STRATEGIC BUSINESS PLAN

ISO/TC 251 *Asset Management*

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Basis Document

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STRATEGIC BUSINESS PLAN ISO/TC 251 *Asset Management*

EXECUTIVE SUMMARY

The field of asset management is of interest to any organization or person interested in deriving value from assets. Those assets can be both tangible (in the form of infrastructure, manufacturing plant, property, facilities) or intangible (in the form of concessions to operate, software licenses, brands or reputation). As assets cover a wide range of sectors, ISO-TC251 will continue supporting the development work in other existing committees that reference asset management as described in this document.

The work of TC251 helps organizations to understand how their stakeholders perceive value and what approaches should be applied in deriving value so that there are clear boundaries in terms of tolerance to various forms of risk whether that be capability, financial, safety, environmental or reputational.

With the focus on sustainability and aligning with the UN Sustainable Development Goals, interest from both developed and developing nations in improving the way decisions are made to better support value derivation from asset bases, regardless of the kind of asset being managed.

One of the key messages of asset management is Alignment of Objectives/goals and this ISO/TC251 business plan has been developed to align with the goals within the ISO Strategy 2030 of:

- ISO standards used everywhere
- Meeting global needs
- All voices heard

Also ensuring the alignment with the vision of "Making lives easier, safer and better".

Our core focus is in three categories:

> 1. Building a diverse technical committee and communicating the benefits of the application of the discipline of asset management and the published work of ISO/TC251 to both our user community (and through a diverse range of liaisons with ISO and IEC committees) as well as other external bodies.

2. Understanding feedback on our current publications and revising/maintaining them as appropriate so they adapt to meet global needs.
3. Identifying areas of new work that will advance and communicate the discipline. Feedback in this area is that there continues to be a demand for developing the work in the area of interfaces between financial and technical areas of our discipline, for sustainability, and for digitization.

TC251 has established seven Working Groups (described in this business plan) to pursue work in these areas. Additionally it has established a Chair's Advisory Group which owns this Strategic Business Plan and will work to identify new work items as well as coordinating work items arising from existing work.

With the diverse nature of the discipline of asset management, we have established a wide variety of liaisons and have processes in place to proactively engage with these committees and external bodies to ensure that duplication of effort is minimized and that scarce resource is appropriately directed towards work that will benefit the standards user community to the greatest extent.

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 prioritize among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

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 elimination 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 164 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 International Workshop Agreement (IWA) 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 IWA 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 and social 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.

The topic of asset management concerns the adequacy of the decision making leading to value creating activities and the subsequent control processes for the delivery of activities associated with those decisions. The topic of asset management as described in the ISO 55000 series of standards should not be confused with either personal wealth management, or the maintenance of assets. It should be noted that these value creating decisions cover both capital and operational expenditure, as well as deriving a good balance between these different kinds of expenditure, to ensure a sustainable solution that best balances the needs of diverse groups of stakeholders.

Asset management is a highly topical and evolving subject, with interest globally from both public and private sector organizations who utilise their assets for the provision of services critical to customers and society (e.g., utilities, transport, power generation, defence, manufacturing, fleet management, property, local and national governments). The diverse range of member in TC251 have observed an increasing interest from key stakeholders, who wish to be assured that the assets are being managed safely, effectively and efficiently with appropriate consideration of short-term priorities, long term sustainability (see comments below on the United Nations' "Sustainable Development Goals" (UN SDG's)), risk management and value-for-money.

The topic of asset management is relevant to all countries and their national commercial interests. Those with established economies may utilise asset management to manage and/or regulate their assets more efficiently, while those with developing economies are looking for the tools, such as asset management, to help them initially create and then to manage their assets in an effective way. The UN SDG's specifically highlight many of these issues and ISO/TC251 sees its work contributing specifically to the SDG's under categories: 6, 7, 9, 11, 12, 13, 14, 15, 16.

Traditionally, the field of asset management has gravitated to issues concerning physical assets; however, the work of ISO/TC 251 shows that there is a growing need for asset management for intangible assets, such as software, concession agreements, licenses to operate, etc. Ensuring a holistic view that manages all forms of assets individually and together on long term, contributing to sustainable solutions, making lives easier, safer and better.

There is a need for much greater understanding between those who operate assets and those who finance them, to enable a "true and fair" view of an organization to be achieved.

2.2 Quantitative Indicators of the Business Environment

A list of quantitative indicators to describe the business environment of ISO/TC 251 is given in Annex A, to provide information that supports its actions. These indicators were developed following a survey of the members of the TC.

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

The following benefits are expected through ISO/TC 251's activities, in alignment with ISO's core strategic objectives:

3.1 ISO Standards Used Everywhere

The TC aims to:

- Enable member countries around the globe to share its research findings and practical experiences in the field of asset management.
- Help organizations undertake asset management effectively and promote the sustainable development of those organizations.
- Provide customers, consumers, governments, regulators, and other interested parties or stakeholders, with greater added value.
- Aid member countries in achieving the UN SDGs, whilst balancing cost, risk and capability through the lifecycle.

Inputs from the national standards body to ISO/TC 251 indicate that the ISO 55000, ISO 55001 and ISO 55002 standards have been translated into the many languages.

3.2 Meeting Global Needs

The ISO 55000, ISO 55001 and ISO 55002 standards were based on tried and tested national standards, some of which had been used internationally for more than 10 years.

The standards evolved into the ISO series, based on feedback from best practice.

The TC will continue with its activities in the standardization of the conduct of asset management and the provision of guidance to organizations on how to enhance their asset management and their asset management systems, based on best practice.

The TC will promote the establishment of a globally unified system of asset management, to facilitate the management of assets and to enable the evaluation of organizations' asset management systems.

While not directly engaged in people development activities, the TC's members are active in participating in conferences and other international and national events, particularly in order to engage with potential users of the standards and to guide those who may be looking at entering this field.

Asset management has a broad base and are able to accommodate those starting their professional lives, as well as those looking for a second career. Specifically, the discipline of asset management is developing and many organizations adopting its principles are identifying new kinds of roles spanning the more traditional professional disciplines. Examples include roles in risk-based decision making which span traditional technical, risk and financial disciplines.

Many organizations have been performing de-facto asset management activities, perhaps without understanding that they are doing so. The TC aims to help clarify this situation for them and to alert them to the body of knowledge that is available, to enhance their performance.

3.3 All Voices Heard

The TC has established a number of key liaison relationships internally with other TCs in related activities (see the table below).

All major institutions in the field of asset management participate in the TC's activities. While they are currently represented indirectly (through delegates who have been appointed by their national member bodies to the TC), several of them are now considering the benefits of establishing direct (external) liaisons.

The TC is also pleased to note that many of the world's leading experts in this field are participating in its activities.

This leads the TC to deliver benefits such as:

- The provision of management system frameworks that will help organisations implement and embrace in their organisational activities existing works from other ISO or IEC committees (such as IEC 60300-1 on Dependability management, etc.).
- Support for the work of developing or maintaining the following standards in other committees:

Committee	Standard(s)
ISO/CASCO	ISO/IEC TS 17021-5 "Conformity assessment – Requirements for bodies providing audit and certification of management systems – Part 5: Competence requirements for auditing and certification of asset management systems"
ISO/TC 59/SC 13	ISO standards for "Organization and digitization of information about buildings and civil engineering works, including building information modelling (BIM)"
ISO/TC 59/SC 14	ISO standards for "Building Construction – Design Life"
ISO/TC 67	ISO standards for "Materials, equipment and offshore structures for petroleum, petrochemical and natural gas industries"
ISO/TC 68	ISO standards for "Financial services"
ISO/TC 108/SC 5	ISO standards for "Mechanical vibration, shock and condition monitoring – Condition monitoring and diagnostics of machines"
ISO/TC 176/SC 2	ISO standards for "Quality management and Quality Assurance/ Quality Systems"
ISO/TC 184	ISO standards for "Automation Systems and Integration"
ISO/TC 184/SC4	ISO standards for "Industrial data"
ISO/TC 207	ISO standards for "Environmental management"
ISO/TC 207/SC 4	ISO future standard on "Green finance"
ISO/TC 224	The ISO 24516 series of "Guidelines for Management of Assets of water supply and wastewater systems"
ISO/TC 262	ISO series of "Risk management" standards, particularly ISO 31000

ISO/TC 267	ISO series of "Facility management" standards, particularly ISO 41001
ISO/TC 268/ SC1	ISO 37150 standards on "Smart community infrastructures"
ISO/TC 289	ISO 10668 "Brand valuation – Requirements for monetary brand valuation"
ISO/TC 292	ISO 22301 "Business continuity management"
ISO/TC 295	ISO 21378 on "Audit data collection"
ISO/TC 309	ISO future standard on "Governance of organizations" and ISO 37301 on "Compliance management"
ISO/TC 322	ISO future standard on "Sustainable finance"
ISO/TC 323	ISO future standard on "Circular Economy"
ISO/IEC JTC1/SC7	ISO/IEC 19770-1 "I.T. Asset management"
ISO/IEC JTC1/SC 27	ISO/IEC 27001 "I.T. Security management"
IEC/TC 56	IEC 62402 "Obsolescence management"
IEC/TC 115	ISO standards for "High Voltage Direct Current (HVDC) transmission for DC voltages above 100 kV"
IEC/TC 123	ISO standards for "Management of network assets in power systems"
CEN/TC 234	CEN standards for "Gas Infrastructure"
CEN/TC 319	CEN standards for "Maintenance"
CEN/TC 348	CEN standards for "Facility management"

The TC will continue to support the work of the ISO/TMB/TAG13-JTCG (the Joint Technical Co-ordination Group for management system standards) in maintaining the "Harmonized Approach" from Annex SL in the ISO Supplement to the ISO/IEC Directives Part 1.

The TC has used webinars and other forms of electronic communication to considerable effect and will continue to do so in the future.

As part of its Communications strategy, the TC continuously looks to improve by utilising various options concerning web sites, social media and the use of mobile telephone "Apps" etc., to engage more widely with its user community.

Having first published its core standards in 2014, the TC recognizes that communication about its standards is vital to ensuring their success.

At this time asset management is still considered a new field in many territories. The TC is targeting communications:

- To support ISO's national member bodies to disseminate information about the standards
- To promote the standards directly to potential users
- To support users of existing national standards to migrate to using the ISO 55000 series.

The TC's members are active in participating in conferences and other national and international events to promote the use of its standards.

## 4. REPRESENTATION AND PARTICIPATION IN THE ISO/TC

4.1 Membership

Details of the committee including its membership may be found at its web site:

https://www.iso.org/committee/604321.html?view=participation
The membership of the TC has consistently grown year by year since its establishment in 2015.

The membership of the TC has a good spread across the globe, with a good proportion of representation by developing/ transitional countries. The TC is working towards improving representation from the Middle East, Africa and South East Asia.
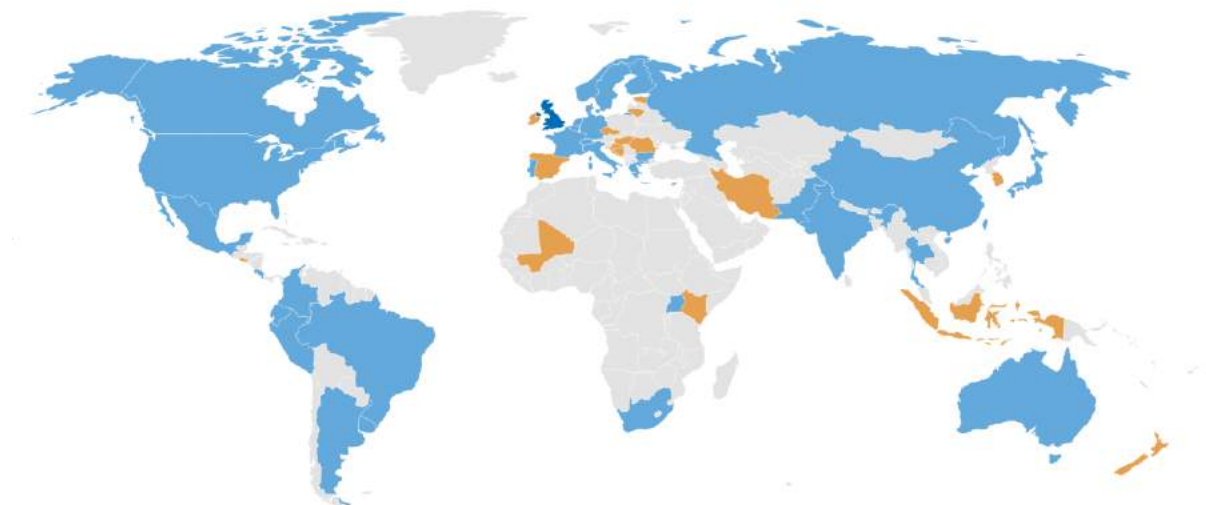
This map is designed to visually demonstrate the geographic distribution of our Members. The boundaries shown do not imply an official endorsement or acceptance by ISO.

Light blue = Participating members; Orange = Observing members; Dark blue = Secretariat (BSI)

For developed countries the challenge is to promulgate the use of the standards, whereas for developing countries the challenge is to create an initial awareness of asset management and the benefits it can bring. The TC hopes its communications strategies will enhance interest among ISO's members in its work, and will enable more of them to join (or return to) the committee.

In terms of Liaison organizations there are a number of key external organizations, such as the Global Forum on Maintenance and Asset Management, which have chosen not to join either the former PC or the TC. This is not through lack of awareness of the work in ISO, but more a case of their members already participating by being members of national delegations. It is noticeable that the web sites of such organizations include clear references to the ISO 55000 standards.

The challenge for TC251 is to ensure that the liaison members (particularly the internal liaison members) are aware of the existence of the asset management standards, to try to prevent them "re-inventing the wheel" during their work.

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

5.1 Defined objectives of the ISO/TC

5.1.1 General

ISO/TC251 aims to develop unified international standards for asset management and asset management systems and contribute to leading edge asset management practices.

The work of the TC will reflect the objectives of ISO's Strategic Plan:

- To determine, standardize and promote leading edge practices in asset management and asset management systems.
- Through the standardization of asset management practices, to support stakeholders in their use of asset management and asset management systems.
- To establish a framework of International Standards for asset management applicable to all organizations.
- To promote the adoption and use of the International Standards on asset management.
- To facilitate international communication and cooperation of asset management and asset management systems activities.
- To provide material to assist stakeholders in meeting the UN SDGs through the application of asset management principles and approaches.
- To foster and encourage greater understanding and communication between internal and external stakeholders of organizations (e.g. technical, commercial, operational and financial areas of organizations) both with each other, and with clients, users, societal groups, investors, regulators and other external stakeholders.

5.1.2 Early review

The former ISO/PC 251 recommended conducting early reviews of the ISO 55000 series of standards, as the application of the Annex SL "Harmonized Approach" caused significant changes to be incorporated into the standards, when compared to the documents used as the basis for the work.

The usual cycle for the revision of a standard is 5 years before a systematic review, approximately 6 months to conduct a review and for a decision to be made on the results, then 2 to 3 years for the revision to achieve publication, i.e., approaching a 9-year period.

In line with the PC's recommendation and on feedback it had received, the TC decided not to wait the 5 years for systematic reviews and instead to conduct initial reviews of ISO 55000 and ISO 55001 in 2016. However, and in contradiction to the TC's plans, the results of their views indicated that the standards should be confirmed unchanged.

Due to separate inputs, it was agreed to treat ISO 55002 separately and to start a revision of the standard at that time. The work to revise ISO 55002 brought forward many ideas on issues that could potentially be used to improve ISO 55000 and ISO 55001 and was completed in November 2019. A separate project for the development of ISO/TS 55010 similarly brought forward additional issues.

These ideas, along with the changes arising from the revision of the Annex SL Harmonized Approach during 2019 and 2020, led the TC to decide to conduct further reviews of ISO

55000 and ISO 55001 again in 2020. On this occasion the TC agreed to start revisions of the standards in 2021.

5.1.3 Supporting the development work in other committees that reference asset management

It is noted that several TCs are now referencing asset management as a topic within their standards. The ISO/IEC Directives Part1:2021, clause SP 5.4, requires that the ISO 55000 and ISO 55001 standards should be cited and followed when developing such standards. ISO/TC 251 will be pleased to work with and assist those TCs in the development of their standards.

Asset management is a key issue for organizations' strategic planning. It is noted that several TCs are now examining the development of standards addressing topics within the strategic area, e.g. SDGs, ESGs, 6 Capitals. ISO/TC 251 will be pleased to work with and coordinate its standards development activities with those TCs.

As the ISO 55000 series was developed to be applicable by any organization, it is essential that ISO/TC 251 understands the approach being taken to asset management in those other standards, in case there are any differences.

The TC also needs to act as a source of information to those other committees about the ISO 55000 series.

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

The TC's initial aim to "establish a core set of standards on asset management and asset management systems" was achieved through the publication of; ISO 55000, ISO 55001 and ISO55002 in 2014.

Since that time, the TC has been focussing on creating awareness of the benefits of asset management and on promulgating the use of the standards. It will continue to do this through its dedicated WG3 "Communications"

Also during this period, the importance of intangible assets, digitalization and data management have increasingly come to the fore and led the TC to recognize it needs to update the standards. For example, the concepts of asset management originated from the arena of physical infrastructure management, but today many sources indicate that around 80% of the value of the Fortune 500 companies is based on intangibles. The TC has increasingly come to understand that the purpose of asset management should be focussed on multi-disciplinary investment decision making to create value for an organization, in contrast to the management/maintenance of physical assets, stressing that investment and value can be more than financial.

The topics of digitization and data management are already being addressed in a number of other TCs. TC251 has therefore been putting emphasis on making sure that it has the necessary liaisons in place to coordinate its activities in these areas with such TCs and to learn from what they are doing. There are a limited number of TCs dealing with intangible assets, and TC251 is treating liaisons with them as being even more critical.

The TC is also fortunate in having a broad spread of expertise within its caucus of experts, many of whom have experience in these areas, and who also have extensive networks of contacts in these fields. The TC will seek to leverage their knowledge and networks to provide the necessary information into its standards development processes.

The TC is very aware of the importance of making its standards and website guidance materials available in a variety of languages. The TC has been extremely fortunate in having a Spanish Translation Task Force appointed to be part of the TC, as there is significant interest from Latin American countries and users in this field. It is also grateful to the other experts and NSBs who have assisted in translating all the information on the TC's website (it is now available in 8 different languages).

Leading from this, the following tasks are to be undertaken in the following 3 years:

a) Continue the task to create greater awareness of the standards and to promulgate their use. ISO/TC 251 has established WG3 on "Communications" to fulfil this role.

The WG, in conjunction with WG4 "Product Improvement and Revision of ISO 55000", will engage with members and with users to determine if they have additional needs for guidance standards or other materials, before proposing their development to the TC. It may also look to using social media, etc. in order to provide information on the standards and on asset management.

b) Obtaining information concerning the use of the standards, and on how the standards can be improved.

Part of WG4's "Product Improvement and Revision of ISO 55000" role was to look at the feasibility of a number of mechanisms for obtaining such feedback, including surveys and validation programmes. A survey was conducted to obtain the feedback on improving the standard, interpreted it and reported it to the TC.

c) The TC will continue to work proactively to engage with its internal liaison members to determine their needs, to review their draft standards as they are developed, and to provide feedback to them.

d) The TC will continue to work proactively with its members and liaison members to determine trends in asset management and the need for additional standards (or other ISO products) to be developed. Where a need is identified, the TC will establish Working Groups, or Ad Hoc Groups, to undertake such tasks, as is appropriate. (A preference will be given to the establishment of Working Groups, to enable the full participation of members.)

Since the publication of the ISO5500x series, it has become clear that there is significant demand for additional information and publications to help organizations to better align their financial and technical areas to support asset management activities.

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

The TC's members do not envisage any enduring factors that would result in an overall negative impact to the implementation and completion of the TC's work programme at this time.

The revision of the Annex SL "Harmonized Approach" will be accommodated and incorporated into the next edition of ISO 55001.

WGs 4 and 6 have developed Design Specifications to guide the revisions of ISO 55000 and ISO 55001 respectively. The incorporation of new issues into the standards could present challenges to the timelines for the projects, as could the need for close coordination between the WGs.

The WG 5 project to revise ISO/TS 55010 will need to look closely at how much material on the topic of "finance" (in relation to asset management) can be transferred from the TS into the ISO 55000 and ISO 55001 standards. This will also require coordination of the activities of WG5 with those of WGs 4 and 6.

The WG7 project for the development of ISO 55011 ran into difficulties after a Committee Draft was approved for elevation to become a Draft International Standard. The WG has conducted a survey of potential users to seek to resolve the problems that were identified. It has since developed a Design Specification to guide the future development work. The WG will need to continue to monitor changes in the ISO 55000 and ISO 55001 standards as they are revised, and to adapt the future ISO 55011 as necessary.

In contrast to WGs 4 to 7, which have been established for some time, have some long serving members to support them, and have standards/projects that have been discussed for some time, WGs 8 and 9 have newly been established and will be addressing new subjects. WG8 will have the advantage of being able to refer to similar standards that have been developed by other ISO/TCs on the topic of involvement/competence. WG9 will be starting on a completely new subject area, which could involve difficult discussions, until the WG's members agree on the path forward. While, both WGs will be starting with outline drafts that were provided as part of their new work item proposals, the TC has requested that they should also develop Design Specifications to guide their work.

In all the WGs, the use of a Design Specification, Outline Project Plan, and Decision Log will enable the TC to monitor progress both against the timeline and on the content of their standards. This will assist in determining the need for any corrective action, which will be implemented as needed.

Due to the COVID pandemic, the TC has been working in a purely virtual environment and has identified some challenges:

a) Delegates attending meetings from a variety of time zones, which means that meetings generally have to be shorter than for physical meetings. In turn, this means that more meetings need to be held to compensate, which can lead to meeting fatigue or attendance difficulties for some experts.
b) It makes the review and processing of comments against drafts extraordinarily difficult, with reduced opportunities for side meetings to resolve disagreements.
c) Virtual meetings facilitate increased participation by those who are normally not able to travel to physical meetings, which is beneficial. However, with increased

participation it can take longer to discuss comments, as all voices need to be given time to express their viewpoints.

Now that virtual working has become the new norm, there is a risk as the world transforms out of the pandemic of leaving some benefits behind. The virtual way of working has enabled a more diverse set of participants among other great benefits. The TC will need to ensure an inclusive way of working moving forward by ways such as blended meetings.

There is still a need to grow the availability of certification, accreditation and competency services in this field. The current limited availability of such certification, accreditation and competency services represents a barrier to uptake of the standards in some territories.

TC 251/WG3 will work on wider communications to help the user community (including certification, accreditation and competence development organizations) to understand the business case for providing such services.

7. STRUCTURE, CURRENT PROJECTS AND PUBLICATIONS OF THE ISO/TC

7.1 Overview

ISO/TC 251 is responsible for the maintenance of the following published international standards:

- ISO 55000 Asset management - Overview, principles and terminology
- ISO 55001 Asset management - Management systems - Requirements
- ISO 55002 Asset management - Management systems - Guidelines for the application of ISO 55001

The TC has joint responsibility with ISO/CASCO for the development of:

- ISO/IEC TS 179021-5 Conformity Assessment — Requirements for bodies providing audit and certification of management systems - Part 5 Competence requirements for auditing and certification of asset management systems.

The TC has currently established the following groups:

- CAG01 – Chair's Advisory Group
- WG3 – Communications and Liaisons
- WG4 – Product Improvement and Revision of ISO 55000
- WG5 – Finance
- WG6 –Revision of ISO 55001
- WG7 - Development of ISO 55011
- WG8 – Development of a new standard on "People involvement and competence"
- WG9 – Development of a new standard on "Data asset value evaluation index system"
- AHG1 - Spanish Translation Task Force

The Chair's Advisory Group's (CAG) purpose is to:

- Examine strategic issues not being discussed currently in the TC
- To look at potential new work items
- To develop and maintain the Strategic Business Plan (SBP)

Within the TC, the ISO/TMB has established:

- AHG01 – Spanish Translation Task Group

The Spanish Translation Task Group has produced translations of ISO 55000, ISO 55001 and ISO 55002. It will continue to produce Spanish translations of other standards and materials that the TC develops.

The results of the recent (systematic) reviews of ISO 55000 and ISO 55001 indicated a strong majority for their revision and it has been agreed to revise both standards.

7.2 Working Group 3 – Communications and Liaisons

WG3 has adopted the following key elements for its purpose:

1) Promote the use of the standards managed by TC251
2) Manage the collection of market intelligence required by TC251
3) Manage the formal liaisons between TC251 and other committees of interest within the standard setting community

Since ISO55001 is a management standard spanning wide range of communities, it can potentially be of interest to a wide range of audiences, which will each need to be addressed with a relevant communications plan. WG3 acts as the single point of contact of TC251 with most outside audiences, both for incoming and outgoing communications. WG3 has identified its target audiences as:

1 – Implementers	Asset owners, operators, contractors (as corporations)
	Asset managers (as individuals)
2 – Service Providers	Training organizations & education providers
	Consultants
	Accreditation bodies
	Certification bodies
3 – Influencers	Regulators (economic) (cost & service level)
	Regulators (technical) (risk & performance)
	Insurance companies / actuarial bodies
	Financial markets / analysts & portfolio managers / investors
	Industry analysts (Gartner, Solomon, etc.)
	Policy makers
4 – Resources	TC251 members
	National Standard Bodies
	TC's and PC's within International standard setting bodies (ISO, IEC, ...)
	Third party associations and bodies Federations (GFMAM, ...) Discipline specific (AMC, IAM, ...) Industry specific: (Cigré, UIC, ...) Market specific: (ENTSO-E, ...)
	Conference organizers / Publishers
	Academia
5 – Other	General public

As a priority, work will commence developing messaging and communication materials that are relevant to the primary audience, i.e. potential implementers of the standard.

WG3 will subsequently start specializing the messaging to the other audiences identified above.

Some of the key communication tools required by WG3 are managed by ISO: the website, publications such as *Focus*, and the online repository for TC251 documents. But these tools only reach or serve a small portion of WG3's audiences. WG3 will therefore need to rely heavily on cooperation with third parties to disseminate its messages and collect the relevant market intelligence.
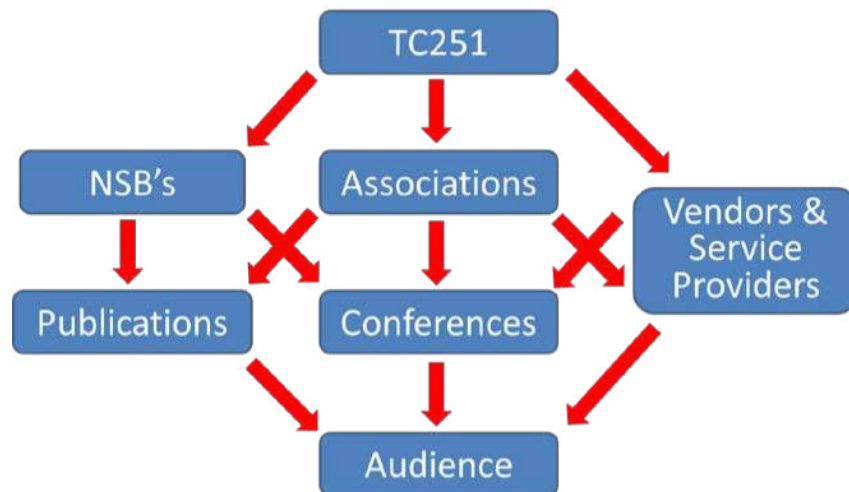
In particular, WG3 will need to leverage all TC251 members to build strong relationships with the relevant National Standard Bodies and with Associations active in the asset management space in their countries. The members of TC251 will become "ambassadors" encouraging such bodies to relay the messaging of TC251 to their own audiences, and potentially requesting these bodies to collect market intelligence for TC251. Many of these bodies are actively promoting ISO55001 already and have produced a wealth of materials that WG3 can refer to.

Since some audiences are new to the topic of ISO5500x, it is essential to make the information both compelling and as easy to access as possible. WG3 will work with ISO to develop a strong web presence. It will also encourage the translation of key information into multiple languages by engaging international TC251 members and NSB staff.

All WGs within TC251 will at times need market input. The role of WG3 is to leverage its connections and processes to facilitate the collection of any market intelligence required by WG4 on behalf of TC251. WG3 will also manage the collection of unsolicited feedback to TC251 by means of web forms or other vehicles.

WG3 manages the liaisons between TC251 and other committees of interest within the standard setting community. WG3 will facilitate TC251 playing a proactive role in such liaison efforts. To this end WG3 will review the need for liaisons with other committees at each TC251 in-person meeting, will ensure all identified liaison needs are addressed, and will supply TC251 liaison members with standardized communication materials.

Since communications around an ISO standard will continue as long as the standard is in existence, the role of WG3 is equally long term. Over the next two years WG3 will need to ramp up and create both processes and content to address the communication needs identified by TC251. After this initial ramp up, WG3 will manage the communication assets of TC251 and respond to any market and/or communication vehicle evolutions. WG3 will perform a review of its main assets at every in-person TC251 meeting.

7.3 Working Group 4 – Product Improvement and Revision of ISO 55000

WG4's purpose is to determine the need for updates and improvements to TC 251 products inclusive of ISO 55000, ISO 55001, ISO 55002, and future products as needed. WG4's approach uses a classic Input, Output, and Outcome model depicted in the graphic below.
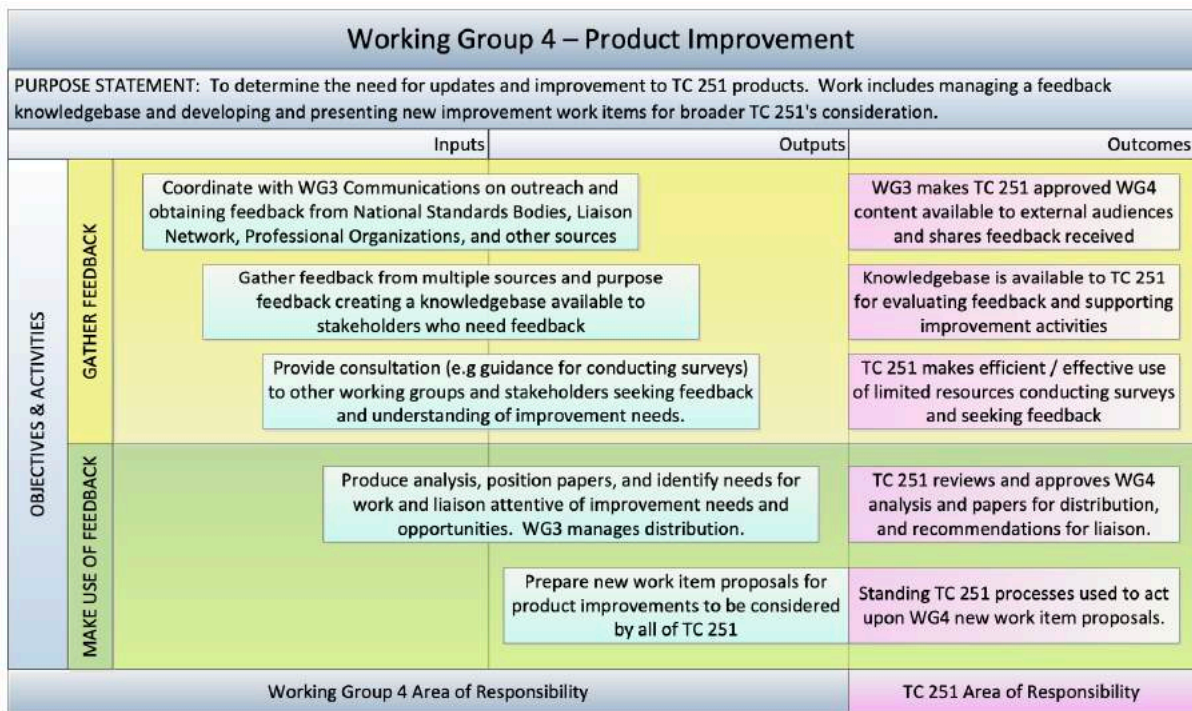
WG4's efforts will be organized around two general types of activities: gathering feedback and making use of feedback as shown in the diagram above. Gathering feedback requires WG4 to work closely with WG3 *Communications* to communicate with National Standards Bodies, TC 251's liaison network, professional organizations, and other sources. WG4 will gather feedback from multiple sources and make this feedback available in a knowledgebase including a structured, searchable database. WG4 will also provide consultation support to TC 251 and other working groups to obtain feedback.

WG4 will make use of feedback using a four-part framework (shown to the right) that: compiles feedback; develops feedback focus areas; identifies improvement opportunities; and then prioritizes improvement actions. WG4's objectives and use of the Input, Output and Outcome model is limited to the first two parts, inputs and outputs. WG4 will develop outcome objectives, but authority to initiate improvement action (defined in terms of tasks and timeframes) will remain a TC 251 responsibility and be coordinated through the ISO/TC251/CAG.

7.4 Working Group 5 – Finance

Since the publication of the ISO5500X series, it has become clear that there is significant demand for additional information and publications to help organizations to better align their financial and technical areas to support asset management activities. WG5 has adopted the following key elements for its Purpose and Scope:

> 1) Provide advice to help organizations realize the benefits of establishing better interaction between their asset management functions and their finance and accounting management functions.

2) Address barriers to such interaction by providing explanations for differences in terminology and meanings ascribed to terms commonly applied in each discipline. Fostering a common language/taxonomy between asset management, finance, accounting management professionals.

WG5 has identified its target audience as:

1) CEO and other 'C' level executives and those in top management who have responsibility for asset management and the finance and accounting management function within the organization.

2) Those in the asset management and finance/accounting disciplines within the organization who have responsibilities to provide information to the finance/accounting function and who conversely rely upon the outcomes of the finance function to meet their asset management objectives.

3) Any other stakeholders who have an interest in the flow of information between asset management and finance/accounting functions of the organization that impinge on the corporate objectives of the organization.

The major tasks planned for WG5 over the next three years is the production of a series of finance related publications ranging from short articles through to standards and technical specifications. These can be published via a variety of routes including the ISO TC 251 website and in associated publications such as relevant magazines.

The choice of publication medium will be driven by the need to spread the message as widely as possible on the ways to improve the interactions between asset management and financial management and accounting in organizations. It is anticipated that these publications will be a good vehicle to generate discussion and feedback to WG4 from a much wider audience than that which is currently aware of the ISO 55000 series.

WG5 has also begun the process of identifying a number of possible additional topics for similar publications. It is recognized that some of these subject areas are within the remit of other ISO and IEC Technical Committees and WG5 will work strongly with WG3 to ensure that TC251 engages positively and proactively with our various liaisons to ensure that work is developed collaboratively and with the full co-operation of other TC's where it is appropriate to do so. Similarly it may be that the correct publication route is via another TC and in those cases WG5 will work closely with the ISO/TC251/CAG to determine how this is to be achieved.

The possible topics for future information and publication medium to be considered include:

- Value of assets/value from assets
- Managing Financial Information
- Financial Risks, threats, exposures and opportunities,
- Performance measurement
- Whole of life costing
- Alignment of AM and Financial management planning
- Long Term Financial Planning
- What is an Asset?
- Aligning the asset views

7.5 Working Group 6 – Revision of ISO55001

This WG was established following the receipt of feedback from TC251 members that areas of ISO 55001 needed an early revision to address highlighted problems.

The main objective for WG 6 is to review the ISO 55001 document and to support users of the ISO 55001. A survey of suggestions for improvement included 8 categories. These are:

1. Guidance: on a number of clauses of the standard guidance was not sufficient or clear. This will need improvement.
2. Cross clause subjects. Some subjects are connected to several clauses in ISO 55001. Their alignment needs further clarification. This will be done in annexes for the strategic asset management plan, risk, finance, compliance, decision making criteria, information management, scope, value and leadership.
3. Consistency between the three ISO 55000 documents (00, 01 and 02) and Annex SL. Especially the input from ISO 55000 is lacking.
4. Cross references. A balance is to be found between the coherence of the documents by referencing to relevant other parts of the ISO 55000 series on one side and not overdoing the amount of cross links on the other side.
5. Balanced clear text. Readability of the document is key in its acceptance by different user groups.
6. Use of examples. Examples can be very clarifying but could also give the impression of limiting the scope of the requirement.
7. Style consistency and language. The style of all texts should be edited to be similar throughout the document.
8. Text beyond the scope. Care should be taken that too detailed requirements are avoided and that interference with specific industry standards is avoided.

The adequacy of guidance for ISO 55001 will benefit significantly from exchanging information and consulting with the communications, product improvement and finance workgroups (WGs 3 to 5) and therefore these processes will be an important part of the work within TC251.

7.6 Working Group 7 – ISO 55011 Guidance for development and application of public policy to enable asset management

WG 7 are developing ISO 55011 to provide guidance for establishing and sustaining an enabling environment for asset management through public policy. It is applicable to all types and levels of government.

The objectives of WG 7 are;

- To provide guidance for establishing and sustaining an enabling environment for good asset management through public policy.
- To provide guidance on the public policy instruments that can enable good asset management and how government officials can apply them.
- To provide case studies and examples of best practice application of public policy instruments that enable good asset management.

Along with the audience from ISO 55000/1, experts from WG7 and results of the worldwide ISO 55011 survey (ISO/TC 251/N710) identify the following new audiences to be considered in the development of ISO 55011:

- Those who advise on public policy,
- Those who implement public policy,
- Those who issue implementing agency guidance,
- Those who issue executive guidance,
- Those who issue final regulations,
- Those who submit proposed legislation or regulations,
- Those who approve proposed legislation or regulations,
- Those who pass legislation,
- Those who are involved in the development of legislation, policy, reporting and control frameworks, including audits,
- Those who influence policy makers who can mandate asset management and/or support the adoption and allocation of resources,
- Those who set strategic direction for public policy.

7.7 Working Group 8 - People involvement and competence

This working group aims to provide guidance for engaging people in an organization's asset management system, and on enhancing their involvement and competence within it.

This guidance is applicable for any organization, regardless of size, type, or activity to carry out competence management, people development, people involvement for those people involved in the establishment, implementation, maintenance and improvement of an asset management system. This guidance can guide various organizations to apply ISO 55001 Asset Management, Management System Requirements.

7.8 Working Group 9 - Data asset value evaluation index system
This working group looks to construct principles, index classification, index system and evaluation process of data asset value evaluation index system.

This looks to be applicable to the data asset value of quantitative calculation and evaluation in the process of electronic commerce transactions. It can also be used as the evaluation basis of data asset commercialization and securitization in the process of online data trading.

8. INFORMATION ON ISO ONLINE

The link below is to the TC's page on ISO's website:

https://www.iso.org/committee/604321.html

Click on the tabs and links on this page to find the following information:

• About (Secretariat, Chair, Committee Manager, Date of creation, Scope, etc.)
• Contact details
• Structure (Subcommittees and working groups)

• Liaisons
• Meetings
• Tools
• Work programme (published standards and standards under development)

Reference information

Glossary of terms and abbreviations used in ISO/TC Business Plans General information on the principles of ISO's technical work

Appendix A

In relation to section 2.2 in this strategic business plan, the following list of indicators describes the business environment of ISO/TC 251 and provides information to support its actions.

A.1. Real examples of increased income and/or cost savings achieved through implementation of the ISO committee's International Standards

Below you will find a list of case studies, success stories and newsworthy items around the adoption of ISO/TC251 work and their associated web-link.

AySA: Lessons learned from an ISO 55001 Certification journey
Case Study October 2019 – English – Español

Downer: Reliable, efficient and sustainable Asset Management
Case Study September 2018 – English – Português

Geneva soars to new heights with ISO 55001
ISO Focus Jan/Feb 2017 English – Français – Español – Português – Chinese – Japanese

Gladstone Area Water Board (GAWB) are using ISO 55001 certification to demonstrate the sound asset practices that contribute to the setting of water prices
BSI Case Study September 2016 English – Português

ISO 55001, Sodexo's bottom line
ISO Focus May/Jun 2016 English – Français – Español – Português – Chinese – Japanese

Alpiq is the first European electricity company to receive the ISO 55001 certification
Electro Suisse Article February 2016 English – Français – Português– Deutsch – Japanese

Scottish Water are using ISO 55001 certification to manage physical assets efficiently and boost customer service levels
BSI Case Study January 2014 English – Português – Japanese

A.2. Total number of the ISO committee's International Standards cited as normative references in International Standards of other ISO committees.

The following table identifies the known ISO committee's are utilizing the standard(s) produced by ISO/TC251.

Committee	Area Utilized
ISO/IEC JTC1/SC 7	**ISO/IEC 19770-1:2017** - Information technology — IT asset management — Part 1: IT asset management systems — Requirements
	ISO/IEC 19770-5:2015 - Information technology — IT asset management — Part 5: Overview and vocabulary
ISO/TC207/ SC4	**ISO/CD 14100** - Green Finance: Assessment of Green Financial Projects (under development)
ISO/TC267	**ISO 41001:2018** - Facility management — Management systems — Requirements with guidance for use
ISO/TC322	**ISO/CD32210** - Framework for sustainable finance: Principles and guidance (under development)
CEN/TC 319	**WD 00319028** - Performance and condition assessment for buildings and civil engineering works - Framework for assessment within physical asset management (under development)
	EN 16646:2014 Maintenance - Maintenance within physical asset management
	EN 17485:2021 Maintenance - Maintenance within physical asset management - Framework for improving the value of the physical assets through their whole life cycle

A.3. Total number of national adoptions of the ISO committee's International Standards.

The following table is a summary of if a country has adopted ISO 55000/55001.

Country	Adopted ISO 55000	Adopted ISO 55001
Argentina (IRAM)	Yes	Yes
Australia (SA)	Yes	Yes
Austria (ASI)	„No	No
Belgium (NBN)	Yes	Yes
Brazil (ABNT)	Yes	Yes
Bulgaria (BDS)	Yes	Yes
Canada (SCC)	No	No
China (SAC)	Yes	Yes
Colombia (ICONTEC)	Yes	Yes
Costa Rica (INTECO)	Yes	Yes
Cyprus (CYS)	N/A	N/A
Denmark (DS)	Yes	Yes
Ecuador (INEN)	Yes	Yes
Finland (SFS)	Yes	Yes
France (AFNOR)	Yes	Yes
Gabon (AGANOR)	Intended for adoption	Yes
Germany (DIN)	Yes	Yes
Greece (NQIS ELOT)	Yes	Yes
India (BIS)	Identical adoption	Identical adoption
Italy (UNI)	Yes	Yes
Japan (JISC)	Yes	Yes
Netherlands (NEN)	Yes	Yes
Norway (SN)	Yes	Yes
Pakistan (PSQCA)	Intended for adoption soon	Intended for adoption soon
Peru (INACAL)	Yes	Yes
Portugal (IPQ)	--	no comment
Russian Federation (GOST R)	Yes	Yes
South Africa (SABS)	Yes	Yes
Sweden (SIS)	Yes	Yes
Switzerland (SNV)	No	No
Thailand (TISI)	Intended for adoption	Intended for adoption
Uganda (UNBS)	Yes	Yes
United Kingdom (BSI)	Yes	Yes
United States (ANSI)	Yes	Yes
Uruguay (UNIT)	--	No