



NEW WORK ITEM PROPOSAL	
Closing date for voting	Reference number (to be given by the Secretariat)
Date of circulation	ISO/TC / SC N
Secretariat	<input checked="" type="checkbox"/> Proposal for new PC

A proposal for a new work item within the scope of an existing committee shall be submitted to the secretariat of that committee with a copy to the Central Secretariat and, in the case of a subcommittee, a copy to the secretariat of the parent technical committee. Proposals not within the scope of an existing committee shall be submitted to the secretariat of the ISO Technical Management Board.

The proposer of a new work item may be a member body of ISO, the secretariat itself, another technical committee or subcommittee, or organization in liaison, the Technical Management Board or one of the advisory groups, or the Secretary-General.

The proposal will be circulated to the P-members of the technical committee or subcommittee for voting, and to the O-members for information.

IMPORTANT NOTE: Proposals without adequate justification risk rejection or referral to originator.

Guidelines for proposing and justifying a new work item are contained in [Annex C of the ISO/IEC Directives, Part 1](#).

The proposer has considered the guidance given in the [Annex C](#) during the preparation of the NWIP.

Proposal (to be completed by the proposer)

<p>Title of the proposed deliverable. <i>(in the case of an amendment, revision or a new part of an existing document, show the reference number and current title)</i></p> <p>English title KNOWLEDGE MANAGEMENT SYSTEMS - REQUIREMENTS</p> <p>French title (if available)</p>
<p>Scope of the proposed deliverable.</p> <p>This Standard sets the requirements for Knowledge Management systems in organizations and deals with the establishment and maintenance of Knowledge Management systems, instilling a culture of Knowledge Management and sharing in Knowledge Management solutions and in the manner of measuring the knowledge in organizations. The Standard is applicable for all types of business, private and public organizations, independent of the field of business and their size, and also for non-profit organizations.</p>

Purpose and justification of the proposal.

Knowledge is considered today as one of the most critical resources for the success of organizations, whether they are profit organizations or non-profit organizations. The management of a critical resource should be managed in an accepted manner and checked against a suitable Standard.

The need for a Standard is especially important today when the subject is in the development stages since an International Standard is both a tool for arranging the activity of knowledge management and a tool for an overall enhancement of the quality of the activity in the field. Other fields, in which Standards were incorporated, were improved and developed due to the regulations and we believe that this will also happen in this important field.

In this age of globalization, there is an advantage to International Standards and in a field that involves cooperation, how much more so. There should also be cooperation in the Standard and allow everyone to benefit from the fruits of our investment carried out in Israel. Furthermore, there is no apparent reason that the Standard's content should change from one location to another.

This Standard establishes requirements for Knowledge Management in an organization:

- A. that aspires to increase its capabilities by means of leverage of personal human, social and organizational capital (hereinafter, intellectual capital).
- B. that wants to prove to its customers and to the market as a whole, its advantage regarding its knowledge and its management.

Adoption of a Knowledge Management system is a strategic decision of the organization. The content and the implementation of a Knowledge Management system in an organization are influenced by various factors:

- A) Characteristics of the organization including size of the organization, its structure and the stakeholders;
- B) The organizational surroundings, changes in this environment and the hazards in it;
- C) The organizational culture in general and the Knowledge Management culture in the organization, in particular;
- D) Changing needs of the organization;
- E) The unique purposes of the organization;
- F) The organization's core capabilities;
- G) The intellectual capital of the organization.

The process based approach means performance of an orderly process, of defined and successive stages over a period of time, for realizing the activities of Knowledge Management in an organization. This Standard encourages the adoption of the process based approach of Knowledge Management in an organization, as the basis for a quality and effective action of a Knowledge Management system in an organization over a period of time.

The purpose of this Standard is to guide its users, while maintaining freedom of management that allows conformance with the above factors.

If a draft is attached to this proposal,:

Please select from one of the following options (note that if no option is selected, the default will be the first option):

- Draft document will be registered as new project in the committee's work programme (stage 20.00)
- Draft document can be registered as a Working Draft (WD – stage 20.20)
- Draft document can be registered as a Committee Draft (CD – stage 30.00)
- Draft document can be registered as a Draft International Standard (DIS – stage 40.00)

Is this a Management Systems Standard (MSS)?

- Yes No

NOTE: if Yes, the NWIP along with the Justification study (see Annex SL of the Consolidated ISO Supplement) must be sent to the MSS Task Force secretariat (tmb@iso.org) for approval before the NWIP ballot can be launched.

Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal.

- International Standard Technical Specification Publicly Available Specification Technical Report

Proposed development track 1 (24 months) 2 (36 months - default) 3 (48 months)

Known patented items (see ISO/IEC Directives, Part 1 for important guidance)

- Yes No **If "Yes", provide full information as annex**

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized.

As far as we know, there are no similar works (MSS intended to be a contractual specification) being developed .

A listing of relevant existing documents at the international, regional and national levels.

We identified two relevant guidance standards:

- AS 5037- 2005: Knowledge management – a guide
- BS PAS 2001 - Knowledge management - Guide to good practice

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s)

The need for this MSS exists at local, national, regional and global levels, and in both developed and developing countries. The need exists for all sectors, all sizes of organizations, and is generic

This MSS establishes requirements for Knowledge Management in an organization that:

- A. Aspires to increase its capabilities by means of leverage of personal human, social and organizational capital (hereinafter, intellectual capital). Peter Drucker, the management no. 1 guru argued that in the 21st century, organizations that will succeed, whether profit based organizations or non-profit organizations will be those who will know how to manage their knowledge and knowledge workers.
- B. Wants to prove to its customers and to the market as a whole, its advantage regarding its knowledge and its management

As such, among the potential needs of this MSS are the following:

- Improve the corporate image
- Open new markets
- Enhance your brand and gain a reputation as a reliable business
- Attract the best employees through your enhanced reputation.
- Find new business partnerships
- Improve the quality of your offers
- Optimization of processes and results
- Have your product reach markets more quickly.

Challenges existing in an organization at the business or organizational level can receive an effective response through Knowledge Management solutions, and to give a business value to the organization (such as efficiency, increasing output, increase in customer and employee satisfaction and creating a new value for the product).

In this era of global trade, the existence of a Knowledge Management System can assist in enhancing trust in the organization and thereby contribute to accessing new markets

The intended document would be applicable to organizations of all kinds and sizes, based on developing and developed countries.

Liaisons:

A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s).

Joint/parallel work:

Possible joint/parallel work with:

- IEC (please specify committee ID)
- CEN (please specify committee ID)
- Other (please specify)

New work item proposal

A listing of relevant countries which are not already P-members of the committee.	
Preparatory work (at a minimum an outline should be included with the proposal) <input checked="" type="checkbox"/> A draft is attached <input type="checkbox"/> An outline is attached <input type="checkbox"/> An existing document to serve as initial basis The proposer or the proposer's organization is prepared to undertake the preparatory work required <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Proposed Project Leader (name and e-mail address) Dr.Moria Levi- moria@kmrom.com Secretariat-SII Secretary- Havi Sarel-Gore (MSc.)-sarel@sii.org.il	Name of the Proposer (include contact information) Havi Sarel-Gore (MSc.)-sarel@sii.org.il
Supplementary information relating to the proposal <input checked="" type="checkbox"/> This proposal relates to a new ISO document; <input type="checkbox"/> This proposal relates to the amendment of existing ISO document <input type="checkbox"/> This proposal is for the revision of an existing ISO document; <input type="checkbox"/> This proposal relates to the adoption as an active project of an item currently registered as a Preliminary Work Item; <input type="checkbox"/> This proposal relates to the re-establishment of a cancelled project as an active project. Other:	

Annex(es) are included with this proposal (give details)

Justification Study for NWIP:

KNOWLEDGE MANAGEMENT SYSTEMS - REQUIREMENTS

1. Introduction

KNOWLEDGE MANAGEMENT

The field of Knowledge Management has been evolving in Israel during the last 20 years. It was mainly developed by practitioners in businesses, companies and organizations. It was developed due to the deep understanding that knowledge in organizations is one of the most important assets. The Academy joined these efforts by research, teaching and consulting. This situation has led to well established practices, methodologies and tools.

Also, this leads to experts and implementers of forums and networks who shared their best practices and gained experience in Knowledge Management.

At the same time, the same developments and trends were observed in other countries and we have learned a great deal from the experience gathered in companies in different countries through participation in professional conferences and through direct communications.

Based on this infrastructure and lessons learned, the Standards Institute of Israel (SII) with the professional community of Knowledge Management have prepared and approved an Israeli Standard SI 25006 for Knowledge Management. This standard was well accepted by different companies in Israel, which have implemented it in the Management Systems of their companies. Some of the companies even asked for certification based on the requirements of this standard. As of today, several companies in Israel are certified to SI 25006 as part of their management system.

Based on our experience we propose that the ISO Central Committee consider a New Work Item on the issue of Knowledge Management. We are sure that today and in the future, there is a strategic importance for managing knowledge in companies. In the era of globalization, it is crucial to build your abilities based on knowledge sharing with partners. In the era of FACEBOOK, TWITTER, WIKIPEDIA and GOOGLE, there are many opportunities to learn and communicate for the benefit of your organization based on these networks through the effective principles of Knowledge Management.

This paper presents a JS for NWIP:

KNOWLEDGE MANAGEMENT SYSTEMS - REQUIREMENTS

Annex SL to the ISO/IEC Directives, Part 1, Consolidated ISO Supplement – Procedures specific to ISO; 2012 gives the following general principles to provide guidance to assess the market relevance of proposed MSS and for the preparation of a JS.

Annex SL further states that an MSS should be initiated, developed, and maintained only when all of the principles are observed.

- | | |
|---------------------|--|
| 1) Market relevance | Any MSS should meet the needs of, and add value for, the primary users and other affected parties. |
| 2) Compatibility | Compatibility between various MSS and within an MSS family should be maintained. |
| 3) Topic coverage | An MSS should have sufficient application coverage to eliminate or minimize the need for sector-specific variances. |
| 4) Flexibility | An MSS should be applicable to organizations in all relevant sectors and cultures and of every size. An MSS should not |

prevent organizations from competitively adding to or differentiating from others, or enhancing their management systems beyond the standard.

- 5) Free trade An MSS should permit the free trade of goods and services in line with the principles included in the WTO Agreement on Technical Barriers to Trade.
- 6) Applicability of conformity assessment The market need for first-, second- or third-party conformity assessment, or any combination thereof, should be assessed. The resulting MSS should clearly address the suitability of use for conformity assessment in its scope. An MSS should facilitate joint audits.
- 7) Exclusions An MSS should not include directly related product (including services) specifications, test methods, performance levels (i.e. setting of limits) or other forms of standardization for products produced by the implementing organization.
- 8) Ease of use It should be ensured that the user can easily implement one or more MSS. An MSS should be easily understood, unambiguous, free from cultural bias, easily translatable, and applicable to businesses in general.

Appendix 1 to Annex SL gives a number of questions that are based on these principles. The answers to the questions are required to form part of the JS. The questions and answers are given in section 2 of this paper below.

2. Annex SL: Questions with answers

Basic information on the MSS proposal

Q1	What is the proposed purpose and scope of the MSS? Is the document supposed to be a guidance document or a document with requirements?
A1	This standard is intended to be a document with requirements. Scope This Standard sets the requirements for Knowledge Management systems in organizations and deals with the establishment and maintenance of Knowledge Management Systems, instilling a culture of Knowledge Management and sharing of Knowledge Management solutions. Also, it promotes measuring the knowledge in organizations. The Standard is applicable for all types of business, private and public organizations, independent of the field of business and their size, and also for non-profit organizations.
Q2	Would the proposed MSS work item result in an International Standard (IS), an ISO/(IEC) Guide, a Technical Specification (TS), a Technical Report (TR), a Publicly Available Specification (PAS), or an International Workshop Agreement (IWA)?
A2	The result of this work is intended to be an International Standard.
Q3	Does the proposed purpose or scope include product (including service) specifications, product test methods, product performance levels, or other forms of guidance or requirements directly related to products produced or provided by the implementing organization?
A3	No, the standard will only focus on issues related to Knowledge Management and Knowledge Management Systems and will not include product specifications, product

	test methods, product performance levels, or other forms of guidance or requirements directly related to products produced or provided by the implementing organization.
Q4	Is there one or more existing ISO committee or non-ISO organization that could logically have responsibility for the proposed MSS? If so, identify.
A4	No. We recommend establishing a new PC with the participation (or liaison) of representatives from the following committees: ISO TC 176, TC 46, TC 171.
Q5	Have relevant reference materials been identified, such as existing guidelines or established practices?
A5	Yes: SI 25006 – <i>Knowledge Management Systems – Requirements</i> - A new Israeli Standard that is attached. In addition we identified two relevant guidance standards: <ul style="list-style-type: none"> • AS 5037- 2005: Knowledge management – a guide • BS PAS 2001 - Knowledge management – Guide to good practice
Q6	Are there technical experts available to support the standardization work? Are the technical experts direct representatives of the affected parties from the different geographical regions?
A6	We can recommend the following technical experts to support the standardization work. Patrick Lambe (Singapore) Steve Oest (Australia) Arthur Shelly (Australia) Hubert Saint-Onge (Canada) Boris Jaegar (Germany) Nick Milton (UK) David Snowden (UK) Jay Liebowitz (USA) David Gurteen (UK) All of the above experts are presently consultants or working in the academic field, whether or not they began their career in this region. Furthermore, Israeli experts are available to support the standardization work. We assume that International experts on Knowledge Management will join this project.
Q7	What efforts are anticipated as being necessary to develop the document in terms of experts needed and number/duration of meetings?
A7	We estimate that a PC of approximately 10-15 experts, and up to 1- 2 meetings per year, each of 2-3 days duration (with electronic communication by e-mail, conference calls and webinars in the interim) for 3 years will be needed.
Q8	What is the anticipated completion date?
A8	Subject to meeting the 3 year "default" timeline for a project, the expected completion date will be in the 1 st quarter of 2017.
Q9	Is the MSS intended to be a guidance document, contractual specification or regulatory specification for an organization?
A9	It is intended to be a "requirements" specification.

Principle 1: market relevance

- 1) **Market relevance** **Any MSS should meet the needs of, and add value for, the primary users and other affected parties.**

Q10	<p>Have all the affected parties been identified? For example:</p> <ul style="list-style-type: none"> a) organizations (of various types and sizes): the decision-makers within an organization who approve work to implement and achieve conformance to the MSS; b) customers/end-users, i.e. individuals or parties that pay for or use a product (including service) from an organization; c) supplier organizations, e.g. producer, distributor, retailer or vendor of a product, or a provider of a service or information; d) MSS service provider, e.g. MSS certification bodies, accreditation bodies or consultants; e) regulatory bodies; f) Non-governmental organizations. 																																			
A10	<p>Knowledge Management has the potential of assisting in the achievement of almost every organizational and business target. Thus, for different types of organizations, whether profit or non-profit based, and in different countries. Attached are specific examples showing the variety of business benefits and organizations who reported such benefits:</p> <table border="1" data-bbox="316 958 1476 1937"> <thead> <tr> <th data-bbox="316 958 547 1081">Business benefit</th> <th data-bbox="555 958 798 1081">Sample of relevant KM solution</th> <th data-bbox="805 958 1010 1081">Sample of organization/ sector *</th> <th data-bbox="1018 958 1185 1081">Country</th> <th data-bbox="1193 958 1476 1081">Source</th> </tr> </thead> <tbody> <tr> <td data-bbox="316 1093 547 1193">Improve the corporate image</td> <td data-bbox="555 1093 798 1193">Set of personal and professionals blogs</td> <td data-bbox="805 1093 1010 1193">Microsoft / high-tech</td> <td data-bbox="1018 1093 1185 1193">Global</td> <td data-bbox="1193 1093 1476 1193">Naked Conversations, R. Scoble & S. Israel, John Wiley & Sons, 2006, NJ</td> </tr> <tr> <td data-bbox="316 1205 547 1350">Optimization of processes and results</td> <td data-bbox="555 1205 798 1350">Knowledgebase & knowledge website</td> <td data-bbox="805 1205 1010 1350">Annie E. Casey Foundation/ public</td> <td data-bbox="1018 1205 1185 1350">US</td> <td data-bbox="1193 1205 1476 1350">Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK</td> </tr> <tr> <td data-bbox="316 1361 547 1507">Improve patient health</td> <td data-bbox="555 1361 798 1507">Knowledgebase</td> <td data-bbox="805 1361 1010 1507">INET International/ medical</td> <td data-bbox="1018 1361 1185 1507">Canada</td> <td data-bbox="1193 1361 1476 1507">Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK</td> </tr> <tr> <td data-bbox="316 1518 547 1664">Optimization of processes and results</td> <td data-bbox="555 1518 798 1664">Portal; Document Management; Experts Map</td> <td data-bbox="805 1518 1010 1664">EDC- Export Development Canada/ finance</td> <td data-bbox="1018 1518 1185 1664">Canada</td> <td data-bbox="1193 1518 1476 1664">Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK</td> </tr> <tr> <td data-bbox="316 1675 547 1821">Improve the quality of offers</td> <td data-bbox="555 1675 798 1821">Learning Lessons; Shared workspaces</td> <td data-bbox="805 1675 1010 1821">GSA PBS - General Services Administration Public Building Service/ public</td> <td data-bbox="1018 1675 1185 1821">US</td> <td data-bbox="1193 1675 1476 1821">Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK</td> </tr> <tr> <td data-bbox="316 1832 547 1937">Optimization of processes and results</td> <td data-bbox="555 1832 798 1937">Communities of Practice</td> <td data-bbox="805 1832 1010 1937">Anglo American Corporation/ mining</td> <td data-bbox="1018 1832 1185 1937">Italy</td> <td data-bbox="1193 1832 1476 1937">Case Studies in Knowledge Management, K. A. Grant, 2012, Canada</td> </tr> </tbody> </table>	Business benefit	Sample of relevant KM solution	Sample of organization/ sector *	Country	Source	Improve the corporate image	Set of personal and professionals blogs	Microsoft / high-tech	Global	Naked Conversations, R. Scoble & S. Israel, John Wiley & Sons, 2006, NJ	Optimization of processes and results	Knowledgebase & knowledge website	Annie E. Casey Foundation/ public	US	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK	Improve patient health	Knowledgebase	INET International/ medical	Canada	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK	Optimization of processes and results	Portal; Document Management; Experts Map	EDC- Export Development Canada/ finance	Canada	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK	Improve the quality of offers	Learning Lessons; Shared workspaces	GSA PBS - General Services Administration Public Building Service/ public	US	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK	Optimization of processes and results	Communities of Practice	Anglo American Corporation/ mining	Italy	Case Studies in Knowledge Management, K. A. Grant, 2012, Canada
Business benefit	Sample of relevant KM solution	Sample of organization/ sector *	Country	Source																																
Improve the corporate image	Set of personal and professionals blogs	Microsoft / high-tech	Global	Naked Conversations, R. Scoble & S. Israel, John Wiley & Sons, 2006, NJ																																
Optimization of processes and results	Knowledgebase & knowledge website	Annie E. Casey Foundation/ public	US	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK																																
Improve patient health	Knowledgebase	INET International/ medical	Canada	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK																																
Optimization of processes and results	Portal; Document Management; Experts Map	EDC- Export Development Canada/ finance	Canada	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK																																
Improve the quality of offers	Learning Lessons; Shared workspaces	GSA PBS - General Services Administration Public Building Service/ public	US	Making Cents out of Knowledge Management, J. Liebowitz, Scarecrow Press, 2008, UK																																
Optimization of processes and results	Communities of Practice	Anglo American Corporation/ mining	Italy	Case Studies in Knowledge Management, K. A. Grant, 2012, Canada																																

Optimization of processes and results	Debriefing	French Air Force/ military	France	Case Studies in Knowledge Management, K. A. Grant, 2012, Canada
Improve business partnerships	Knowledge Sharing and Learning	Polyethylene Malaysia/ industry	Malaysia	Case Studies in Knowledge Management, K. A. Grant, 2012, Canada

* The indicated organizations have implemented the listed Knowledge Management solutions and reported that they have achieved the listed benefits.

KM MSS can serve the following roles in the organization:

Role	Advantages
CEO / Executive management	Knowledge Management aligned to support business
KM Sponsor (executive manager)	Control KM resources Monitor KM implemented with excellence
Knowledge Manager	Justify investments
Knowledge worker / facilitator	Advantages: Guide in effective knowledge work, knowledge management guidelines and requirements to achieve better results. Help to assure knowledge projects success Explanation: with the big ambiguity and lack of sound guidelines, that is the result of knowledge management being a recently emerging practice and the result of marketing hypes, end users and knowledge workers will greatly benefit from an authoritative standard with clear and comprehensive guidelines Note: ambiguity means unclear or having multiple interpretations. Fields such as economics have various theories and concepts, but are also well-established and have a clear description of key terms. The relatively new field of knowledge management is still vague to the public and therefore the standard will fulfill a unique and important role in creating a solid base.

Q11 What is the need for this MSS? Does the need exist at a local, national, regional or global level? Does the need apply to developing countries? Does it apply to developed countries? What is the added value of having an ISO document (e.g. facilitating communication between organizations in different countries)?

A11 The need for this MSS exists at local, national, regional and global levels, and in both developed and developing countries.

The following are examples for substantiation of the need taken from international sources regarding the importance and value of KM and the reasons for this need (all these references are links):

- [Chris Collison - What is Knowledge Management and why is it important?](#)
- [Dr. David Griffiths - Why should you be interested in Knowledge Management today?](#)
- [Knowledge and Performance in an environment of continuous operational improvement](#)
- [Nick Milton - Time, cost, quality - and knowledge](#)
- [Timothy K. Perkins - Knowledge: The Core Problem of Project Failure](#)

	<ul style="list-style-type: none"> • Knowledge Management - Making the Most of Intellectual Assets • David Skyrme - Valuing Knowledge: Is It Worth It? • David Skyrme - Making the Business Case for Knowledge Management: As Simple as ABC? • What are the benefits to my business? <p><u>Below are examples that show two main reasons for the need for a KM standard:</u></p> <p>1 Ambiguity in the understanding of what KM is:</p> <ul style="list-style-type: none"> • Tom Davenport - Does "Management" (in Knowledge Management) Mean "Command and Control"? • David Skyrme - Fact or Fad? Ten Shifts in Knowledge Management • Tom Davenport - Knowledge Management: Broadening and Narrowing • KM and CRM: Is the line blurring? • The rights and wrongs of Knowledge Management • Knowledge Management - Architectures beyond technology <p>2 Examples of project failure due to incomplete approach - the KM standard can guide organizations to minimize failures:</p> <ul style="list-style-type: none"> • Patrick Lambe and Edgar Tan - Knowledge Management Implementation Challenges: Case Studies from Singapore Organizations • Anatomy of a Failed Knowledge Management Initiative: Lessons from PharmaCorp's Experiences • Exploring Failure-Factors Of Implementing Knowledge Management Systems In Organizations • Success and Failure Criteria for Knowledge Management Systems • What are the biggest barriers to Knowledge Management? <p>Below is a quote of a particular example taken from the medical industry:</p> <p><u>Knowledge Management in the Medical Industry – Binding and Mandatory</u></p> <p>The full scope and life cycle of medical products and services – devices and pharma - are subject to legally mandated requirements in essentially all countries / jurisdictions. These span the entire range of existence from initial concept through R&D, laboratory and field (clinical trials) testing, proof of fitness for use (verification and validation), manufacturing (processes and production), sales and installation when appropriate, through post sales monitoring (vigilance) and beyond. Manufacturers, regulatory agencies, professional users (health care providers) are all required to gather and analyze data, convert the data to knowledge, utilize it as an ongoing activity, and retain the derived information for extended, often unlimited periods.</p> <p>Detailed legal requirements are prescribed in USFDA regulations (Federal law in the US), EU Directives, and specific legislation in most countries. They are supported and augmented by a host of ISO standards and a plethora of guidance and explanatory documents published by regulatory agencies, Notified Bodies, and professional organizations and societies; just to mention the most widely recognized.</p> <p>The point is that Knowledge Management is a controlled, structured methodology germane to and applied by a significant component of industrial, governmental and non-governmental agencies and entities worldwide. An extensive list of references supporting this point can be supplied without detracting from the fact that essentially all practitioners in the field are not only aware but also fully compliant. As such they can all benefit from a Standard.</p> <p>In general, having a MSS can assist in leveraging the quality of Knowledge Management in the organizations in which it takes place, and if implemented in enough organizations, in leveraging the discipline as a whole. In a discipline that is only 20 years old, this leveraging is very meaningful.</p>
Q12	Does the need exist for a number of sectors and is thus generic? If so, which ones? Does the need exist for small, medium or large organizations?

A12	<p>The need exists for all sectors, all sizes of organizations and is generic, as noted above (see A10 and A11), Having a MSS can assist in leveraging the quality of Knowledge Management in the organizations in which it takes place, and if implemented in enough organizations, in leveraging the discipline as a whole. In a discipline that is only 20 years old, this leveraging is very meaningful.</p>
Q13	<p>Is the need important? Will the need continue? If yes, will the target date of completion for the proposed MSS satisfy this need? Are viable alternatives identified?</p>
A13	<p>An important question to be answered when deciding to approve a new MSS is whether the said discipline is to be regarded as a management tool and not only serving as a passing trend. This issue has been researched regarding the discipline of Knowledge Management.</p> <p>The researcher, Kenneth A. Grant, has published his research "Knowledge Management, an Enduring Fashion" on this issue in "Case Studies in Knowledge Management Research", in 2011. The research, based on Theory of Diffusion of Innovations, investigates both academic scholars as well as business journals. His main findings are as following:</p> <ol style="list-style-type: none"> a. Sound evidence has been found encouraging the assumption that Knowledge Management has been penetrated in organizations as expected in the theory (of innovations diffusion). The move was led in organizations, mainly by management and consultants. b. For most of the KM terms, upon which the research was based on, consistent growth in use has been found, according to the required defining graphs. c. The findings were based both in academic scholars as well as in business journals. <p>The need is important and will continue to be important as we progress in an era of knowledge.</p> <p>The issue of timing has been discussed in some research papers, that concluded that knowledge management is not a trend and is here to stay.</p> <p>The target date for the completion of this proposed MSS is satisfactory (1st quarter of 2017.).</p>
Q14	<p>Describe how the need and importance were determined. List the affected parties consulted and the major geographical or economical regions in which they are located.</p>
A14	<ol style="list-style-type: none"> a. Our answers in this annex are based on our familiarity with the subject and on our involvement in this field for approximately 15 years, on academic research papers, business articles and books published on KM. Where relevant, they have been quoted (see A10, A11). b. Many additional resources and references can be added from the extensive literature.
Q15	<p>Is there known or expected support for the proposed MSS? List those bodies that have indicated support. Is there known or expected opposition to the proposed MSS? List those bodies that have indicated opposition.</p>
A15	<p>Those societies that deal with knowledge are expected to support the standard. Also large organizations which promote Knowledge Management as a strategic issue may support the proposed standard .Also International organizations showed interest and requested to receive the Israeli Standard.</p>
Q16	<p>What are the expected benefits and costs to organizations, differentiated for small, medium and large organizations if applicable?</p> <p>Describe how the benefits and the costs were determined. Provide available information on geographic or economic focus, industry sector and size of the organization. Provide information on the sources consulted and their basis (e.g. proven practices), premises, assumptions and conditions (e.g. speculative or theoretical), and other pertinent information.</p>

A16	<p>There is a variety of benefits (as mentioned above in A11) to organizations in using this kind of standard, including:</p> <p>a combination of processes, actions, methodologies and solutions that allow maintaining, sharing, accessibility and development of object-oriented knowledge, whose objective is ongoing improvement of organizational capabilities and performance, and the ability of personnel to contribute business value by providing effective responses to problems in Knowledge Management. See the range of solutions suggested in chapter 6 of the attached proposal. The list grows as implementation and technologies advance.</p> <ul style="list-style-type: none"> - Increased performance <ul style="list-style-type: none"> • Improves corporate image • Opens new markets • Enhances your brand and gains a reputation as a reliable business • Attracts the best employees through your enhanced reputation. • Finds new business partnerships • Improves the quality of your offers • Optimizes processes and results • Gets your product to markets more quickly. - The use of data as a business management tool. <p>Costs have been defined in most organizations, where measured, by two main parameters:</p> <ol style="list-style-type: none"> a. Cost of enabling software platforms. b. Cost of labor: Knowledge Management roles; time of employees. <p>These benefits and costs are applicable to all sizes of organizations. It is considered that the benefits considerably outweigh the costs to an organization in the long run.</p>
Q17	<p>What are the expected benefits and costs to other affected parties (including developing countries)?</p> <p>Describe how the benefits and the costs were determined. Provide any information regarding the affected parties indicated.</p>
A17	<p>The costs that other affected parties experience are lower using this standard rather than developing and implementing their own standards, which would add additional development, implementation, coordination between organizations and training costs. This is in addition to the costs their industries would pay for not complying with a major international standard. It was demonstrated that to manage knowledge in a systemic way saves costs as the organization is not losing knowledge by preserving it, reusing knowledge and developing its needed knowledge in an effective way.</p>
Q18	<p>What will be the expected value to society?</p>
A18	<ol style="list-style-type: none"> a. There is a connection between performance and management standards. Having a knowledge management standard is expected to leverage the overall level of knowledge management worldwide. <p>The expected value to society is improvement in the capability to transfer information, to expand the application of knowledge and information and reduction of costs in the transfer of knowledge and information.</p> <ol style="list-style-type: none"> b. Facilitating collaborative efforts, increasing the use and value of human knowledge and shared wisdom that will greatly contribute especially to more remote or less wealthy societies by providing them with better access to collaboration, know-how and best practices

Q19	Have any other risks been identified (e.g. timeliness or unintended consequences to a specific business)?
A19	<p>No risks were identified, yet it is expected that the standard will be completed within three years, as it is believed that such a standard is essential.</p> <p><u>The first step of organizations in implementing this proposed MSS is understanding the gaps in Knowledge Management. This is not a common practice in all organizations. In these companies, we have a cultural gap.</u></p>

Principle 2: compatibility

2) Compatibility Compatibility between various MSS and within an MSS family should be maintained.

Q20	Is there potential overlap or conflict with other existing or planned ISO or non-ISO international standards, or those at the national or regional level? Are there other public or private actions, guidance, requirements and regulations that seek to address the identified need, such as technical papers, proven practices, academic or professional studies, or any other body of knowledge?
A20	Not as far as we know. The standard was written as process based (relying upon the ISO 9001 model in accordance with PDCA principles) to assure its compatibility with and incorporation in management systems existing in an organization.
Q21	Is the MSS or the related conformity assessment activities (e.g. audits, certifications) likely to add to, replace all or parts of, harmonize and simplify, duplicate or repeat, conflict with, or detract from the existing activities identified above? What steps are being considered to ensure compatibility, resolve conflict or avoid duplication?
A21	This proposal will not conflict with previous existing conformity assessment initiatives.
Q22	Is the proposed MSS likely to promote or stem proliferation of MSS at the national or regional level, or by industry sectors?
A22	No, at least not in the coming 5 years after it is published... The intent is to bring together the existing knowledge and best practices into one document so the standard when published will help stem the proliferation of MSSs at the national or regional level, or by industry sectors.

Principle 3: topic coverage

- 3) Topic coverage An MSS should have sufficient application coverage to eliminate or minimize the need for sector-specific variances.

Q23	Is the MSS for a single specific sector?
A23	No, the standard will be generic, addressing all sectors.
Q24	Will the MSS reference or incorporate an existing, non-industry-specific ISO MSS (e.g. from the ISO 9000 series of quality management standards)? If yes, will the development of the MSS conform to the ISO/IEC Sector Policy (see 6.8.2 of ISO/IEC Directives, Part 2), and any other relevant policy and guidance procedures (e.g. those that may be made available by a relevant ISO committee)?
A24	The management system in this proposal is based on the ISO 9001 structure but not according to the draft format of the first version of ISO Guide 83 published while this standard was in preparation.
Q25	What steps have been taken to remove or minimize the need for particular sector-specific deviations from a generic MSS?
A25	The theme itself is generic enabling an approach that does not need to have specific content, and the sector conformances are only at the application level.

Principle 4: flexibility

- 4) Flexibility** **An MSS should be applicable to organizations in all relevant sectors and cultures and of every size. An MSS should not prevent organizations from competitively adding to or differentiating from others, or enhancing their management systems beyond the standard.**

Q26	Will the MSS allow an organization competitively to add to, differentiate or encourage innovation of its management system beyond the standard?
A26	It is intended that this standard will remain generic and encourage organizations to competitively add to, or differentiate, or innovate their management systems beyond its requirements. Of course, any organization in which the knowledge is a very important asset may do much more beyond this standard, but this standard will function as the base document for Knowledge Management.

Principle 5: free trade

- 5) Free trade** **An MSS should permit the free trade of goods and services in line with the principles included in the WTO Agreement on Technical Barriers to Trade.**

Q27	How would the MSS facilitate or impact global trade? Could the MSS create or prevent a technical barrier to trade?
A27	The MSS could facilitate or impact global trade by encouraging organizations to improve their Knowledge Management and consequently, enable a competitive edge and cooperative efforts that would facilitate global trade. This MSS cannot create a technical barrier to trade.
Q28	Could the MSS create or prevent a technical barrier to trade for small, medium or large organizations?
A28	No. This MSS cannot create a technical barrier to trade for organizations, regardless of their size.
Q29	Could the MSS create or prevent a technical barrier to trade for developing or developed countries?
A29	No. This MSS cannot create a technical barrier to trade for both developing and developed countries.
Q30	If the proposed MSS is intended to be used in government regulations, is it likely to add to, duplicate, replace, enhance or support existing governmental regulations?
A30	The MSS is not intended to be used in government regulations, and its development may even support, but not duplicate, replace or even conflict with governmental regulations.

Principle 6: applicability of conformity

- 6) Applicability of conformity assessment** **The market need for first-, second- or third-party conformity assessment, or any combination thereof, should be assessed. The resulting MSS should clearly address the suitability of use for conformity assessment in its scope. An MSS should facilitate joint audits.**

Q31	If the intended use is for contractual or regulatory purposes, what are the potential methods to demonstrate conformance (e.g. first party, second party or third party)? Does the MSS enable organizations to be flexible in choosing the method of demonstrating conformance, and to accommodate for changes in its operations, management, physical locations and equipment?
A31	<p>Conformity to this standard may be demonstrated either through first, second or third party assessment systems, such as audits or self-assessment programmes.</p> <p>As far as it is a MSS, and allows conformity assessment, it is flexible enough to allow organizations to choose their method of demonstration, as well as accommodate any necessary changes.</p>
Q32	If third-party registration/certification is a potential option, what are the anticipated benefits and costs to the organization? Will the MSS facilitate joint audits with other management system standards or promote parallel assessments?
A32	<p>Certification is one of the potential options of this proposal.</p> <p>For this standard the primary benefits of third party certification include:</p> <ul style="list-style-type: none"> - Creating a knowledge management culture in organizations that will facilitate establishing a common language (i.e., improving inter-organization communications at the global level), expanding as more organizations in various countries adopt the standard - Increased customer confidence by the evidence of third party recognition of its management and advantages - Improved efficiency as the global ISO Knowledge Management infrastructure expands, e.g. through the provision of standardized auditor training courses, the availability of knowledgeable and experienced consultants, a diversity of certification bodies, etc. <p>The costs of third-party registration/certification include:</p> <ul style="list-style-type: none"> • employee training • audit preparation costs • audit costs • registration fees. <p>Our position is that if a company adopts and implements this MSS in an effective way it will add no additional costs for third party certification except the registration fees.</p> <p>Regarding joint audits, it will definitely assist in having joint audits on the various subjects of management such as quality, safety, environment and to integrate in them the subject of KM as part of the management concept of the organization / company provided that the auditing team includes an auditor with expertise in KM in accordance with the proposed standard, 25006.</p>

Principle 7: exclusions

- 7) Exclusions** **An MSS should not include directly related product (including services) specifications, test methods, performance levels (i.e. setting of limits) or other forms of standardization for products produced by the implementing organization.**

Q33	Does the proposed purpose or scope include product (including service) specifications, product test methods, product performance levels, or other forms of guidance or requirements directly related to products produced or provided by the implementing organization?
A33	<p>The MSS is not based, nor related, to any specific methodology, platform, product or service.</p> <p>The MSS was not designed to serve any specific sector or group of organizations and applies both to profit and non-profit organizations.</p> <p>The MSS provides a general approach, including the establishment of goals for continuous improvement in managing the organizational knowledge that could be attained through a variety of means, methodologies and technology platforms. The requirements of the management system would apply within the scope as defined by the implementing organization. Every organization may define specific exclusions to the system taking into consideration the direct and indirect Knowledge Management systems. This justification of exclusions would support the flexible nature of the MSS.</p>

Principle 8: ease of use

- 8) Ease of use** **It should be ensured that the user can easily implement one or more MSS. An MSS should be easily understood, unambiguous, free from cultural bias, easily translatable, and applicable to businesses in general.**

One of the primary objectives of this standard was that the standard would be applicable to businesses in general, and that it should be easy to understand and apply.

ISRAELI STANDARD SI 25006

November 2011

ICS CODE: 03.100.01

This is a true translation of the Hebrew original. In any case of discrepancy between the original Hebrew text and the English translation, the Hebrew version shall prevail.

KNOWLEDGE MANAGEMENT SYSTEMS - REQUIREMENTS



The Standards Institution of Israel

Descriptors:

Knowledge Management, organizations, management operations, management techniques, management, information.

Updating the Standard

Israeli Standards are reviewed periodically at least every five years, in order to adapt them to scientific and technological developments. Users of Standards should ascertain that they are in possession of the latest edition of the Standard including its Amendments. A document appearing in the "Reshumot" (The Israeli Official Journal) as an Amendment may be a separate Amendment, or an Amendment incorporated into the Standard.

Standard validity

An Israeli Standard, including revisions, takes effect from its publication date in "Reshumot". Whether the document or parts of it are Official should be checked. An Official Standard or Amendment (in whole or in part) takes effect 60 days following publication of the notice in the "Reshumot", unless the notice states otherwise for the effective date.

Standards Mark

A manufacturer of a product complying with the requirements of the applicable Israeli Standards is entitled, after being licensed by the Standards Institution of Israel, to mark it with the Standards Mark:

**Copyright**

This Standard or any part of it may not be photocopied, copied or published by any means whatsoever, without prior permission in writing of the Standards Institution of Israel. ©

TABLE OF CONTENTS

Introduction	1
0.1 General.....	1
0.2 Process based approach to Knowledge Management	1
1. Scope	3
2. Definitions	3
2.1 Explicit knowledge	3
2.2 Tacit knowledge	3
2.3 Knowledge Management	3
2.4 Knowledge Management system	3
2.5 Learning organization	3
2.6 Knowledge worker	3
2.7 Process based approach to Knowledge Management.....	3
2.8 Challenge.....	4
2.9 Knowledge Management policy	4
2.10 Innovation.....	4
2.11 Knowledge Management solutions	4
2.12 Knowledge asset	4
2.13 Knowledge Management culture	4
2.14 Lesson learned.....	4
2.15 Debriefing.....	4
2.16 Best practice	4
2.17 Facet	5
3. Management responsibility	5
3.1 General.....	5
3.2 Management obligations	5
3.3 Knowledge Management policy	5
3.4 Planning	6
3.5 Responsibility and authority	6
3.6 Management review.....	6
4. Resources management	6
4.1 Resources management	6
4.2 Manpower	6
4.3 Technological infrastructure	7
5. Knowledge Management culture and learning organization.....	7
5.1 General.....	7
5.2 Definition of a desirable Knowledge Management culture	7
5.3 Diagnosis of Knowledge Management culture	9

5.4	Plan for promoting Knowledge Management culture	9
6.	Knowledge Management solutions	10
6.1	General	10
6.2	Facets of solutions for Knowledge Management	12
7.	Knowledge Management implementation in the organization	14
7.1	General	14
7.2	High level planning and formulation of work plans	14
7.3	Implementation of Knowledge Management systems	16
7.4	Documentation	18
7.5	Measurement and evaluation	18
7.6	Debriefing and improvement	18
7.7	Continued action on handling the challenges and new needs	18
8.	Documentation	18
8.1	Purposes of documentation	19
8.2	Documentation contents	19
8.3	Documentation format	20
8.4	Documentation control	20
9.	Measurement and evaluation	20
9.1	Measurement and evaluation purposes	20
9.2	Measurement and evaluation ranges	20
9.3	Measurement and evaluation implementation	20
9.4	Measurement and evaluation method	21
10.	Debriefing	21
10.1	General	21
10.2	Debriefing	21
10.3	Methodology	22
10.4	Results	22
Annex A – List of possible measures (examples) for clause 9 – Measurement and evaluation		23
Annex B – Maturity levels of Knowledge Management		29

Introduction

0.1 General

This Standard establishes requirements for Knowledge Management in an organization:

- A. that aspires to increase its capabilities by means of leverage of personal human, social and organizational capital (hereinafter, intellectual capital).
- B. that wants to prove to its customers and to the market as a whole, its advantage regarding its knowledge and its management.

Adoption of a Knowledge Management system is a strategic decision of the organization.

The content and the implementation of a Knowledge Management system in an organization are influenced by various factors:

- A) Characteristics of the organization including size of the organization, its structure and the stakeholders;
- B) The organizational surroundings, changes in this environment and the hazards in it;
- C) The organizational culture in general and the Knowledge Management culture in the organization, in particular;
- D) Changing needs of the organization;
- E) The unique purposes of the organization;
- F) The organization's core capabilities;
- G) The intellectual capital of the organization.

The purpose of this Standard is to guide its users, while maintaining freedom of management that allows conformance with the above factors.

0.2 Process based approach to Knowledge Management

The process based approach means performance of an orderly process, of defined and successive stages over a period of time, for realizing the activities of Knowledge Management in an organization. This Standard encourages the adoption of the process based approach of Knowledge Management in an organization, as the basis for a quality and effective action of a Knowledge Management system in an organization over a period of time.

Figure 1 presents a schematic description of the process based approach model for Knowledge Management in an organization, given in this Standard. Implementation of all stages of such a model, including reciprocity between the stages, can be considered as adoption of a "process based approach".

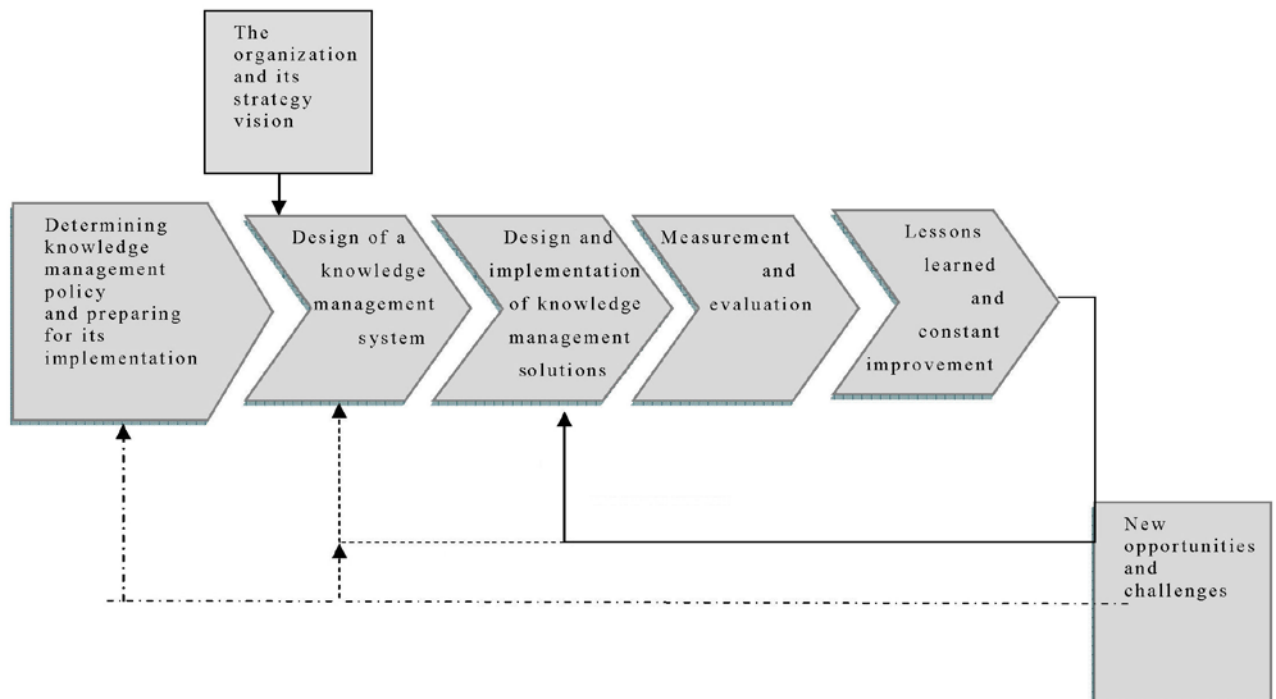


Figure 1 - Process based approach model for Knowledge Management in an organization

Note:

Annex B allows determining the maturity levels of Knowledge Management in an organization. The Annex can be used for constructing a multilevel work plan for compliance with the requirements of this Standard and assist in its implementation.

Where the process based approach is used as a basis for Knowledge Management activity, it emphasizes the importance of the following:

- A. An action on a strategy basis;
- B. The identification and understanding of the challenges and needs of the organization;
- C. The need to plan Knowledge Management action, to determine priorities for them and to weigh them according to cost vs. benefit;
- D. Monitoring and measurement of the results of the actions on several levels, their evaluation and analyses;
- E. Constant improvement of the process on the basis of the analysis results and learning from experience gained in the organization;
- F. Improvement of the response of Knowledge Management to the needs of the organization, and providing solutions to new challenges in the organization.

1. Scope

This Standard sets the requirements for Knowledge Management systems in organizations and deals with the establishment and maintenance of Knowledge Management systems, instilling a culture of Knowledge Management and sharing in Knowledge Management solutions and in the manner of measuring the knowledge in organizations. The Standard is applicable for all types of business, private and public organizations, independent of the field of business and their size, and also for non-profit organizations.

2. Definitions

For the purpose of this Standard, the following definitions are applicable:

2.1 Explicit knowledge

Knowledge recorded in documents, in databases and in procedures, formulated in words or in a visual manner, and can be found and included in the organization.

Note:

The following terms can be ranked: data, information and knowledge in this order where the term, knowledge, represents the highest level.

2.2 Tacit knowledge

Knowledge, in the minds of organization members, not formulated in words or in a visual manner, not defined and not passed on to others.

2.3 Knowledge Management

A combination of processes, actions, methodologies and solutions that allow maintaining, sharing, accessibility and development of object-oriented knowledge.

2.4 Knowledge Management system

A management system in the organization that outlines, manages and promotes the Knowledge Management action in the organization, and includes the management structure of the actions, the various collaborators taking part, the work patterns, the additional resources required, the methodologies and solutions adopted by the organization and the measurement and evaluation processes of the actions

2.5 Learning organization

An organization that steadily improves its capability and performance and that of the people.

2.6 Knowledge worker

A worker for whom knowledge is the significant factor for his performance at work and his contribution to the organization.

2.7 Process based approach to Knowledge Management

An approach that maintains performance of an orderly process, of definite and consecutive

stages over a period of time, in order to realize Knowledge Management actions in the organization, in combination with constant improvement actions as part of the process.

2.8 Challenge

Disparity or need present in an organization, at the business unit or organizational level that can receive an effective response through Knowledge Management solutions, and to give a business value to the organization (such as efficiency, increasing output, increase in customer and employee satisfaction and creating a new value for the product).

2.9 Knowledge Management policy

Principles and rules for Knowledge Management in an organization resulting from the organizational concept, from its goals and purposes, and includes, among others, premises, values, applicable processes and procedures in the organization concerning personal and organizational learning, to maintain, share and provide access of existing knowledge and to develop new knowledge.

2.10 Innovation

Successful exploitation of new ideas regarding the process (operation), the product, the service, the strategy or the management.

Note:

The innovation process should create a value that promotes the organization business.

2.11 Knowledge Management solutions

Solutions that address the actual current needs and challenges of Knowledge Management in the organization that include the following elements: culture, processes, contents and technology (automation) (see clause 6), where there is a different measure for each solution according to the organization status at that time and according to the type of solution.

2.12 Knowledge asset

Intellectual capital, such as copyrights or a patent, intellectual property or any other knowledge that brings an added value or benefit to the organization.

2.13 Knowledge Management culture

The premises, the guiding values, the desirable behavior and actions, which the organization employees maintain, share, make accessible and develop knowledge.

2.14 Lesson learned

Recommended manner of operation for the future on the basis of past experience.

2.15 Debriefing

The orderly process of developing new lessons based on the event, process or action.

2.16 Best practice

Object lesson or experience gained taken and refined.

2.17 Facet

Means to characterize an object by classifying it into subclasses according to a certain rule. Any object can be classified by several facets referring to the various characteristics of the object, e.g. a Knowledge Management solution can be characterized by means of the "knowledge source" facet, that permits classifying the knowledge source as: a) tacit knowledge; b) explicit knowledge; c) new knowledge.

3. Management responsibility

3.1 General

A complete Knowledge Management process is part of the culture of an organization, that supports the organization and implementation of its strategy. A change in the existing culture of the organization intended to promote knowledge retention, knowledge sharing, knowledge accessibility and knowledge development, requires an intrinsic change in the organization starting with management. The management obligation to develop and implement a Knowledge Management system and also control its progress is essential to ensure the success of the process.

3.2 Management obligations

Senior management shall provide evidence for its obligation to develop and implement a Knowledge Management system in the organization and constant improvement of its effectiveness by means of the following actions:

- A. Inclusion of values related to Knowledge Management into the organization values;
- B. Setting a policy of the manner of Knowledge Management in the organization;
- C. Establishing a supporting organizational system to Knowledge Management that includes definition of responsibility and authorization of managers, of employees and of professional personnel in the Knowledge Management field;
- D. Allocation of required resources for realizing the Knowledge Management process in the organization;
- E. Transmission of messages to the organization of the importance of organizational Knowledge Management and the requirement to carry it out, while directing the organization to Knowledge Management culture.

3.3 Knowledge Management policy

Senior management shall be responsible for a Knowledge Management policy (strategy) that:

- A. is suitable for the goal of the organization and its policy;
- B. provides a framework for establishment of Knowledge Management goals and their review;
- C. provides a framework for the manner of Knowledge Management;
- D. includes a commitment to meet the legal requirements and other relevant requirements;

- E. includes a commitment for continuous improvement of the effectiveness of the Knowledge Management system;
- F. includes a measurement and evaluation system of the Knowledge Management and tracking of the Knowledge Management targets achieved.

3.4 Planning

Senior management shall ensure the existence of a Knowledge Management plan for carrying out the policy, as detailed in clause 3.3 above.

3.5 Responsibility and authority

Senior management shall appoint a management member who will have the responsibility and authority that includes the following:

- A. Ensure that the necessary processes and resources for the Knowledge Management system are determined, achieved and maintained;
- B. Report to senior management of the actual Knowledge Management performance and of any need for improvement.

3.6 Management review

Senior management shall review the Knowledge Management system at planned time periods in order to ensure continuous conformance of a useful and efficient Knowledge Management system for the organization. This review shall include opportunities for improving the organizational Knowledge Management process and the degree of its implementation.

4. Resources management

4.1 Provision of resources

The organization shall allocate sufficient resources to ensure implementation of the Knowledge Management process, for meeting the requirements of the Standard and for continuous improvement and constant progress of the Knowledge Management system in the organization, including manpower, budget and proper work plans.

4.2 Manpower

The organization shall arrange for manpower to fill these roles that will meet the following requirements:

4.2.1 Chief knowledge officer (CKO)

The CKO shall be responsible and have the authority to activate the Knowledge Management system in the organization and to advance the organizational Knowledge Management by means of a Knowledge Management plan. The CKO shall be given training appropriate for the position and continued training or professional enrichment at least annually.

4.2.2 Persons responsible for Knowledge Management solutions

Those responsible for Knowledge Management solutions shall be defined for each solution realized in the organization, as detailed in clause 6. They have the responsibility and authority to construct the solution in their area of responsibility, to improve it and to ensure its compliance with the requirements of the Standard.

Furthermore, other persons responsible can be defined, such as knowledge referents, Knowledge Management staff members, individual knowledge referents, community leaders, etc.

4.2.3 Organization managers

Organization managers in the various units in which knowledge workers are subordinate to them, have the responsibility and authority to advance the maintenance of knowledge, its sharing, its accessibility and its development in business and organizational subjects in their area of responsibility. Organization managers shall allow knowledge workers to allocate from their time for knowledge maintenance, sharing, accessibility and development.

4.3 Technological infrastructure

The organization shall set up a satisfactory technological infrastructure that allows compliance with the requirements of the Standard and continuous improvement of the effectiveness of the Knowledge Management system.

5. Knowledge Management culture and learning organization

5.1 General

Knowledge Management culture is affected by the overall organizational culture of the organization and influences it, and constitutes a central factor in the success or failure of the establishment and assimilation of Knowledge Management systems in the organization. Knowledge Management culture, as a social exchange process among people in the organization and organizational units, determines what knowledge is appropriate for learning and sharing, defines the relationship between personal knowledge of the employees to the organizational knowledge, creates the background for reciprocal action where there is knowledge sharing in the various stages, and provides a structure for the processes wherein new knowledge is created, gains legitimacy and is circulated in the organization.

5.2 Definition of a desirable Knowledge Management culture

The organization management shall define the premises, the guiding values, the behaviors and the desired actions for fostering Knowledge Management culture. Some criteria that may aid management in defining the desired cultural characteristics and the appropriate dosage for them in the organization:

- Sharing level versus the competition between individuals in the organization and between other units in the organization;
- The attribute wherein there is continuous learning and readiness to changes rather than the attribute where accumulated knowledge is perpetuated and remains constant;
- Transparency of information versus secrecy and protection of information and the conception that each one has to know only what is required for his work;
- The conception that knowledge is a resource, a social commodity belonging to everyone versus the conception that knowledge is property belonging to its owners;
- The type and amount of knowledge belonging to an organization versus the type and amount of knowledge belonging to the individual;
- Development, encouragement and imposing responsibility versus supervision, finding the guilty party and punishment for errors;
- Encouragement for innovation versus encouragement for reuse of existing knowledge assets;
- Level of readiness to learn from external sources versus the level of readiness to learn from internal sources;
- A culture that encourages retaining, sharing, accessibility and development of the knowledge of all members of the organization, versus a culture that merits knowledge of experts in each subject;
- Informal culture where the knowledge is transmitted in every possible way versus formal culture where the knowledge is transmitted by well defined channels;
- An organization that encourages making comments, giving insights and creativeness, versus an organization that encourages planned and systematic learning;
- A culture that encourages taking risks versus a conservative culture that avoids taking risks;
- A culture that tries to locate and maintain both explicit knowledge and tacit knowledge versus a culture that emphasizes locating and maintaining only explicit knowledge;
- The attribute where the organization encourages free discussion between its members and allows creation of knowledge communities and possibilities for each individual to express himself versus the attribute where Knowledge Management is conducted in a centralized and structured from top to bottom;
- The attribute where the organization defines that a specific knowledge is worthy of being learned and retained versus the attribute wherein all the action ranges of the organization and its internal and external processes are an object worthy of Knowledge Management;
- The attribute where retaining, sharing, accessibility and development of knowledge are considered an integral part of the functions of the employees versus the attribute where they are considered as an additional activity of the position;

- The attribute where managerial attention is given, and appreciation is expressed for effort, actions and initiatives of knowledge sharing versus the view that all of these are "expected" or are a penalty for the time spent on these subjects at the expense of regular work;
- The attribute where there is encouragement and support of experiencing and using new and diverse technology of Knowledge Management versus adherence to existing technologies.

5.3 Diagnosis of Knowledge Management culture

The organization management shall diagnose the following:

- The actual existing Knowledge Management culture in the organization and in its various parts, the measure of conformance with the desired culture, the differences, if any, and the basic premises, the values, the behaviors and the existing actions, that may promote or restrain Knowledge Management in the organization;
- The measure of conformance between the values that the organization management declares and the values that actually guide the organizational decisions;
- The definitions of the position, the reward systems, the procedures and the reciprocity between individuals in the organization and the units of the organization, according to their conformance to the desired culture.

5.4 Plan for promoting Knowledge Management culture

A plan for promoting Knowledge Management culture in the organization where required and according to the Knowledge Management policy of the organization shall be constructed. The plan shall be updated on a regular basis, and when required, the position definitions, reward systems and procedures shall be changed in order to support the promotion of the Knowledge Management process.

The plan shall contain elements that ensure the advancement of the culture towards a learning organization.

Management shall ensure the implementation of the plan for assimilation of the desired culture.

Clarifications:

Accepted characteristics of a Knowledge Management and learning organization:

- Recognition, encouragement and rewarding innovation;
- Appreciation and rewarding knowledge sharing;
- Open communication and a non-condemning approach in reporting faults and debriefing;
- Encouragement of learning opportunities (participation in forums and learning communities).

6. Knowledge Management solutions

6.1 General

Actual implementation of Knowledge Management shall be through Knowledge Management solutions, that provide a response to business and/or organizational needs.

The list of existing Knowledge Management solutions are varied and abundant.

Furthermore, this list is ever expanding as Knowledge Management methodology advances and as the technology is developing.

The solutions for Knowledge Management include, among others, the following:

- **Organizational portals**⁽¹⁾ – solutions based on portal technology that constitute the gate for organizational data, information and knowledge, and they represent a central platform for organizational Knowledge Management;
- **Professional portals and knowledge sites** – solutions based on portal technology, focusing on professional design, and that connect and make accessible the data, the information, and the professional knowledge for the use of the relevant position holders in the organization;
- **Communities of practice** – groups of people having common knowledge fields, that share the knowledge both at face-to-face meetings and through professional knowledge websites;
- **Enterprise content management (content management solutions)** – solutions allowing organizing and accessibility of documents;
- **Web content management solutions** – solutions that allow organizing and accessibility of built-in knowledge items, e.g. Knowledge Management systems for consumer service;
- **Wiki style tools** – solutions based on WIKI or similar technology, that allow organizing and accessibility of partially built-in knowledge items, with emphasis on values (titles of items), simple access (entry page) and links (both between items and outside the solution) and joint content writing;

It can and is correct to apply this technology in the organization with control of the addition of their content and their editing, according to the needs of the organization;

- **Search engines** – solutions that allow direct access to documents and additional knowledge items, even it not organized or partially organized;
- **Templates** - solutions that allow creating an outline that shows the manner of documentation of a knowledge item;
- **Smart documents** - documents written in a pre-agreed manner for improving accessibility of their contents to the reader;

⁽¹⁾ Not relevant to the translation.

- **Blogs** – solutions based on blog technology that includes knowledge items ("posts") written in a personal writing style and organized according to dates;
- **Expert maps** – maps describing organization or non-organization knowledge experts and their expertise;
- **Social networks** – networks that allow management of profiles of the organization members and management of communication among them;
- **Micro blogging tools** – short network diaries (blogs). Solutions that allow the individual or the organization to circulate knowledge from a central location;
- **Tag clouds** – solutions that help to locate documents and other knowledge items, by emphasis on tags (key words) related to the subject, giving a different appearance to these tags that signify their significance on the subject;
- **Call centers' KM solutions** – solutions for management of a built-in content used by the organization representatives when providing service to their customers;
- **Glossary** – collection of professional and/or organizational terms and definitions concerned with the knowledge field covered by the dictionary;
- **Job definition files** – knowledge bases that contain the information and knowledge in a defined field required by a new employee entering his position;
- **Procedures** – documents containing the instructions that obligate the organization in a defined knowledge field and for the purpose of promoting professional activity;
- **Doctrine** – documents containing the organizing discipline of the organization in a defined knowledge field including documented verbal knowledge, recommendations and discipline whose purpose is to promote professional action;
- **Arenas of innovation** – solutions for development of new knowledge in the organization, mainly through communities. This allows non-linear and not linear collaboration;
- **Debriefing** – solutions for analysis of events, actions and/or processes performed in the organization for the good of defining the optimum conduct in the future;
- **Lessons learned knowledgebase** – solutions for management of lessons learned, best practices, past experience, proposals and recommendations;
- **Workflow charts** – solutions for documentation of permanent procedures and their accompanying knowledge for optimum performance, that may help in automating the processes;
- **Professional desktops** - solutions (based on portal technology) that provide a professional answer for a defined position: placing most of the data, information and knowledge before him required for carrying out his function;
- **Learning generators** – solutions for development of new knowledge on the basis of past experience, e.g. brainstorming, root cause analysis and quality audits;
- **Cultivating experts** – solutions for encouragement and cultivation of knowledge collected by the knowledgeable in the organization in order to turn them into experts;

- **Knowledge retention / Knowledge continuity** – solutions for giving priority to retained knowledge, of a resigning employee and/or his change of position, for the purpose of documentation and accessibility for those remaining in the organization;
- **Dedicated Knowledge Management solutions** – dedicated solutions that allow Knowledge Management, not according to the abovementioned solutions, in a manner that conforms specifically to the content world on the Knowledge Management subject.

Note:

The term Knowledge Management solution refers to the specific implementation of the Knowledge Management tool for a defined purpose and a defined content world.

6.2 Facets of solutions for Knowledge Management

6.2.1 General

A Knowledge Management solution can be characterized by several facets:

A. Knowledge Management essence:

Knowledge maintenance, sharing or development

B. Solution elements:

Cultural, process, content and technological automation in realizing Knowledge Management;

C. Source of managed knowledge:

Tacit knowledge intended for documentation in the minds of persons, documented explicit knowledge in their possession and intended for collection, new information and knowledge;

D. Functionality of the Knowledge Management solutions:

Addition and updating of knowledge, knowledge storage and knowledge use;

E. Manner of Knowledge Management:

Management of knowledge items, social networking among colleges.

The following clauses refer to Knowledge Management solutions and requirements, according to the above facets.

6.2.2 Knowledge Management essence

There are various types of Knowledge Management solutions:

A. Knowledge retaining solutions (continuity):

Solutions that are mainly for knowledge retention or transfer of knowledge when changing positions.

Examples: job definition files, knowledge retention of retirees;

B. Knowledge sharing solutions:

Solutions that are mainly for transferring knowledge and sharing at given points of time among various persons.

Examples: portals and professional knowledge sites, communities of practice, lessons learned knowledgebases, terminology dictionaries and micro blogging tools.

C. Knowledge access solutions:

Solutions that are mainly for helping to get better oriented in the existing knowledge in the organization.

Examples: search engines, tag clouds, smart documents, templates.

D. Knowledge development solutions:

Solutions for expanding the existing organizational knowledge base.

Examples: lessons learned, innovation arenas, cultivating experts and doctrine.

The organization shall implement at least one solution from each type of the abovementioned management solutions: retention, sharing, access and development.

6.2.3 Solution elements

On implementation of a solution, for any specific need, there shall be four complementary elements as follows:

A. The cultural element

An element that refers to actions intended to bring the solution to the consciousness of the users and for their training, for encouraging its use, for assimilation of its use and turning it into part of the regular work procedures in the organization;

B. Process element

An element that refers to actions intended both for regularly updating and adding content and for regular use of the contents, and that are interconnected with the regular work procedures in the organization;

C. The content element

An element that refers to collection, to organization and sometimes even to processing the content concerned with the Knowledge Management solutions;

D. The technological element

An element that refers to storage of contents and their accessibility in the computer sharing technology, that gives access to knowledge to all the employees for whom it is relevant.

Every Knowledge Management solution implemented in the organization shall contain all of the above four elements.

6.2.4 Source of the knowledge managed

The organization shall apply processes that deal with the following three sources of knowledge:

A. Tacit knowledge found in the minds of the people and that can be documented within frameworks such as lessons learned knowledgebases, professional disciplines and procedures;

B. Explicit knowledge found with individuals and that can be converted to shared knowledge by acts such as knowledge identification, collection, filtering and improvement;

C. New information and knowledge that can be developed in the organization, e.g. by means of lessons learned and development of professional disciplines.

7. Knowledge Management implementation in the organization

7.1 General

- 7.1.1 Guidelines are given below for initiation, implementation and assimilation of the process based approach to Knowledge Management in an organization (as described in clause 0.2). Full implementation of the process based approach in an organization provides a high level of quality actions and of effectiveness of the effort to maintain a Knowledge Management system in the organization. At the same time, partial implementation of this approach is possible under certain circumstances (as described below) while taking into consideration the differences relative to the full process. Preliminary stages for implementation of the process based approach to Knowledge Management in an organization are determination of Knowledge Management policy of the organization and preparation for its implementation (establishing an organizational infrastructure for Knowledge Management action). These stages are detailed in clause 3.
- 7.1.2 Implementation of a Knowledge Management system in an organization is accomplished with conformance to the legal requirements and the applicable relevant requirements for the organization.

7.2 High level planning and formulation of work plans

7.2.1 Knowledge mapping

7.2.1.1 General

Organic mapping is a necessary preliminary stage for every organization starting the process of orderly organization of Knowledge Management. The purpose of the mapping is to identify the main challenges and understand the characteristics of the organization that constitute delaying or speeding up the Knowledge Management process.

The results of the mapping will be the following:

- A description of how the organization perceives its Knowledge Management, regarding the four elements: culture, processes, contents and technology (automation);
- A concrete work plan that can be achieved in a short or intermediate time period (up to two years).

The extent of the mapping and the mapping framework are determined by the Knowledge Management policy: broad or localized mapping project, initial full mapping or gradual mapping while promoting a specific subject, mapping of a specific line of business, of any need, etc.

Clarifications:

Various techniques exist for carrying out mapping. Several examples of techniques that have found broad use are given below:

- A. Mapping of knowledge flow in business and organizational processes;
- B. Mapping of knowledge centers: sources and needs;
- C. Mapping according to challenges;
- D. Mapping according to content areas;
- E. Mapping according to occupations.

Several techniques may be combined for different lines of business in the organization, and techniques can be added to those mentioned above.

7.2.1.2 Mapping method

Mapping shall include stages such as the following:

A. Data collection

Data collection from various sources such as:

- Depth interviews;
- Meetings with key groups;
- Observations on people during their work, and especially while working with information systems;
- Reading of written material (such as procedures and charts);
- Review of existing knowledge systems;
- Learning previous analysis works carried out in the organization.

B. Analysis of findings

After the data collection, their analysis shall be performed, and the findings and conclusions shall be formulated.

The analysis shall include disassembly and assembly of collected data while examining cultural statements and processes. The purpose of the analysis is to determine priorities for implementation of solutions.

C. Writing a mapping document

The document shall include, at least, a description of the organizational background and the present status, organizational characteristics that have a bearing on Knowledge Management and the list of knowledge subjects that the organization will promote.

7.2.2 Adoption of Knowledge Management methodologies and solutions and making them compatible with the organization

In order to provide an answer to challenges, methodologies and solutions for Knowledge Management shall be selected (see the list of solutions in clause 6 above). Adoption of a solution shall be examined, at least, according to the following criteria:

- A. Quality of the response of the proposed solution for the specific challenge;
- B. A systemic view of the mix of solutions given to the organization for obtaining an answer to the complex of challenges;
- C. Adjustment to resources, to culture, to the information and the technological infrastructure existing in the organization.

7.2.3 Preparation of work plan

After validation of the mapping findings and on the basis of the establishment of priorities for

handling them, a work plan shall be constructed. The work plan shall include the challenges chosen for action and the Knowledge Management solutions for treatment of each of the challenges. The description, goals and stages for implementation shall be written for each solution, including an overall timetable. The work plan shall consider the various solution implementation stages for Knowledge Management, as defined in clause 7.3 below. Periodically (at least annually), the organization shall check the implementation of the work plan for the past year, learn lessons and define the work plan for the future.

7.2.4 Definition and selection of manpower and other resources

The collaborators to the planning and implementation process of the solutions, including definition of the position holders and a definition of the authorities and responsibilities regarding assimilation of solutions and of management and routine operation of Knowledge Management implementation in the organization over a period of time.

Other resources shall be allocated as needed.

7.3 Implementation of Knowledge Management solutions

Implementation of Knowledge Management solutions shall be done gradually, according to the capabilities of the organization. For each solution, the following steps shall be taken:

7.3.1 Management of the solution implementation

Management of the solution implementation shall include at least the following details:

- Preparation of a work plan and timetable;
- Risk management;
- Recruiting and appointing of collaborators in the organization;
- Recruiting necessary resources and their allocation;
- Characterization of the solution.

7.3.2 Characterization of the solution

Characterization of the solution shall define the following aspects: background for the need, purposes, required functionality, target populations (users), method, architectural infrastructure, system elements (when speaking of an automated system) and technical specification.

Characterization of the solution shall be presented to the intended customer in the organization for approval prior to starting implementation.

7.3.3 Construction and implementation of the solution

The solution shall be constructed based on the specification. If it is necessary to deviate from the specification for any reason whatsoever, return to the characterization stage, adjustments shall be made and the change approved. After obtaining a suitable solution, acceptance tests shall be performed that represent all the typical scenarios in the use of the solution.

7.3.4 Collection and documentation of the contents

For each Knowledge Management solution, an initial core of content shall be established

that allows carrying out the solution, so that there will be a sufficient mass of content when introducing the solution.

After introducing the solution, mechanisms shall be formulated for continuing the content collection, their improvement, their cataloging, their processing, updating and retention in the archives, and deleting the contents that are not kept current on a regular basis. A suitable process shall be defined both for the initial core of content stage and for its normal operation (there may be different mechanisms).

7.3.5 Assimilation of the solution

The assimilation stage is a critical stage in the success of the solution and therefore, it shall be accompanied by an assimilation plan and shall be managed as an integral part of the solution implementation process.

Clarifications:

The assimilation shall, in general, include several elements:

- Construction of a detailed assimilation plan: construction of a plan that maps the assimilation challenges, presents principles and outlines the action plan and method. The plan shall include the assimilation stages, the target populations, officials and their responsibility, the timetables and the means for assimilation.
- Introduction: action of revealing the Knowledge Management solution. The importance of this action is the statement that accompanies it, that a change has occurred in the work arrangements in the organization. Each organization shall decide how to carry it out (on the progression between broad active marketing and discreet and personal marketing).
- Training: this action is essential when speaking of a new type of technological system whose usage is not clear and/or where there is a significant change in the work process. The training shall fit the target population and its characteristics.
- Escorting: a continuous stage performed as part of the assimilation. In this stage, the organization employees have already begun to make use of the solution, however, escorting is still required in order to bring the assimilation to fruition and to ensure its success, and if necessary, to improve the solution according to the feedback received from the field.

Note:

It is recommended that the assimilation stage be considered already at the beginning of the mapping stage.

7.3.6 Operation and maintenance of the solution

The operation and maintenance process of the solution shall be defined.

The operation and maintenance shall include two main types of updating:

- Updating the content: a solution, as good as it can be, shall continue to exist only provided that its contents are up-to-date and relevant to the users. As part of the plan maintenance, the minimum frequency for updating the contents shall be set together with someone responsible to carry it out.
- Updating the Knowledge Management solutions: in the work processes, changes are constantly occurring. Furthermore, people submit suggestions and ideas for

improvement of the Knowledge Management solutions. The person responsible for the solution shall collect the feedbacks and the current needs, and according to the priorities, the desired changes shall be carried out.

7.4 Documentation

The documentation shall comply with the requirements in clause 8.

7.5 Measurement and evaluation

During and after assimilation, measurement and evaluation actions shall be performed as detailed in clause 9.

According to the measurement, evaluation shall be made of the solution at the end of the assimilation stage and periodically during the lifetime of the system. As a consequence of the measurement and evaluation, changes shall be made in the Knowledge Management solutions, as necessary.

7.6 Debriefing and improvement

7.6.1 Debriefing

Debriefing is intended to bring organizational improvement by means of solutions that systematically check the processes, actions, and/or events in the organization. Learning lessons shall be carried out for the constructed solution, as detailed in clause 10.

7.6.2 Improvement of organizational mechanisms

According to the lessons learned, the supporting mechanisms in the Knowledge Management action in the organization (construction, position holders, teams, resources, work procedures, culture, organizational measurement, training, manpower, etc) and the products of the action (solutions and various implementations) shall be monitored and improved.

7.7 Continued action on handling the challenges and new needs

The organization shall maintain a mechanism that allows continued action on treating the challenges and new needs raised by the various customers in the organization and/or that arise from the organization entering new knowledge and business fields, to new markets or due to new opportunities, risks and various outside constraints [competition, requirements (regulation), technology and others].

8. Documentation

8.1 Purposes of documentation

- A. The documentation will support proper and efficient management of Knowledge Management actions in the organization;
- B. The documentation will serve as a reference for the management of Knowledge Management actions.

8.2 Documentation contents

The documentation of Knowledge Management action shall contain that detailed below:

8.2.1 Policy document:

A documented statement of the Knowledge Management policy, of the Knowledge Management purposes and of the cultural-valued basis for operation of Knowledge Management in the organization;

8.2.2 A description of the position holders and the organizational action framework, that outline, manage and control the Knowledge Management action in the organization;

8.2.3 The mapping findings or details of the preferred challenges for treatment and the concrete work plan for implementation;

8.2.4 Work procedures and the products:

The work documents in the various stages of Knowledge Management and the products created.

Reference shall be made to all stages of Knowledge Management implementation, according to clause 7.

8.2.5 Results of the measurement and evaluation:

Documentation of the results and analysis of the results of Knowledge Management action in the various fields: policy, resources, processes, solutions and the general level of Knowledge Management and Knowledge Management culture in the organization;

8.2.6 Debriefing and improvement steps:

A. Documentation of the implications derived from the lessons learned;

B. Documentation of the decisions made due to learning of the implications;

C. Documentation of the changes and improvements carried out in the Knowledge Management plan, in the processes, in the actions, in the methodologies, etc.

Note:

The subject of documentation in this clause is in addition to the knowledge documentation itself discussed in the sections of this Standard.

8.3 Documentation format

A. The documentation shall be in a format used in the organization for documentation management;

B. The documentation shall be accessible to all the relevant users, at the appropriate user points;

C. The documentation shall allow identification of the plan stages, the various implementations and shall be carried out at a frequency set by the organization;

D. In every case where it is important to locate different editions of documents (current and previous), there shall be identification of the different versions. This directive particularly applies to specification documents, to computerized applications, to

training and operation documents and to other documents, at the discretion of the organization;

E. There shall be uniform templates (formats) for permanent and routine documents;

F. A checking mechanism shall be defined for documents that will determine to check the validity and/or edit them at defined periods or after a defined event.

8.4 Documentation control

The organization shall define in a documented procedure the method of documentation control.

9. Measurement and evaluation

9.1 Measurement and evaluation purposes

The purpose of measurement and evaluation is to enable orderly tracking of the existence and progress of Knowledge Management processes in the organization, and to ensure a contribution to meeting the organization's targets and achieving its goals.

9.2 Measurement and evaluation ranges

The measurement and evaluation shall be carried out in the following fields:

- Knowledge Management policy (the strategy);
- the resources for Knowledge Management;
- Knowledge Management processes;
- Knowledge Management solutions;
- Knowledge Management and Knowledge Management culture at the overall organization level.

9.3 Measurement and evaluation implementation

The organization shall ensure the following:

9.3.1 Knowledge Management policy (strategy)

- A Knowledge Management policy exists and is suitable for the organization's concept and its policy;
- The Knowledge Management policy promotes the organizational policy and achieving its goals.

9.3.2 Resources for Knowledge Management

- Resources have been allocated as detailed in clause 4 that deals with resource management.

9.3.3 Knowledge Management procedures

- Knowledge Management solutions are implemented according to processes detailed in clause 7 that deal with Knowledge Management implementation in the organization.

9.3.4 Knowledge Management solutions

- Solutions are implemented as detailed in the various facets in clause 6 that deals with the Knowledge Management solutions;
- The use of each of the realized solutions are measured;
- The measure of goal achievement for each action realized is measured;
- Business/organization outputs (after a defined period) are measured as a result of actions realized;
- Higher level of meeting the goals and the business outputs than obtained in the previous year.

9.3.5 Knowledge Management and Knowledge Management culture at the overall organization level

- Knowledge Management extent is measured and increased relative to the previous year's volume;
- The Knowledge Management culture is measured as detailed in clause 5 that deals with Knowledge Management culture and a learning organization.

9.4 Measurement and evaluation method

- The organization shall establish measures for management of Knowledge Management action according to the abovementioned defined evaluation fields;
- The organization shall check the attainment of these measures at least annually.

See Annex A for an example of a list of measures.

10. Debriefing

10.1 General

Knowledge Management action is an ongoing organization action in which the processes of drawing conclusions are carried out for constant improvement of the manner of the management of organization knowledge and its products.

10.2 Debriefing

The organization shall draw conclusions on two levels:

- A. At the overall level of the Knowledge Management plan – management responsibility, resources, culture and policy – at least once every two years;
- B. At the individual level of realized Knowledge Management solutions – for each solution where the volume of investment of resources is at least one year.

The organization shall define the subjects of drawing conclusions and the frequency of their performance.

10.3 Methodology

There are a variety of methods for drawing conclusions and managing them. The organization shall adopt for itself a suitable methodology, provided that it conforms with the following principles:

- A. It is systematic and professional;

B. It includes the following stages:

- Examining what happened or took place;
- Analysis of the reasons for it;
- Suggestions for the future on the basis of this analysis.

C. It will lead to objective and comprehensive results as much as possible. Examples of known methodologies for drawing conclusions:

- Classic investigation (facts, findings, conclusions, lessons learned, missions)
- After action review –AAR.

10.4 Results

The organization shall assimilate the lessons learned, and improve the manner of the Knowledge Management process and its products according to the lessons learned.

Annex A – List of possible measures (examples) for clause 9 – Measurement and evaluation

(informative)

Examples of evaluation areas and possible measures for these areas (see clause 9.2) are given below. Inputs are brought for most of the examples, and the organization shall define output measures for itself according to its Knowledge Management system purposes.

A-1 Management and administrative responsibility

- Is the Knowledge Management integrated with the concept of the organization or with the purposes of the organization
- Is organizational learning integrated into the organization vision or purposes of the organization
- Is there an active information manager in the organization
- Does the information manager take part in the management / senior management discussions
- What is the number of employees assigned a specific task in the knowledge field. Are they directly subordinate to the organizational CKO
- Is there someone responsible for Knowledge Management in the divisions / sections / units (in part time positions or in addition to his function)
- Are sufficient resources allocated for Knowledge Management

Note:

It is not mandatory that the resources are allocated directly to the Knowledge Management body but they can be given to other bodies such as divisions dealing with information technology (IT), quality, the manpower field and training.

- Are the Knowledge Management goals defined in the organizational work plans
- Is Knowledge Management action covered by the procedures
- Does Knowledge Management have an official platform for publicity
- Does the general manager or other senior managerial function assist in the organizational recognition in the importance of the Knowledge Management actions
- Is sharing knowledge a central organizational value
- Are means of rewards or means of recognition and appreciation defined for knowledge contributions in the Knowledge Management actions

A-2 Manpower – professional organizational knowledge and learning continuity

- Is a risk survey for loss of knowledge performed (retirement / leaving / position change)
- Is there a systematic process for recruiting replacements (inside or outside the organization)

- Is there a systematic process for acquiring knowledge of retirees (documentation / personal or group training)
- Is there a systematic process for transferring a position and overlapping
- Is there a professional training arrangement for targeted subjects
- Is there reference to personal knowledge contribution (creativity, sharing, use) in discussions on promotion of employees

A-3 Technological infrastructures and their function

Note:

The list of solutions is according to the list in clause 6 in the Standard.

A-3.1 Hardware infrastructure

- Does sufficient hardware infrastructure exist for the Knowledge Management needs in the organization

A-3.2 Organizational portals, professional knowledge and knowledge community sites

- Does an accessible sharing point (organizational portal) exist for information or operation of information systems
- Is the access to information and information systems, SSO (Single Sign On)
- Do they constitute a sharing work environment
- What is the percentage of active sites
- Has a site manager been assigned as responsible for operation of the site
- Are the persons responsible for entering contents defined
- What is the average frequency for updating contents / addition of new contents
- Do the users report that the solution is beneficial or that it shortens processes

A-3.3 Documentation management

- Is there a specific solution for documentation management
- Is the solution mandatory or can new documents be created in a different manner
- Are all the documents entering the organization placed in the document management system
- Does the solution for documentation management also handle the records according to the relevant requirements applicable to the organization
- Are there templates, documents or smart documents that permit the entry of metadata in a full or partial automatic manner
- Is every new document retained in a single physical location in the organization
- Is there accessibility to all the digital documents in the organization
- Is there accessibility to the organizational documents available only as hard copy

A-3.4 Search engines

- Is there a federative search engine (combination) or separate search engines
- Are the results of the search presented to the user in a convenient manner

- Does the search engine grade the results
- Does the search engine allow the user to place tags
- Can the users save the search in order to return to it
- Does the possibility exist to receive an automatic warning when a new item is added to a search that was performed

A-3.5 Solution for management of a built-in content

If a solution exists for management of a built-in content:

- Is the solution unidirectional (read only) or bidirectional (read-write)
- Does the solution provide an answer to all the systems that create a built-in content in the organization

A-3.6 Maps of experts and knowledge centers

- Is there a "yellow pages" file
- Does the mapping also include outside experts

A-3.7 Partially built-in content management tool (such as WIKI)

- What is the percentage of active sites
- What is the percentage of active (that contribute content) users
- What is the average frequency of updating content / addition of new content
- Do the users report a benefit from the solution

A-3.8 Network diaries (blogs)

- Do they exist
- What is their frequency of use
- Do the users report of a benefit from the solution

A-3.9 Social networks

- Do they exist
- What is their frequency of use
- Do the users report a benefit from the solution

A-4 Integration in work processes

A-4.1 Management of projects

- Is there a procedure for combining elements of Knowledge Management in the organizational project performance process, considering knowledge from previous projects, including investigations, conclusions and insights resulting from them
- Is there organized documentation after completion of each stage in the process

A-4.2 Handling engineering information

- Is there a procedure for creating engineering information (content and Standards) and incorporate engineering information from the organization's information system, including accessibility for employees

- Is there a supporting organization system for handling engineering information

A-5 Debriefing

- Is there a mandatory procedure for carrying out debriefing
- Is there an organization system for debriefing
- Is there tracking of the performance of the lessons learned
- Is there a process for extracting or refining the conclusions and best practices for converting them into lessons learned knowledgebase
- Is there a reservoir for management of lessons learned knowledgebase as knowledge items
- Do processes exist for circulating the lessons learned knowledgebase and promoting their use

A-6 Products

A-6.1 Organizational study

- Is there a decrease in the number of safety faults (especially repeated faults)
- Is there a decrease in the number of errors and other faults (other than safety faults)
- Was there "duplication of success factors"
- Is there a decrease in the amount of knowledge that "left the organization"
- Has the training period for a worker for a position been reduced
- Do the workers perceive the encouragement of knowledge sharing by the managers
- Do the workers perceive that there is sufficient organizational infrastructure for knowledge sharing

A-6.2 Functioning of the handling of documents

- Do the employees know where to save documents
- Do the employees know where and how to locate a document – Is this expressed in a decrease of time required for retrieval

A-6.3 Process improvement (due to the existence of knowledge and knowledge accessibility)

- Has the required time been decreased for starting up new projects
- Has the required time been decreased for submitting cost proposals

A-7 Reciprocity between a Knowledge Management group with other units in the organization

A-7.1 IT unit

- Does Knowledge Management have an effect on the selection of organizational systems
- Who is responsible for assimilation of Knowledge Management solutions
- Are the Knowledge Management solutions maintained at an appropriate standard

A-7.2 The unit responsible for debriefing

A-7.3 The unit responsible for organizational learning

A-7.4 The unit responsible for training and manpower

A-7.5 The unit responsible for organization and methods

For clauses A-7.2 to A-7.5 above:

- Is there a continuous work interface
- Is the unit integrated with the Knowledge Management planning and its implementation
- Is the Knowledge Management team integrated with the processes of the unit

A-8 Knowledge Management culture

Evaluation according to clause 5.3 in the Standard

Annex B – Maturity levels of Knowledge Management

(informative)

This annex presents a tool for checking Knowledge Management maturity levels in the organization whose purpose is to help preparations for Knowledge Management implementation in the organization.

Subject	Maturity level				
	1 (Low)	2	3	4	5 (High)
Management responsibility	–	There is a management member, responsible	<ul style="list-style-type: none"> - There is management responsibility for development and implementation of a Knowledge Management plan - Management is responsible for the existence of a Knowledge Management plan - Knowledge Management is part of the organizational vision, of the organization strategy and of its values 	<ul style="list-style-type: none"> - Management is responsible for the existence of a strategy supporting Knowledge Management policy - Management ensures existence of a Knowledge Management plan 	<ul style="list-style-type: none"> - A management review exists wherein the Knowledge Management system in the organization is reviewed
Resources	The concept of Knowledge Management exists in a formal manner in the organization	There is a chief knowledge officer in the organization	<ul style="list-style-type: none"> - There are position holders in the organization that support the Knowledge Management subject - Management allocates specific monetary resources for Knowledge Management 	There is a Knowledge Management team in the organization. The Knowledge Management team is subordinate to a member of the organization management	Unit managers in the organization initiate Knowledge Management actions while providing additional resources for the subject (manpower and/or funds)

Subject	Maturity level				
	1 (Low)	2	3	4	5 (High)
Implementation	Knowledge Management includes collection of knowledge in the organization	- Technology support for sharing and accessibility of knowledge is in use - There is systematic action of knowledge sharing	- There is multi-year activity planned for Knowledge Management in the organization - Mapping that aids Knowledge Management in the organization is performed	Knowledge Management action includes reference to all the process based approaches	Overall organization Knowledge Management action includes all the process based approaches in each action
Solutions	Systematic actions exist for knowledge construction	Knowledge Management integrates technological aspects (automation)	- Knowledge Management integrates content aspects - Knowledge Management includes documentation of tacit knowledge (found in the minds of the employees)	- Systematic actions exist for knowledge development - Knowledge Management integrates process aspects - Knowledge Management is integrated in the operational information systems or in the core work processes	Knowledge Management is an integral part of the organizational structure
Culture	-	- Learning mechanisms exist for employees - People document knowledge in their daily work	- Learning mechanisms exist in groups - People share professional and organizational knowledge with each other	- Learning exists and is integrated in the work processes and in various actions	- Learning organization: An organizational process exists of constant improvement based on learning - The contribution to knowledge and sharing knowledge constitute criteria for worker evaluation

Subject	Maturity level				
	1 (Low)	2	3	4	5 (High)
Documentation	–	Organizational knowledge is documented within the Knowledge Management framework	Central milestones in Knowledge Management are documented	The Knowledge Management process is completely documented	Measurement of the Knowledge Management process and its products are documented
Measurement and evaluation	–	–	Measurement exists of the use of Knowledge Management solutions and for effectiveness of use	Measurement of outputs from Knowledge Management action exists	Measurement of the organizational effectiveness from Knowledge Management action exists
Debriefing	–	Actions are taken for debriefing	Systematic actions are taken for debriefing for most of the Knowledge Management actions	According to the learning and the lessons-learned processes, the mechanisms that support Knowledge Management action in the organization are monitored and improved	There is also a overall process of debriefing for the purpose of Knowledge Management and constant improvement of the Knowledge Management system
Note: For each maturity level, existence of the conditions of the preceding levels are also required.					