneous substance showing considerable non-homogeneity even in a finely ground state. A number of the chemical tests by which its properties are determined are empirical and subjective, and emphasise the need for standard procedures.

Standards for sampling and analysis are used by industries involved in the generation of electricity, production of steel, gas, cement and chemicals, to name but a few.

Plant and equipment manufacturers use the standards for sampling and coal preparation, and coal scientists throughout the world use those relating to fundamental coal structure.

In all cases it is essential that the terminology used in the description of structure, physical and chemical properties can satisfy academic, utilization and commercial objectives.

The increase in the movement of coal on the international market is increasing commercial competition. As a result the need for rapid methods of analysis backed up by standardized methods has become a priority. International Standards should, however, not be written so as to disadvantage any individual sources of fuel and also to be fair to both the buyer and the seller.

2.2 Quantitative Indicators of the Business Environment.

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the ISO/TC:

Recoverable coal reserves are spread over almost 70 countries at current production levels, proven coal reserves are estimated to last 133 years. In contrast proven oil and gas reserves are equivalent to around 42 and 60 years at current prod levels respectively.

Coal provides 29.6% at global primary energy needs and generates 42% at world's electricity, indicating an increase of 18% for the last two years.

In 1995 world production of hard coal was 4 973 million metric tonnes (Mt) a 7,4% increase in production over the previous year and 78% growth over the past 25 years.

2007 – 5 543 Mt

2009 - 6 823 Mt

2010 – 7 229 Mt

World Hard Coal Production
World Coal Institute

Country	Production (2010) (e) Mt
PR China	3 162
USA	932
India	538
Australia	353
S Africa	255
Russian	248
Poland	77
Indonesia	173
Kazakhstan	105

In 2010, world hard coal production increased by 6,8% compared to 1,8% in 2009

(e) estimate

2.2.1 Structure of the market: Suppliers/Manufacturers (*descriptive and quantitative*)

International trade in Hard Coal amounted to 609 Mt in 2000, increasing to 775 Mt in 2005. The distribution of International Hard Coal Trade.

Year	Steam Coal Mt	Coking Mt	Total Mt
2000	421	188	609
2007	670	247	917
2009	629	217	846

The major exporters of Steam coal were as follows:

Country	2010	2010	Total Mt
	Steam coal Mt	Coking coal Mt	
Australia	143	155	298
Indonesia	160	2	162
Russia	95	14	109
South Africa	68	2	70
PR China	51	3	54
Colombia	67	1	68
USA	23	51	74

The major importers during the same period were as follows:

Country	2010	2010	Total
	Steam Coal Mt	Coking Coal Mt	Mt
Japan	129	58	187
Rep of Korea	91	28	119
Chinese Taipei	58	5	63
Germany	38	8	46
PR China	129	48	177

Source of Data: World Coal Institute

2.2.2 Structure of the market: Customers (descriptive and quantitative)

Coal is the major fuel used for generating electricity, providing some 41% of the world's electricity.

Countries heavily dependent on coal for electricity generation include:

Country	Energy generated from coal (2007) %
Poland	90
South Africa	93
Australia	76
PR China	79
Israel	63
Kazakhstan	70
India	69
Morocco	55
Greece	55
USA	45
Germany	44

2.2.3 Major factors which may have an impact on the development of the markets

While it is accepted that mining does temporarily disturb nature, modern technologies, increased awareness and radically different sensibilities are enabling today's mining industry to provide the resources modern society requires without destroying the environment in the process.

A steady decline in combustion pollutant levels, improved water management practices and widespread land reclamation are now standard consequences of coal production and its use.

In recent years emissions of sulphur dioxide and particulates from coal-fired power stations have been significantly reduced, even in countries where the use of coal has increased. This has been achieved by the more effective cleaning of coal before it leaves the mine, increased use of clean coal technologies, flue gas desulphurisation, the greater use of low sulphur coal and the blending of coals with different sulphur and chlorine content.

Because coal-mining activities frequently come into contact with water resources, eliminating the potentially harmful environmental impact in this area has long been a primary concern of the industry. The major water quality issues include acid mine drainage control, ground water protection, and the prevention of surface water sedimentation. Each of these aspects requires careful monitoring throughout all phases of the mining process.

Land reclamation is now an integral and normal part of the coal surface mining process. Coal operators are guided by the principle that coal extraction carries with it the responsibility of managing and restoring the land.

In most countries planning and legislation constraints ensure that these objectives are met. It is imperative that ISO TC 27 is able to contribute with the generation of relevant standards which will facilitate the understanding and testing of coal, related products, processes and matters relating to the environment

3 BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC.

The availability of International Standards for solid mineral fuels will greatly assist in:

- b) the commercial evaluation of more than 7 229 million metric tonnes (Mt) (2010) each year, valued at \$143 billion; of this production 938 Mt are traded internationally;
- c) the elimination of trade barriers;
- d) the standardisation of terminology, development and maintenance of uniform techniques for the sampling, preparation, analysis and classification of solid mineral fuels;
- e) the protection of the environment.

Non-standard methods of analysis are now frequently being used by agreement between suppliers and users provided that they can be shown to provide results which are comparable with the standard method.

Because of the rapidly changing field of analytical techniques only a brief mention of alternative methods will appear in the international standards developed by ISO/TC 27, WG 9 of SC 5 is establishing uniform procedures for comparing alternative methods with International Standard methods and for assuring the quality of the results obtained.

The policy of ISO/TC 27 is to provide an open forum for all nations for the processing implementation and maintenance of ISO standards relevant to solid mineral fuels which will facilitate international trade and sustain the long term competitiveness in world markets.

4 REPRESENTATION AND PARTICIPATION IN THE ISO/TC.

There are **22** participating (P members) and **19** observing countries (O members) represented on the Technical Committee, including all the major producers and users of Hard Coal. Liaison Member Organizations include technical and economic organizations. There is a large input into the Technical Committee, the Sub Committees and the Working Groups from participating countries and can be categorised, to indicate specific economies.

Developed Countries	Developing Countries	Countries with economies in transition
Participating (P) Members	Participating (P) Members	Participating (P) Members
Australia (SA) Canada (SCC) China (SAC) Czech Republic (CNI) Denmark (DS) France (AFNOR) Germany (DIN) Italy (UNI) Japan (JISC) Kazakhstan (KAZMEMST) Netherlands (NEN) New Zealand (SNZ) Poland (PKN) Russian Federation (GOST R) Spain (AENOR) USA (ANSI) Ukraine (DSSU) United Kingdom (BSI)	India (BIS) Korea, Republic of (KATS) Mongolia (MASM) Portugal (IPQ) South Africa (SABS)	Serbia and Montenegro (ISSM) Ukraine (DSSU)

Observing (O) Members	Observing (O) Members	Observing (O) Members
Austria (ON) Belgium (IBN) Finland (SFS) Ireland (NSAI) Norway (SN) Switzerland (SNV) Indonesia (BSN) New Zealand (SNZ)	Egypt (EOS) Greece (ELOT) Indonesia (BSN) Korea, Democratic People's Republic of (CSK) Pakistan (PSQCA) Thailand (TISI) Iran, Islamic Republic of (ISIRI)	Bulgaria (BDS) Hungary (MSZT) Romania (ASRO) Vietnam (TCVN) Turkey (TSE) Hong Kong China (ITCHK SAR) Serbia (ISS) Vietnam (STAMEQ)

5 OBJECTIVES OF THE ISO/TC AND STRATEGIES FOR THEIR ACHIEVEMENT.

5.1 Defined objectives of the ISO/TC 27.

- Encourage participation from all producers and utilisation countries with the main aim to facilitate commercial evaluation between trading countries
- Ensure the introduction of best practice standards to support all activities within the coal and coke value chain.
- Meet deadlines as directed by ISO central secretariat
- Ensure well managed Secretariat and ISO TC meetings

5.2 Identified strategies to achieve the ISO/TC's defined objectives.

- All SC's, Working Groups and Secretariat to meet every 2 years.
- Improve communications between Secretariat, Chairman of SC, and Subcommittees and Project Leaders
- Facilitate the introduction of well researched, validated and unbiased standards
- Ensure well structured and co-ordinated participation from participating countries
- Use of National standards where possible as source documents
- Ensure all members are well acquainted with specific directives through effective communication
- Measure compliance through managed project evaluation
- Encourage the use of electronic communication means
- Introduce well defined program, implementation and utilisation of resources to facilitate the effective management of the Secretariat
- Equip officials through directives and training to meet various statutory requirements
- Formulate organising committee to plan, organise and execute various requirements in order to ensure effective TC meetings

6 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE ISO/TC WORK PROGRAMME.

- Most officials/ members are professionals within the coal industry and are only assisting this TC within their spare time available. The secretariat understands this constraint and finds it difficult to coordinate deliverables within the required time frame.
- Communication is still a factor that is effecting completion and implementation, this includes languages problems
- Funding and Technical support on research and validation.

7 STRUCTURE, SCOPES AND WORK PROGRAMME OF THE ISO/TC.

This section gives an overview of ISO/TC's structure, scopes of the ISO/TCs and any existing subcommittees and information on existing and planned standardization projects, including resources needed for their completion. The aim of this section is to demonstrate the adequacy of the proposed programme of work in relation to the business environment and/or stakeholders' needs. Only structures directly responsible for standardization projects are listed. Therefore, no co-ordination or advisory groups are included.

ISO TC 27 SOLID MINERAL FUELS TC 27, WG 20, SC 1, SC 3, SC 4 and SC 5 in numerical order				
ISO TC SECRETARIAT: South African Bureau of Standards (SABS)				
ISO/TC 27	Responsible ISO Member Chairperson General Secretariat			Mr J Bekker Ms E Steyn
	Chairperson and Secretary Time Allocation per Year (% of full time person or persons)			15%
TC 27	WG 20	Solid mineral fuels, vocabulary, terms relating to sampling, testing and analysis	Japan	Mr T Yokoyama
SC 1	Coal preparation Terminology and performance		SAI	Dr DW Brown (UK)
SC 3	Coke		SABS	Mr L Giroux (SCC)
SC 4	Sampling		SABS	Dr RJ Holmes (Aus)
	WG 6	Sampling of coal seams	NEN	Vacant
	WG 10	Revision of ISO13909	SAI	Mr P Reagan

SC 5	Methods of analysis		SAI	Mr B Isherwood (Aus) until Jan 2011
	WG 1	Moisture, volatile matter and ash	DIN	Dr K Liphard
	WG 2	Carbon, hydrogen, nitrogen, oxygen and sulphur	UK	Ms D Carraro
	WG 7	Brown coals and lignites	SAC	Ms Li Yinghua
	WG 8	Major, minor and trace elements in coal and coal residues	SA	Mr K Riley
	WG 9	Guidelines for validation of methods	UK	Mr R Watts
	WG 10	Plastic properties of coal	SCC	Mr L Giroux
	WG 11	On-line analyzers	USA	Mr C Rose
	WG 12	Miscellaneous Methods	USA	Dr R Graham
	WG 13	Convenor's policy manual	UK	Mr R Watts
	WG 14	Petrographic analysis of bituminous coal and anthracite	SA	Mr H Read

STANDARDS PUBLISHED AND WORK PROGRAMME AS PER

<http://isotc.iso.org/livelink/workprg/workprg?objId=3367509>

ANNEX - GLOSSARY OF TERMS AND ABBREVIATIONS USED IN ISO/TC BUSINESS PLANS

NB: This glossary gives the full name and status of terms used, in abbreviated form or in full, in the above "Business Plan for ISO/TCs". The glossary also gives the source of the information provided. Glossary intends to help with the understanding of the terms used. Whenever any of these terms are used by contributors to this Business Plan, they are requested to use them coherently as foreseen in the glossary.

Term	Abbrev.	Definition
Standardization		Activity of establishing, with regard to actual or potential problems, provisions for common and repeated use, aimed at the achievement of the optimum degree of order in a given context. NOTES 1 In particular, the activity consists of the processes of formulating, issuing and implementing standards. 2 Important benefits of standardization are improvement of the suitability of products, processes and services for their intended purposes, prevention of barriers to trade and facilitation of technological co-operation.
Standard		Document, established by consensus and approved by a recognised body, that provides, for common and repeated use, rules guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context. NOTE Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits.
package of standards		A group, as small as possible, of inter-related standards in the scope of one or more ISO/TCs which are usually developed simultaneously to one another as parts of one standard, or standards that must be developed simultaneously.
Consensus		General agreement, characterised by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments. NOTE Consensus need not imply unanimity.
ISO/TC International Standardization Deliverables:		
International Standard	IS	A normative document, developed according to consensus procedures, which has been approved by the ISO membership and P-members of the responsible committee in accordance with Part 1 of the ISO/IEC Directives as a draft International Standard and/or as a final draft International Standard and which has been published by the ISO Central Secretariat.
ISO Technical Specification	ISO/TS	A normative document representing the technical consensus within an ISO committee, approved by 2/3 of the P-members of the ISO/TC or SC.

Term	Abbrev.	Definition
ISO Public Available Specification	ISO/PAS	A normative document representing the consensus within a working group, approved by a simple majority of the P-members of the TC/SC under which the working group operates.
ISO Technical Report	ISO/TR	An informative document containing information of a different form from that of normally published in a normative document.
Amendment	Amd	An amendment alters and/or adds to previously agreed technical provisions in an existing standard.
Technical Committee	ISO/TC	A technical body responsible for the programming and planning of technical work and the monitoring and execution of this technical work. The ISO/TC is also responsible for the consensus building process among its members for individual work items.
Subcommittee	SC	A technical body reporting to an ISO/TC which, within its scope which is covered by the scope of its parent ISO/TC, is responsible for the monitoring and execution of the technical work. The SC is also responsible for the approval and consensus building process among its members for individual work items.
ISO/TC Working group And ISO/SC Working group	WG	A technical body, appointed by the ISO/TC or ISO/SC and composed of experts, responsible for the drafting of standards, in accordance to the ISO rules and the clear specifications set by the ISO/TC or ISO/SC.
Editing Committee		A committee set up by a technical body (ISO/TC or SC) at the beginning of its work, which represents the three official languages of ISO. It is responsible for the correct formulation and presentation of the standard(s) prepared by the technical body (ISO/TC or SC) and the equivalence of the texts in the three official languages.
Participating member	P-member	A member body participating actively in the work of a TC or SC, with an obligation to vote on all questions formally submitted for voting within the TC or SC on enquiry drafts and final draft International Standards and, wherever possible, to participate in meetings.
Work Item number	WI	The identification number given to a standards project in a standards work programme. It is intended that the standards project leads to the issue of a new, amended or revised standard, an ISO/PAS, ISO/TS or other ISO product.
Vienna Agreement	VA	Agreement on technical co-operation between ISO and CEN.
VA ISO lead (5.1)		Technical co-operation between ISO and CEN under the VA, where the work is done by the ISO/TC, where a formal notification of interest was received by ISO from CEN, and where parallel synchronised procedures are applied in ISO and CEN for the approval processes.
VA CEN lead (5.2)		Technical co-operation between ISO and CEN under the VA, where the work is done by the CEN/TC or SC, where a formal notification of interest was received by CEN from ISO, and where parallel synchronised procedures are applied in ISO and CEN for the approval processes.
ISO stakeholders		Individuals, institutions, organizations or enterprises who

Term	Abbrev.	Definition
		have a direct or indirect interest in the ISO System, its activities and products and who have a specific interest in the effective programming of ISO work items and their adequate resourcing.