



# VISION 管略

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**新版ISO 14001预期2015年面世**

**TL 9000 Introduces New Security Requirements for ICT**  
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**HKQAA**  
HONG KONG QUALITY ASSURANCE AGENCY  
香港品質保證局



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## Optimising asset performance to increase competitiveness

The concept of "asset management", to many, is confined to financial management and investment. However, the term "asset" can also refer to physical assets like facilities, goods and properties. Without doubt, the performance in managing various types of assets will have a great influence on the competitiveness of an organisation.

Let's take capital-intensive organisations like processing and manufacturing industries, energy, mining, public transportation and utilities as examples. Their most significant expenditure, risks, dependencies and efforts are associated with physical assets. If organisations can effectively manage these assets, they will definitely benefit in terms of increased operational and financial performance.

Specifically, asset management helps organisations reduce maintenance costs and increase the life and reliability of equipment, as well as better utilising the equipment and components required to support business operations. Optimising the investment returns of assets will help improve an organisation's bottom line.

In addition, it will enable organisations to increase competitiveness through continual improvement in operational performance. The corporate image can also be enhanced by demonstrating to investors, regulatory institutions and other stakeholders that their assets deliver quality products and services at an optimal cost.

Asset management is increasingly valued by industry, and ISO launched the ISO 55001 asset management system standard in early 2014. This standard offers a holistic framework organisations can use to systematically manage, in a sustainable manner, the performance of all types of assets over their life cycle.

As a leading conformity assessment body in the region, HKQAA has taken the lead to provide ISO 55001 certification services this year. It is our pleasure to see that some organisations have successfully obtained this certification and demonstrated their asset management competence. With the support of industry and various parties, we believe that quality asset management will become even more popular in the future.

## 优化资产表现，提升竞争优势

对不少人来说，「资产管理」的概念只局限于财务管理及投资。然而，「资产」一词所涵盖的范畴其实很广泛，还可以包括设施、货物、物业等实物资产。诚然，一间机构的竞争能力，往往与管理各类资产的表现有莫大关系。

就以资产密集型的机构为例，如加工及制造业、能源供应、采矿、公共运输及公用服务机构等，其最主要的支出、风险、依赖和投入的资源，都与实物资产息息相关。如果机构能够有效管理这些资产，无论在营运或财务表现上，都会有所裨益。

具体来说，资产管理不但有助这些机构节省维修保养的开支，延长设备的寿命及提高其可靠性，还可进一步善用支持营运需要的设备和元件，从而优化资产的投资回报，提升企业的财务绩效。

另一方面，机构因为资产的营运表现持续改善，既加强了竞争优势；又可以向投资者、监管机构及其他持份者，展现它的资产能以最佳成本提供具质素的产品或服务，令企业形象有所提升。

正因如此，资产管理近年日益受到业界重视。国际标准化组织(ISO)更于今年初推出ISO 55001资产管理体系标准，为任何机构提供了实用的框架，系统化地管理各类资产在生命周期中的表现，以配合机构的可持续发展。

本局作为区内具领导地位的合格评定机构，今年亦率先提供了ISO 55001认证服务，并很高兴已有机构成功取得认证，展示其资产管理的能力。相信未来在业界各方的携手推动下，将可进一步促进优质资产管理的普及化。

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# Introduction to ISO 55001:2014 Asset Management System 剖析ISO 55001:2014资产管理体系



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In the commercial world, an “asset” is usually associated with property, capital, funds and resources. Asset management is commonly associated with financial asset management. Financial asset management focuses on managing investments for financial returns, but the concept of asset management can also be applied to all types of organisations and assets. No matter what industry you are in, you will need to make use of different types of asset to facilitate the achievement of your organisation goals. Your organisation's assets may include physical assets such as equipment, facilities, tools, inventory and property, as well as financial assets, human assets and intellectual assets. Like financial asset management, physical asset management is concerned with returns on investment through managing the operation and performance of facilities throughout their life cycle.

In January 2014, the International Organization for Standardization published a new set of three international standards to help organisations achieve their objectives through the effective and efficient management of their assets:

- ISO 55000 – provides an overview of asset management and asset management systems
- ISO 55001 – specifies the requirements of an asset management system
- ISO 55002 – provides guidance for the application of an asset management system in accordance with the requirements of ISO 55001

This new series of international standards will replace the PAS 55 series of standards, which concentrated on the management of physical assets.

Asset management supports the realisation of value from assets in the achievement of organisational objectives, while balancing financial, environmental and social costs, risk, quality service and performance related to assets. The key difference with PAS 55 is that, though ISO 55001 is primarily intended for managing physical assets, it can also be applied to other asset types, including non-physical assets. According to the Institute of Asset Management, the PAS 55 standards will be superseded on 15 January 2015. With the new ISO 55001 standard, we expect more industries and organisations to benefit from adopting a structured approach to asset management.

## Key requirements of ISO 55001:2014

ISO 55000 defines an asset as an “item, thing or entity that has potential or actual value to an organisation”. Physical assets usually refer to equipment, inventory and property owned by the organisation. Non physical assets may include leases, brands, digital assets, use rights, licences, intellectual property rights, reputation and agreements.

The following is an overview of the key clauses of the standard:

### Clause 4 Context of the organisation

When establishing or reviewing its asset management system, an organisation should consider its internal and external context. The external context includes the social, cultural, economic and physical environment, together with regulatory, financial and other constraints. The internal context includes organisation culture and environment, as well as the mission, vision and values of the organisation. The context of an organisation should also take into account its stakeholder inputs, concerns and expectations.

在商业社会，「资产」一词可指物业、资本、资金及各种不同类型的资源。通常一般人都认为「资产管理」是指如何打理金融资产，透过财务管理去获得投资回报。然而，这只是资产管理的其中一种。诚然，无论任何行业的机构，都会运用不同类型的资产来实现既定的目标，例如金融、人力和技术上的资产，以及设备、设施、工具、货物、物业等实物资产。只要能够适当地管理实物资产在生命周期中的运作和表现，便可以像管理金融资产那样，达成投资回报的目标。

为帮助机构建立具高效率 and 效益的资产管理体系，2014年1月，国际标准化组织（ISO）出版了一套三份的新国际标准：

- ISO 55000——为资产管理和资产管理体系的综览
- ISO 55001——详列资产管理体系的要求
- ISO 55002——根据ISO 55001的要求，提供应用资产管理体系的指引

这套新标准将取代主要著重实物资产管理的PAS 55系列标准。

资产管理的目的，是让资产在实现机构目标的过程中变现价值，同时平衡与资产相关的其他考虑因素，例如财务、环境及社会风险和成本、服务水平及效益等。ISO 55001与PAS 55的分别之处，在于ISO 55001虽然主要针对实物资产，但也可应用于其他非实物资产。英国资产管理协会表示，PAS 55标准将于2015年1月15日被取代，相信新的ISO 55001标准会日益普及，帮助机构从规范化的资产管理得到好处。

## ISO 55001:2014的重点要求

ISO 55000将资产定义为「对机构有潜在或实际价值的物件、事物或个体」。实物资产通常是指机构拥有的设备、货物、物业等，而非实物资产则包括租契、品牌、数码资产、使用权、牌照、知识产权、声誉、协议书等。

下文列出ISO 55001的重点条文：

### 条文4 机构环境

机构在建立或检讨资产管理体系时，需审视其内部与外部环境。外部环境包括社会、文化、经济和现实环境，以及法律法规、财政和其他限制；内部环境则包括机构的文化和环境、使命、愿景和价值观。此外，持份者的意见、顾虑和期望，也会对机构的环境有所影响。



## Clause 5 Leadership

Top management should develop an asset management policy and asset management objectives which are aligned with the organisational objectives. Leaders at all levels of an organisation are involved in the planning, implementation and operation of the asset management system. Top management creates the environment for the asset management system through defining the responsibilities, accountabilities and asset management objectives and strategies.

Appropriate resources should be provided by the top management and leaders at all levels to support the asset management system. These resources include funding, adequate and competent human resources, as well as information technology support.

Top management and leaders at all levels should communicate the organisation's asset management objectives and the importance of its asset management system to all employees, customers, suppliers, contractors and other stakeholders.

## Clause 6 Planning

The organisation should consider the issues related to its context and the needs of stakeholders and determine the risks and opportunities that need to be addressed. The organisation should establish processes for managing its asset management related risks, including contingency planning.

Asset management objectives should be established at relevant functions and levels. The approach to implementing the principles of applying asset management to achieve the organisational objectives should be documented in a strategic asset management plan.

The asset management plans should define the activities to be undertaken in relation to assets, and should specify measurable objectives. Aligning the asset management objectives with organisational objectives, as well as linking asset reports to financial reports, can improve the organisation's effectiveness and efficiency.

## Clause 7 Support

The asset management system requires collaboration and the sharing of resources and promotes awareness of asset management objectives across the whole organisation.

The competency requirements for personnel involved in asset management should be specified. The implementation, maintenance, evaluation and improvement of these competencies require cooperation with the organisation's human resource management system.

The organisation needs to determine its information requirements to support its asset management system. Creating, controlling and documenting this information are critical functions of the asset management system.

## Clause 8 Operation

The organisation should plan, implement and control the processes required to maintain the asset management system, including those that have been outsourced. Operation of the asset management system sometimes requires planned changes, which can introduce new risks. The asset management system should include risk assessment and control of change.

The organisation should determine how the outsourced activities will be controlled and integrated into the organisation's asset management system.

## Clause 9 Performance evaluation

The organisation should evaluate the performance of its assets, its asset management and its asset management system. Performance measures can be direct or indirect, financial or non-financial.

Asset management performance should be evaluated against whether the asset management objectives have been achieved, and if not, why not. Periodic audits should be used to evaluate the performance of the asset management system. The results of performance evaluation should be used as inputs into management reviews.

## Clause 10 Improvement

Opportunities for improvement can be determined directly through monitoring the performance of the asset management system and asset performance. The nonconformities require corrective action and the potential nonconformities require preventive action.

Asset-related incidents should be investigated and reviewed to determine if any improvements are required to prevent their recurrence and to mitigate their effects.

## 条文5 领导

管理层应制订与机构目标相符的资产管理政策和目标。机构各阶层的管理人员，都必须参与管理体系的策划、推行和营运过程，而最高领导层则要制订管理体系的目标、策略和权责，营造适合管理体系运行的环境。

各领导层应提供适当的资源，包括资金、足够和合适的人才、资讯科技等，以支援管理体系的运作。

各领导层应与所有员工、顾客、供应商、承办商及其他持份者保持沟通，传达管理体系的目标和重要性。

## 条文6 策划

机构应根据自身的环境和持份者的需要，判断要应对的风险和机遇，并订立相应的处理程序，例如应急计划。

机构应给相关的部门和岗位订立资产管理目标，并透过制订资产管理策略计划，详述如何应用资产管理的原则来实现机构目标。

机构应在资产管理策略计划中，确立所须执行的工作，以及订立可量度的目标。而制订与机构目标一致的管理体系目标，以及将资产状况与财务报告联系，可有助提升机构的效益和效率。

## 条文7 支援

推行资产管理体系时，需要机构上下通力合作、分享资源，让各成员清楚资产管理的目标。

机构应清楚列明相关人员的能力要求，以及与人资源管理体系互相配合，得以善用、维持、评估和改善人才能力。

机构要界定支持资产管理体系运作所需的资讯。而建立、控制和记录这些资讯是资产管理体系的重要功能。

## 条文8 营运

为了维持管理体系的运作，机构应制订、实行及控制相关的程序（包括外判的工序）。当管理体系运作时，有时需要作出修正，并可能衍生出新的风险，因此体系本身应该要包含风险评估和变更控制的程序。

机构亦应考虑如何监控外判的工序，以及将其融入管理体系的运作中。

## 条文9 绩效评估

机构应评估其资产、资产管理和管理体系的表现。评估可以直接或间接的形式，以及从财政或非财政的角度去进行。

评估资产管理标准是在于其能否实现既定的管理目标，以及审视实现不到的原因。机构应对管理体系进行定期审核，并将评审结果交予管理层作评审。

## 条文10 改进

透过监控资产和资产管理体系的表现，可以直接找出改进的空间；如有不合格项或潜在不合格项，需分别进行纠正及预防措施。

此外，如发生了与资产相关的意外，应进行调查及检讨，考虑是否需要作出改进，以防止再次发生及减低其影响。

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# Developing a Strategic Asset Management System

## 发展策略性资产管理体系

A summary of the “Strategic Asset Management Approach for Sewage Treatment Facilities in Drainage Services Department”, report prepared by Ir Michael Yeung and Ir Gary Chu of Drainage Services Department, and Mr K. Y. Ng of Hong Kong Quality Assurance Agency

撮录自渠务署杨国辉工程师、朱伟业工程师及香港品质保证局吴国先先生撰写的「渠务署污水处理设施之策略性资产管理」报告（原文以英语撰写，中文版由《管略》编辑部翻译）



渠務署

Drainage Services Department

*The Drainage Services Department (DSD) manages a substantial amount of drainage infrastructural assets in Hong Kong. In order to optimise the long term operation and maintenance of these facilities, DSD has developed the Total Asset Management (TAM) system for years, and in 2014 successfully obtained ISO 55001 certification for some of its sewage treatment facilities\*.*

*In this issue VISION summarises a report prepared by DSD in 2013 which outlines the Department's practical experience in developing asset management system for public utilities like their sewage treatment facilities. We believe this article will help readers learn more about the preparations required for establishing such systems.*

*\* Some of DSD's sewage treatment facilities obtained PAS 55 certification in 2013, and then converted to ISO 55001 in 2014. As of 30 June 2014, DSD's ISO 55001-certified sites include Ho Pong Street and Hung Hom Bay Sewage Pumping Stations; Sha Tau Kok, Sai Kung, Sham Tseng and Siu Ho Wan Sewage Treatment Works; Shek O and To Kwa Wan Preliminary Treatment Works; and Main Pumping Station of Stonecutters Island Sewage Treatment Works.*

The Electrical and Mechanical (E&M) Branch of DSD is tasked with the responsibility, among other things, to plan, design, construct, operate and maintain sewage treatment facilities. To maintain this large amount of E&M assets, substantial operation and maintenance (O&M) expenses have been incurred. In this respect, an asset management (AM) system is a useful means to achieve not only an optimal life cycle cost in the long run, but also reliable performance to meet the level of services expected from the general public.

In order to enhance the effectiveness of AM, DSD has set out a roadmap leading to the development of a TAM System in E&M Branch of DSD since 2011.

A Task Force chaired by a chief engineer was established in December 2011 with members drawn from all 3 divisions of E&M Branch to oversee the development and implementation of AM with the following 3 main initiatives:

- To build up competence in TAM;
- To improve the accuracy of asset inventory; and
- To develop our first 5-year TAM plan.

### Competence in Total Asset Management

In the AM development journey, it is essential to ensure the staff engaged in various activities have an appropriate level of competence in terms of education, training and experience. Various kinds of training activities and duty visits to local and overseas PAS 55-certified utilities were conducted. Selected professional staff also attend overseas AM training courses and conferences. These activities enable DSD staff to learn the best AM practices as well as practical skills and knowledge in establishing TAM system appropriate to DSD.

One of the key successful factors in implementation of TAM system is effective communication. A TAM portal was therefore established in 2012 to share pertinent AM information and knowledge within DSD. All the training materials, duty visit reports, conference synopsis, consultancy reports and TAM Task Force meeting minutes, etc. have been uploaded to the portal for easy access of all. This platform also enables systematic introduction of the AM concept to new staff as they join DSD.

渠务署负责管理香港众多渠务基建资产。多年来，渠务署致力发展「全面资产管理」体系，以优化渠务设施在长远营运和保养方面的效益，并于2014年成功为部分污水处理设施取得ISO 55001认证\*。

今期《管略》撮录渠务署于2013年发表的报告，概述渠务署为公用设施（如污水处理设施）在发展资产管理体系时所取得的实际经验。我们深信本文有助读者加深了解如何筹备和建立这类体系。

\* 渠务署部分污水处理设施于2013年获PAS 55认证，及后于2014年转而取得ISO 55001认证。截至2014年6月30日，渠务署获得ISO 55001认证的地点包括：位于河傍街和红磡湾的污水泵房；位于沙头角、西贡、深井和小濠湾的污水处理厂；位于石澳和土瓜湾的基本污水处理厂；以及昂船洲污水处理厂主泵房。

渠务署辖下的机电工程科负责规划、设计、建造、营运和保养污水处理设施。机电工程科在管理众多资产时，需要作出一定的营运和保养开支，而资产管理体系不但可长远而有效地优化管理资产的生命周期成本，同时令污水处理设施表现可靠，以提供符合公众期望的优质服务。

为提升资产管理绩效，自2011年起，渠务署为机电工程科的全面资产管理体系定下发展路线图。

2011年12月，由一位总工程师领导的工作小组正式成立，成员由机电工程科辖下三个分部组成。工作小组负责监管资产管理体系的发展和推行，主要涉及以下三项工作：

- 建立全面资产管理的能力；
- 提升资产库存准确度；及
- 发展全面资产管理的首个五年计划



DSD receives the ISO 55001 certificates (from left: Dr Michael Lam, CEO of HKQAA; Mr Tsui Wai, Deputy Director of Drainage Services; Mr Chung Kum Wan, Director of Drainage Services; Ir Dr Hon. Lo Wai Kwok, Chairman of HKQAA)  
渠务署获颁ISO 55001证书（左起：本局总裁林宝兴博士；渠务署副署长徐伟先生；渠务署署长钟锦华先生；本局主席卢伟国议员）

### 提升全面资产管理的能力

在发展资产管理的过程中，确保参与各项活动的员工在教育、培训和经验方面具备合适能力，是非常重要的。我们除了提供不同类型的培训课程外，亦安排员工到本地及海外取得PAS 55认证的公用事业进行实地考察，以及挑选专业人员出席海外资产管理培训课程和会议。这些活动让渠务署员工了解最佳的资产管理运作模式，同时学习实际技巧和知识，以建立一个适合渠务署的全面资产管理体系。

在实施全面资产管理体系时，良好的沟通是成功的关键之一。全面资产管理的电子平台在2012年推出，让渠务署署内人员可以分享相关资产管理的资讯和知识。平台载有培训资料、实地考察报告、会议提要、顾问报告和全面资产管理工作小组会议纪录等，方便员工查阅。这个平台更可为渠务署新入职的员工，有系统地介绍资产管理概念。



## Asset Inventory

Good TAM system requires meaningful, quality, timely AM information for support. There are two types of computerized maintenance management system (CMMS) in E&M Branch to support this initiative. A good CMMS should embrace a clear identification and definition of asset items that will be managed during the asset life cycle. As such, asset registry and its hierarchy format have been standardized so that assets data can be effectively stored, retrieved and manipulated by the users. All assets are named according to a pre-defined hierarchy which include name of plants, sites/areas, main system names, main and sub-equipment names (Figure 1).

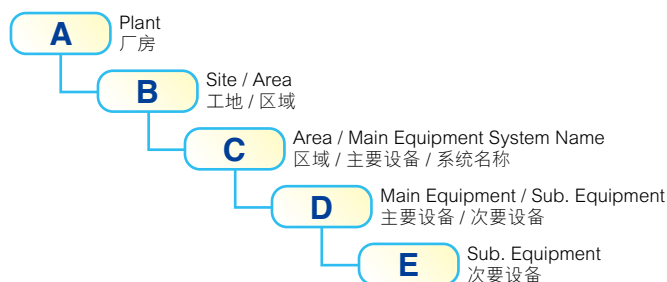


Figure 1: Asset registers and its hierarchy format  
图一：资产登录档及其等级制度的格式

## 资产库存

优秀的全面资产管理体系，需要具备有用、具质素和适时的资产管理资料。为此，机电工程科设立了两类电脑化维修管理系统。出色的电脑化维修管理系统，往往能够清楚识别及界定在资产生命周期里需要管理的各种资产项目。因此，我们把资产登录档及其等级制度的格式标准化，方便用户更有效地把资产数据存档、检索和使用。资产均按照既定的等级制度来命名，包括厂房、工地/区域、主要系统名称、主要及次要设备名称（见图一）。

## The First 5-year TAM Plan

Implementation of TAM system in E&M Branch has been proceeding in stages. A pilot study was first launched in sewage treatment divisions since 2010 and two sewage pumping stations were selected as pilot sites.

This pilot study provided useful insight and solid foundation in establishing an AM system targeted for certification at a later stage. It marked the evolution of strategic TAM system development in three stages, namely:

**Stage 1:** To establish the scope and objectives of a comprehensive study leading to the development of an AM Improvement Plan (AMIP) at E&M Branch level.

**Stage 2:** To establish an AM system at each Selected Critical Plant (SCP). The adequacy and effectiveness of the AM system thus established can be determined through pilot implementation for a period of time.

**Stage 3:** To populate the established AM system from Stage 2 progressively to other sewage treatment facilities in E&M Branch of DSD.

## 全面资产管理的首个五年计划

机电工程科分阶段实施全面资产管理体系。污水处理部于2010年进行首个先导研究计划，并选出两个污水泵房作为试点。

此先导研究计划，为下一阶段建立符合认证要求的资产管理体系，奠定稳健的基础，亦促进策略性全面资产管理体系三个阶段的发展：

**第一阶段：**于机电工程科层面，制订全面研究的范围和目标，以发展「资产管理改善计划」。

**第二阶段：**于每个选定的重点厂房，建立个别资产管理体系，并于先导计划实施期间，评定其资产管理体系的适切度和有效性。

**第三阶段：**将第二阶段建立的资产管理体系，逐步推展至渠务署机电工程科的其他污水处理设施。

图二显示全面资产管理体系各阶段之发展。

Various stages of TAM system development is illustrated in Figure 2.

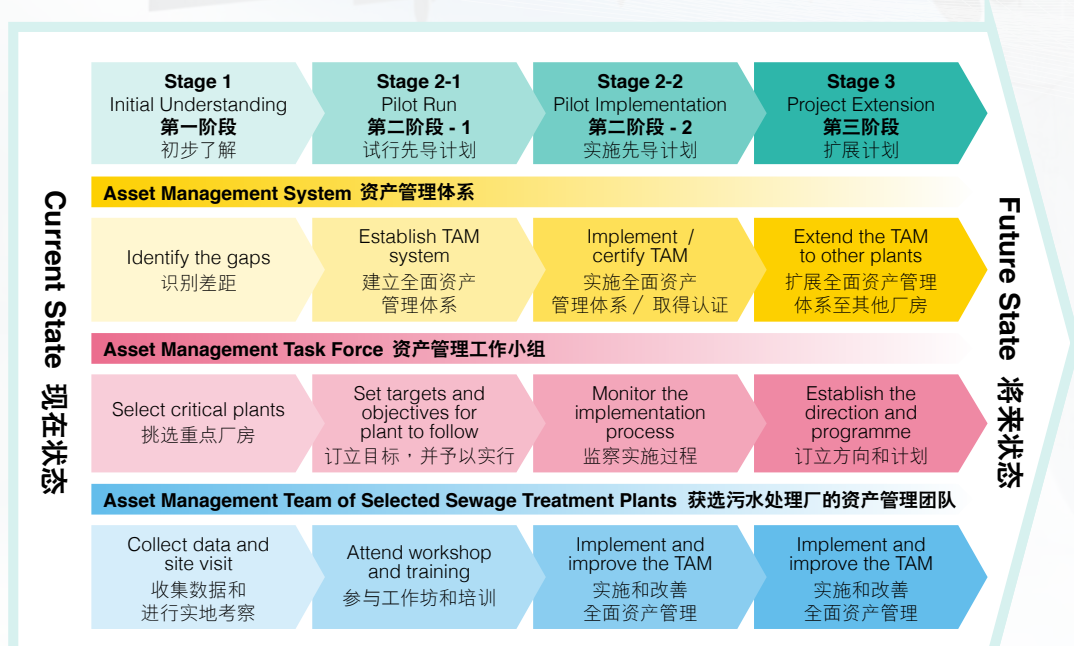


Figure 2: Development Stages of TAM System  
图二：全面资产管理体系各阶段之发展



The major works at each of these three stages are:

### Stage 1 (Oct 2012 – Feb 2013)

The AM practices of the SCPs were holistically reviewed using the assessment tool developed by the Institute of Asset Management to determine the maturity level of current AM practices. An Asset Management Improvement Plan (AMIP) was then established, which summarised the findings from on-site survey, identified the overall strengths and weaknesses, the major gaps which existed and presented a prioritised plan to raise the maturity level of the SCPs in the next 15 months.

### Stage 2 (Mar 2013 – May 2014)

The Stage 2 study aimed to materialise all the recommendations in AMIP by launching pilot projects in the SCPs so as to establish AM system eligible for certification. The seven SCPs together with the two pilot sewage pumping stations were identified for implementation of TAM system in Stage 2.

A Total Asset Management Development Plan (TAMDP) which consolidated the findings and practical experience learned from the Stage 2 to identify the major hurdles, overall strengths and weaknesses of the organisation, etc. was prepared. TAMDP presented a prioritised resources plan to raise the overall maturity level of E&M Branch of DSD in compliance with the certification standard in the next 5 years.

### Stage 3 (2014 – 2019)

Upon completion of Stage 2 study, the established AM system will have meaningful representation of the major types of sewage treatment facilities in E&M Branch of DSD. The similar AM System can then be populated progressively to other sewage treatment facilities from 2014 to 2019 according to the recommendation from TAMDP.

这三个阶段的主要工作如下：

### 第一阶段 (2012年10月 – 2013年2月)

运用资产管理学会的评审工具，对选定重点厂房的资产管理运作进行全面评审，以评定现行资产管理运作模式的成熟程度，继而制订「资产管理改善计划」。此计划总结实地调查结果，找出整体的优劣之处及其间出现的主要差距，并订出优先次序计划，以在随后15个月内提升选定重点厂房资产管理系统的成熟程度。

### 第二阶段 (2013年5月 – 2014年5月)

第二阶段旨在实践「资产管理改善计划」中的建议，于选定的重点厂房推出先导计划，以建立符合认证要求的资产管理体系。此阶段会在七个选定的重点厂房和两所作为试点的污水泵房，实施全面资产管理体系。

随后再制订一个「全面资产管理发展计划」，整合第二阶段所得的结果和实际经验，找出主要困难和机构整体的强、弱项。全面资产管理发展计划提出了一个优先资源投放计划，在未来五年内提升渠务署机电工程科的资产管理系统整体成熟程度，以符合认证标准的要求。

### 第三阶段 (2014年 – 2019年)

当完成第二阶段时，渠务署机电工程科在主要污水处理设施建立的资产管理体系，将具有一定代表性。按照「全面资产管理发展计划」的建议，类似的资产管理体系，可于2014年至2019年间，循序渐近推展至其他污水处理设施。

## Experience Sharing of Stage 2 Study 第二阶段研究所得经验分享

During Stage 2 of the AM system development, Nominated Plant Representatives (NPRs) consisting of professional engineers and technical staff from various disciplines, were nominated from each SCP to go through the various critical elements of an AM system in the form of facilitation workshops.

This is an important process for gathering and consolidating all the useful and valuable knowledge and experience from the experienced technical staff. And throughout the facilitation, the NPRs focused on a number of elements that would be crucial in establishing an AM system, including the AM Risk Framework, AM Database and AM Plan.

### 1. Establishment of AM Risk Framework

After defining the boundary of the AM system by compiling to asset registry to contain all the physical assets at each SCP, NPRs were guided to holistically review the criticality of individual equipment, and categorise them into critical or non-critical assets.

The NPR then conducted a risk assessment for all the critical assets which took into consideration of the consequence and impact of the risk events in aspects such as system failure, public confidence, legal and financial issues as well as the likelihood of occurrence of the risk events. A risk assessment matrix was thus developed and used to prioritise the risk level of all the critical assets across their life cycle (Figure 3).

在发展资产管理体系的第二阶段时，来自每个选定重点厂房的「委任厂房代表」中包括不同专业界别的工程师和技术人员，会透过技术促进工作坊，检讨资产管理体系的各项重要元素。

这个过程十分重要，因为可搜集及整合资深技术人员的宝贵知识和经验。过程中，「委任厂房代表」会重点讲解建立资产管理体系的重要元素，包括资产管理风险架构、资产管理数据库和资产管理计划。

### 1. 建立资产管理风险架构

为资产管理体系定出范围，包罗每个选定重点厂房的所有实物资产并收编于资产登录档。之后，「委任厂房代表」全面评估个别设备的重要性，把它们分为关键或非关键资产。

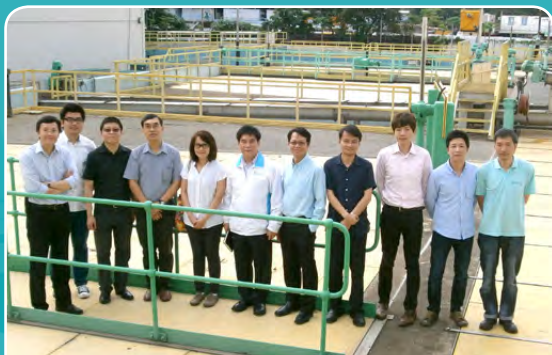
「委任厂房代表」继而对所有关键资产进行风险评估，考虑其引致的后果及影响，例如系统故障、公众信心

危机、法律和财政议题，以及这些危机事故出现的可能性。由此建立的风险评估矩阵，会把重要资产在其生命周期内的风险级别，按优先次序列出（见图三）。

Risk Assessment Matrix 风险评估矩阵					
Likelihood 可能性	Consequences 后果				
	Insignificant 不重要 (1)	Low 轻微 (2)	Moderate 普通 (3)	High 严重 (4)	Hazard 灾难 (5)
Rare 罕有 (1)	L	L	L	L	M
Unlikely 不大可能 (2)	L	L	M	M	M
Possible 可能 (3)	L	L	M	H	H
Likely 很可能 (4)	L	M	H	H	VH
Often 经常 (5)	L	M	H	VH	VH
Risk Rating 风险评级			Action Required 采取行动		
VH	Very High Risk 极高风险		Immediate corrective action 即时改正行动		
H	High Risk 高风险		Prioritized action required 优先采取行动		
M	Moderate Risk 中等风险		Planned action required 计划采取行动		
L	Low Risk 低风险		Managed by routine procedures 常规程序处理		

Figure 3: Risk Assessment Model 图三：风险评估模型





Group photo with certification auditor from Hong Kong Quality Assurance Agency and DSD colleagues from Sewage Treatment Divisions at To Kwa Wan Preliminary Treatment Works  
渠务署污水处理部人员与香港品质保证局认证人员于完成认证审核后，在土瓜湾基本污水处理厂合照

For those critical assets at risk, proper risk treatment plans were established to manage the relevant risk events. In addition, past performance and failure data were also retrieved and consolidated for failure causes analysis to derive the corresponding mitigation measures of the overall risk management plan.

This aforementioned review allows NPRs to re-visit holistically their physical assets in terms of the current condition, performance and risk levels in a systematic manner so that maintenance activities for critical assets can be prioritised sensibly. In addition, review on past performance and failure data could help to realise objectively the likelihood and impact of the occurrence of various risk events so that effective monitoring and control measures could be planned proactively.

## 2. Establishment of AM Database

Having identified the critical assets with moderate risk or above, NPRs took further to review the performance requirements, current asset condition, failure patterns, cause of failures, etc. Based on the historical corrective maintenance records, NPRs tried to correlate the relationship between potential failure events and their pre-failure symptoms.

Having consolidated all the pre-failure symptoms of these critical assets, NPR established a data collection mechanism to capture all the required information in CMMS for on-going monitoring the performance and trend-to-fail of critical assets. With this mechanism in place, potential failure can be minimized by rectification at pre-failure stages. These valuable leading performance indicators can be very helpful tools for prioritising maintenance effort in managing overall performance and risk of critical assets.

## 3. Establishment of AM Plan

The AM policy was established by DSD's senior management to elaborate the principles, approach and expectations of the AM system. Along with this policy, NPRs have established corresponding AM plan that covered the management strategies and action plans of the critical assets across their life cycle, from acquisition, utilization, maintenance, to disposal. To prepare for the plan, NPRs consolidated the useful asset life cycle information including demand forecast, asset current condition / performance, asset remaining service life, risk level, acquisition cost, utilization and maintenance cost, failure history, etc.

The following AM objectives were then determined based on the desired level of services with due consideration cost, risk and performance:

- i. Reduction of corrective maintenance man hours (Cost)
- ii. Meeting zero overflow incidents resulting from equipment breakdown (Performance)
- iii. Maintaining service availability of selected critical asset to the certain percentage as specified in AM Plan (Risk)

The AM plan also embraced life cycle cost management to communicate funding required to provide the required levels of service and provided an overview of future asset replacement requirements so that replacement alternatives and expenditure smoothing can be planned ahead.

为针对那些有潜在风险的关键资产，恰当的风险处理计划亦已建立，以应对相关危机事故。此外，资产的过往绩效和故障数据也透过检索和整合，以分析故障成因，从而制订整体风险管理计划的相应缓解措施。

上述的评审工作促使「委任厂房代表」对实物资产的现时状况、绩效和风险级别，再作全面的系统化检视，好让关键的保养工作得以优先处理。再者，评审过往绩效和故障数据，有助客观地了解各种危机事故出现的可能性和影响，从而积极计划有效的监察和调控措施。

## 2. 建立资产管理数据库

当找出具中等风险或以上的关键资产时，「委任厂房代表」会进一步评审其绩效要求、现时资产状况、故障模式、故障成因等。在参考历来维修保养的记录后，「委任厂房代表」会尝试把潜在故障事件与其故障前的微兆联系起来。

在整合这些关键资产故障前的微兆后，「委任厂房代表」会建立一个数据收集机制，经电脑化维修管理系统搜集一切所需资料，以便持续监察关键资产的绩效和故障趋势。设立了这个机制，便可在发生故障前纠正错误，将潜在故障事件减至最少。这些宝贵的绩效指标，有助定下维修保养工作的优先次序，以便管理关键资产的整体绩效和风险。

## 3. 建立资产管理计划

资产管理方针由渠务署高层管理人员订立，旨在详述资产管理的原则、方向和期望。与此同时，「委任厂房代表」亦建立了相应的资产管理计划，当中包含关键资产的管理策略和推行计划，涵盖从采购、运作、保养至弃置的整个生命周期。为筹备计划，「委任厂房代表」整合了资产生命周期可用的资料，包括预算需求、资产现时状况/绩效、资产余下服务年期、风险级别、采购成本、运作和保养费用、过往故障纪录等。

然后，根据所期望的服务水平，订下在成本、风险及绩效三方面的资产管理目标：

- i. 减少修正性维修保养的工作时数（成本）
- ii. 设备损坏导致污水溢出的事故数目减至零（绩效）
- iii. 按资产管理计划规定，把选定的关键资产的服务有效性维持在一定的百分比水平（风险）

资产管理计划亦包括生命周期的成本管理。除因应所需服务水平预算相应资金外，亦要为未来资产更替的需求作好全面准备，预早计划好更换选项和开支预算。



Ho Pong Street Sewage Pumping Station  
河傍街污水泵房



# New Version of ISO 14001 on Schedule for 2015

## 新版ISO 14001预期2015年面世

**Dr Nigel H. Croft**  
**Associate Technical Director, HKQAA**  
**Chairman, ISO Technical Subcommittee on Quality Systems (ISO/TC176/SC2)**  
**倪国夫博士**  
**香港品质保证局技术总监**  
**国际标准化组织质量体系技术委员会 (ISO/TC176/SC2) 主席**



Since it was first published in 1996, *ISO 14001:2004 Environmental management systems – Requirements with guidance for use* has been adopted on a global basis and there are now well over 250 000 certified users in 155 countries worldwide. The standard is currently undergoing its second revision by ISO's Technical Subcommittee TC207/SC1 to ensure that it remains relevant over the next two decades, by addressing challenges that include:

- Increasingly rigorous legislation
- Environmental concerns arising from pollution; excessive demands on resources; degradation of eco-systems and bio-diversity issues
- An increasing world population, compounded by greater expectations from society for transparent, responsible sustainable development
- Value-chain and life-cycle concepts

### The revision process

Work on the revision started in earnest in 2012, and one of the key inputs has been a report from the TC 207/SC 1 Study Group on "Future Challenges for Environmental Management Systems", which evaluated the potential implications of evolving stakeholder expectations and new developments in the field of environmental management since ISO 14001 was first published in 1996. In total, the Study Group tabled 25 recommendations for consideration in the new revision of ISO 14001, including the following:

- Emphasise that an organisation should retain the responsibility to align its ISO 14001 processes with its environmental and business priorities
- Strengthen the focus on subjects such as:
  - Transparency and accountability in environmental management issues and performance
  - Value chain influence and responsibility
- Express environmental management more clearly as contributing to sustainable development, one of the key pillars of social responsibility
- Broaden and clarify the concept of "Prevention of pollution"
- Strengthen performance evaluation as part of ISO 14001
- Emphasise the strategic considerations, benefits and opportunities of environmental management for organisations
- Strengthen (on a strategic level) the relationship between environmental management and the core business of an organisation, i.e. its products and services and the interaction with stakeholders (including clients and suppliers)
- Address life cycle thinking and the value chain perspectives more clearly in the identification and evaluation of environmental aspects related to products and services

The second Committee Draft of the revision has been circulated to the ISO Member Bodies and the ballot was approved in early 2014. Work is currently underway to address the comments received, and to prepare for publication of the Draft International Standard ("DIS"). This is currently scheduled for mid-2014.

《ISO 14001:2004 环境管理体系——要求及使用指南》自1996年出版以来，至今已获全球155个国家的机构采用，发出超过250,000张证书。现时，国际标准化组织 (ISO) 技术委员会 TC207/SC1 正密锣紧鼓地筹备 ISO 14001 的第二次修订，以应对未来二十年会出现的新挑战：

- 各地日趋严谨的法例法规
- 污染导致的环境问题；天然资源紧绌；生态系统及生物多样性受损
- 全球人口膨胀；大众对社会透明度、社会责任及可持续发展的期望日增
- 价值链及生命周期概念

### 修订过程

ISO 14001 的修订工作早于2012年正式展开，为此，TC207/SC1 的研究小组制作了一份名为《环境管理体系面临之挑战》的报告，分析自1996年ISO 14001 初版以来，关于环境管理有甚么新的发展，以及持份者有甚么新期望，并从中总结出25项新版ISO 14001 的修订建议，包括：

- 强调机构有责任将ISO 14001 融入其环保及业务上的决策
- 更加重视以下题目：
  - 对环境管理事项及表现的透明度和承担
  - 价值链的影响及相关责任
- 在可持续发展的课题上，环境管理项目应获得更具体的阐述
- 对「防止污染」作出更全面及明确的定义
- 加强表现评估的部分
- 强调环境管理为机构带来的策略考量、好处及机遇
- 深化环境管理与核心业务（如产品和服务、与顾客及供应商等持份者的互动）在策略层面上的关系
- 在识别及评估产品和服务对环境的影响时，须加入生命周期及价值链的思维

新版ISO 14001 的第二份委员草案已于2014年初通过ISO成员的投票，现时正根据收集到的意见，编写《国际标准草案》，预计于2014年中发表。



## Structure and content of ISO 14001:2015

Like its counterpart for Quality Management Systems (ISO 9001), ISO 14001:2015 will be based on the aligned “High level structure” and “common text” that was developed by ISO’s Joint Technical Coordination Group, and published in “Annex SL” of the ISO Directives in 2012. The aim is to promote greater harmonisation between ISO’s various management system standards, and this is expected to benefit those users who wish to address quality and environmental topics within a single, integrated system. The result is that approximately 30% of the new ISO 14001 will be virtually identical to the new ISO 9001 (for example, in common topics such as policy definition and deployment, resource management, document control, internal audits and management review), though each standard will include discipline-specific text that reflect the context in which a quality management system or an environmental management system is to be implemented.

The “High Level Clause Structure” to be used for ISO 14001 is as follows:

## ISO 14001:2015的章节结构与内容

跟新版的《ISO 9001 质量管理体系》标准一样，ISO 14001:2015 将会以 ISO 联合技术协调小组编写的「高阶架构」及「相同文本」方式编写，并作为 2012 年《ISO 指引》中的「附件 SL」出版，以便机构能透过实行一个综合管理体系，同时达到质量管理及环境管理等多个标准。因此，ISO 14001 和 ISO 9001 将会有约三成的相同内容（如政策定义与实施、资源管理、文件管制、内部审核、管理评审等共同题目），虽然两者均个别有反映其管理体系独特性的内容。

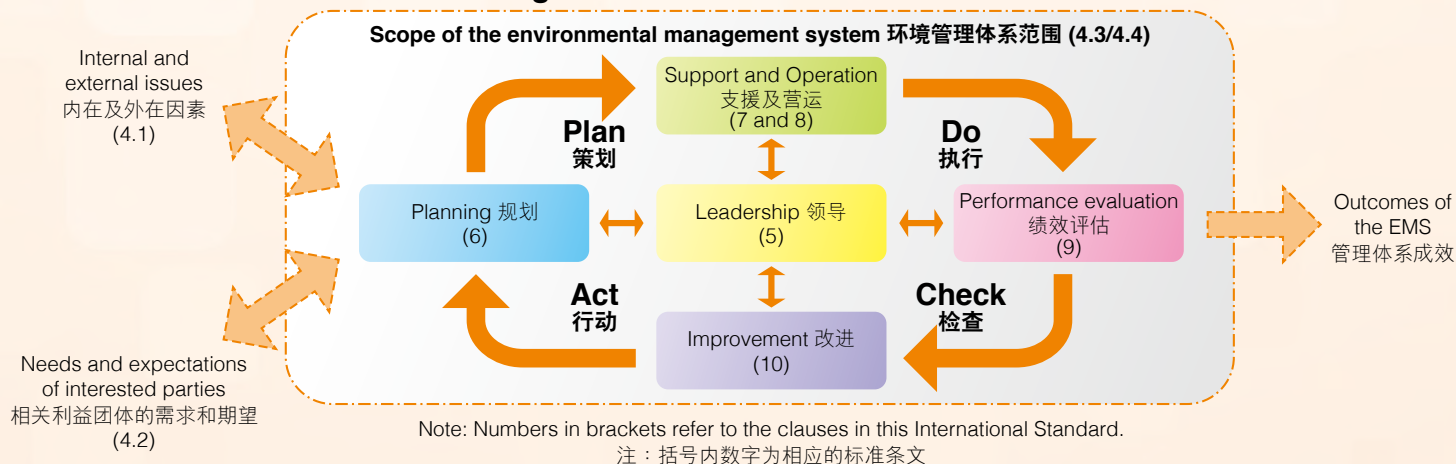
ISO 14001 的高阶架构详列如下：

<b>1. Scope</b>	<b>1. 范围</b>
<b>2. Normative references</b>	<b>2. 引用标准</b>
<b>3. Terms and definitions</b>	<b>3. 词汇和定义</b>
<b>4. Context of the organisation</b>	<b>4. 机构环境</b>
<ul style="list-style-type: none"> <li>Understanding the organisation and its context</li> <li>Needs and expectations of interested parties</li> <li>Determining the scope of the EMS</li> <li>Environmental Management System (This will now incorporate the need for the organisation to manage the processes needed for its EMS)</li> </ul>	<ul style="list-style-type: none"> <li>了解机构及其环境</li> <li>相关利益团体的需求和期望</li> <li>决定环境管理体系的范围</li> <li>环境管理体系（包括机构需要管理体系过程的原因）</li> </ul>
<b>5. Leadership</b>	<b>5. 领导</b>
<ul style="list-style-type: none"> <li>Leadership and commitment</li> <li>Environmental Policy</li> <li>Roles, responsibility and authority</li> </ul>	<ul style="list-style-type: none"> <li>领导与承担</li> <li>环境方针</li> <li>职能、职责与权限</li> </ul>
<b>6. Planning</b>	<b>6. 规划</b>
<ul style="list-style-type: none"> <li>Actions to address risks &amp; opportunities (This will include the identification of environmental aspects, any significant impacts and the organisation's legal compliance obligations)</li> <li>Environmental Objectives and plans to achieve them</li> </ul>	<ul style="list-style-type: none"> <li>应对风险和机会的措施（包括识别环境管理的范围、会导致的影响及法律法规要求等）</li> <li>目标和计划实行</li> </ul>
<b>7. Support</b>	<b>7. 支援</b>
<ul style="list-style-type: none"> <li>Resources</li> <li>Competence</li> <li>Awareness</li> <li>Communication (includes internal and external communication and reporting)</li> <li>Documented information</li> </ul>	<ul style="list-style-type: none"> <li>资源</li> <li>员工能力</li> <li>员工意识</li> <li>沟通（包括内部沟通、对外沟通及汇报等）</li> <li>文件记录</li> </ul>
<b>8. Operation</b>	<b>8. 营运</b>
<ul style="list-style-type: none"> <li>Operational planning and control</li> <li>Value chain control</li> <li>Emergency preparedness and response</li> </ul>	<ul style="list-style-type: none"> <li>营运规划与监控</li> <li>价值链的监控</li> <li>紧急情况的准备与应对</li> </ul>
<b>9. Performance evaluation</b>	<b>9. 绩效评估</b>
<ul style="list-style-type: none"> <li>Monitoring, measurement, analysis &amp; evaluation</li> <li>Internal audit</li> <li>Management review</li> </ul>	<ul style="list-style-type: none"> <li>监察、测量、分析与评估</li> <li>内部审核</li> <li>管理评审</li> </ul>
<b>10. Improvement</b>	<b>10. 改进</b>
<ul style="list-style-type: none"> <li>Non conformity and corrective action</li> <li>Continual Improvement</li> </ul>	<ul style="list-style-type: none"> <li>不符合项与纠正措施</li> <li>持续改进</li> </ul>

It can be seen that this structure follows a logical “Plan-Do-Check-Act” sequence, which is shown schematically in the following figure (taken from the Committee Draft for ISO 14001):

此架构依循「策划—执行—检查—行动」的模式，如下图所示（来源：ISO 14001 委员会草案）：

### Context of the organisation 机构环境





## The main changes

The Introduction to the Committee Draft of ISO 14001:2015 emphasises that ISO's portfolio of standards on environmental management are intended to provide organisations with knowledge, tools and techniques to build success over the long term and create new opportunities for sustainable development and growth. In today's society, it is important for an organisation to be able to reduce its direct operational footprint, and to influence the way its products and services are designed, manufactured, distributed, consumed and disposed by using a life-cycle perspective to ensure that environmental burdens are not inadvertently shifted elsewhere in the cycle. As social networking and other communication tools become ever more sophisticated, it is equally important that organisations engage with relevant interested parties and share environmental information.

It is important to emphasise that the final text of ISO 14001:2015 has not yet been agreed, but based on the work that has been carried out so far, the following key enhancements can be noted:

### • Context of the organisation

All of ISO's management system standards now begin with a requirement for the organisation to define the context in which it operates. In other words: what are the external and internal factors that can affect the organisation's ability to achieve its environmental objectives? External factors could include, for example, the local socio-economic conditions, ecosystem and legal framework, as well as the availability of resources and governmental infrastructure. Internal factors might include issues such as the technology available, organisational culture, and general educational levels of the workforce.

### • Strategic Planning

The need to integrate environmental management considerations into the organisation's overall strategic planning processes is emphasised.

### • Risks and opportunities

Risk relates to the effect of uncertainty on planned results. The concept of risk has always been present in ISO 14001, in the requirement for an organisation to identify the environmental aspects related to its operations, and to address the associated significant environmental impacts. Many organisations have chosen to address this using techniques such as Failure Mode and Effect Analysis, to assign priorities to the various environmental impacts based on the overall risk they represent. This is now more explicitly addressed, and actions to mitigate adverse risk or exploit beneficial opportunities (such as new technologies, novel use of raw materials etc) are integrated in the operational planning of the environmental management system.

### • Leadership

The clause related to top management has been enhanced, to recognise that effective leadership needs to be demonstrated at all levels within the organisation, starting from top management, but being deployed down to the first levels of line management.

### • Environmental Policy

The organisation is now required to include in its policy a commitment to the prevention of pollution and to support environmental protection specific to the context of the organisation, such as sustainable resource use, climate change mitigation and adaptation, and protection of biodiversity and ecosystems.

### • External communication and reporting

ISO 14001:2015 will emphasise the need communications to be truthful and not misleading; complete, accurate, transparent and reliable, and based on and consistent with the information generated within the environmental management.

### • Value chain planning and control

The new revision promotes the concept of "Lifecycle thinking" (but with no specific requirement to perform a formal life cycle assessment) to manage environmental aspects associated with procured goods and services, as well as the environmental impacts associated with product use and end-of-life treatment or disposal.

## Transition to ISO 14001:2015

The revision process for ISO 14001 is already well underway, and the new version is on schedule for publication late in 2015. In order to allow sufficient time for organisations that are currently certified to ISO 14001 to adapt to the new requirements, it is likely that a transition period of not less than two years (and, quite probably three years) will be defined by the International Accreditation Forum. This will be decided before the end of 2014.

## 重要修订内容

ISO 14001:2015 委员会草案的引言指出，ISO 环境管理标准系列的目的是为机构提供知识、工具和技术，以达到可持续发展的长远目标，并创造更多可持续发展的机会。在今日的社会，企业必须懂得降低营运直接产生的碳足迹，并且监控其产品和服务的生命周期，包括开发、生产、分销、耗用、弃置等过程，以免不自觉地将对环境的影响转移至其他地方；另外，由于社交网络及其他沟通平台日益发达，企业亦应争取不同利益团体的参与，以及与各界分享环保资讯。

现时 ISO 14001:2015 的内容仍在审议阶段，但暂时已知以下重要的修订内容：

### • 机构环境

现时所有 ISO 标准均要求机构先定义其营运的环境，换言之：有甚么内外因素会影响机构达到其环保目标？外在因素可包括社会经济环境、生态系统情况、法律体制、天然资源供应、政府基建现状等，而内在因素则可包括科技水平、企业文化、员工教育程度等。

### • 策略性规划

强调机构须在整体策略性规划中纳入环境管理的考量。

### • 风险及机会

风险即影响目标实现的不确定因素。事实上，ISO 14001 一直都有包含风险的概念，即要求机构识别其营运对环境有所影响之处，以及如何处理一些重大的影响。过去不少机构选择使用「失效模式及效应分析」，根据风险程度分配不同影响的处理次序。新版 ISO 14001 则要求机构更明确地处理，在环境管理体系的营运规划中，加入减低重大风险和寻求更多良好机会（如新科技、使用原材料的新颖方法等）的措施。

### • 领导

补充了有关最高管理层的条文，确保他们的领导工作遍及机构各阶层，并能伸延至最前线的部门。

### • 环境方针

须在机构方针中承诺防止污染，以及在营运涉及的范围中支持环保，例如使用可持续的资源、采取气候变化的纾缓及适应措施、保护生物多样性和生态系统等。

### • 对外沟通及汇报

强调沟通内容必须诚实并不含误导成分、完整、准确、具透明度、可信，并与环境管理的数据互相符合。

### • 价值链规划与监控

提倡以「生命周期思维」的概念，管理所采用产品和服务对环境的影响，以及处理和弃置产品时的影响（不过并不要求进行正式的生命周期评估）。

## ISO 14001:2015 的过渡期

ISO 14001 的改版工作进展顺利，相信新版本将如期于 2015 年下旬面世。而为了给予现有 ISO 14001 用户充足的时间，作好准备迎接新要求，预料国际认可论坛（IAF）会给新修订版订立最少两年（亦很可能是三年）的过渡期，详情会在 2014 年年底前落实。



# TL 9000 Introduces New Security Requirements for ICT

## TL 9000为资讯及通讯科技引入新的安全要求



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**王伟林先生**  
**香港品质保证局评审经理**

TL 9000 is a quality management practice designed by the QuEST Forum in 1998. The Forum was formed in 1998 to pursue the goal of global information and communications technology (ICT) quality and industry-wide performance excellence. The members of QuEST Forum include major ICT service providers and operators as well as major ICT equipment suppliers. TL 9000 was created to focus on supply chain directives throughout the international ICT industry. It is a specialised form of the generic ISO 9001 designed to meet the needs of the ICT sector, extending from service providers and operators to ICT equipment manufacturers, and from component suppliers to services contractors and subcontractors.

TL 9000 requirements are defined in two documents:

- **TL 9000 Requirements Handbook, which includes the full text of ISO 9001:2008**
- **TL 9000 Measurements Handbook**

The R5.5 Requirements Handbook, which replaces the R5.0 handbook, was published on December 31, 2013. This is the latest revision of the TL 9000 standard published by the QuEST Forum and now includes the new ISO 9001:2008 language. The TL 9000 Measurements Handbook remains unchanged at Release 5.0.

The following table summarises the number and types of changes made in the new publication:

Type	Adders (additional requirements to ISO 9001)	Notes (guidance/ explanations)
New/changed	13	8
Deleted	2	3
No real change	79	37
<b>TOTAL</b>	<b>92</b>	<b>45</b>

As reflected in the table, there are not many changes. However, some may have a significant effect on, and far reaching impacts for, an organisation's TL 9000 Quality Management System. The most significant one is the brand new adder – 7.1.C.3 Product Security. According to the new requirement (7.1.C.3 in the R5.5 requirements handbook), a TL 9000 organisation “shall establish and maintain methods for the identification and analysis of security risks and vulnerabilities for the product, throughout its life cycle”. Therefore, a consistent mechanism, process or procedure has to be established to identify and analyse the risks and vulnerabilities the products or services may face throughout their life cycle. This will then be consistent with an existing

TL 9000由电讯业优质供应商领导人论坛 (QuEST Forum) 于1998年开发，为资讯及通讯科技的国际供应链，订立质量管理要求。QuEST Forum也在同一年成立，成员包括全球主要的资讯及通讯科技服务供应商、营运商和设备供应商，旨在推动业界取得卓越表现，致力追求和提升全球资讯及通讯科技的水平。TL 9000以ISO 9001为蓝本，制订了切合行业特性的要求；对象由服务供应商和营运商，扩展至设备生厂商、零部件供应商，以及服务承包商和分包商。

以下两份文件详述了TL 9000的要求：

- **《TL 9000要求手册》，内容包括ISO 9001:2008全文**
- **《TL 9000测量手册》**

TL 9000要求手册5.5版已于2013年12月31日推出，取代了旧有的5.0版。该手册包含ISO 9001:2008的最新词汇，是QuEST Forum针对TL 9000标准推出的最新修订版。而较早时出版的TL 9000测量手册5.0版，则维持不变。

以下图表概括了TL 9000要求手册5.5版和5.0版的变更：

种类	新修订 (ISO 9001 外的附加要求)	附录 (指引/说明)
全新/ 改变	13	8
删除	2	3
没有太大改变	79	37
<b>整体</b>	<b>92</b>	<b>45</b>





requirement - 7.1.C.1 Life Cycle Model - which requires a TL 9000 organisation to “establish and maintain an integrated set of methods that covers the life cycle of its products”. It also requires that the methods have to contain the processes, activities and tasks involved in the product life cycle, including the concept, definition, development, introduction, production, operation, maintenance and disposal of products. These two requirements together clarify that security risks and vulnerabilities have to be identified and analysed in the processes, activities and tasks involved throughout the whole product life cycle.

The 7.1.C.3 requirement requires that “the results of the risk analysis shall be used to support secure network operation by prevention or mitigation of security vulnerabilities in the product design and operational controls.” So a TL 9000 organisation has to apply suitable security risk treatment options to prevent or control the security vulnerabilities identified in the product design and operational controls. The note - 7.1.C.3-NOTE 2 - then elaborates, by referring to ISO 27001: an operational control “is a means of managing risk and it includes policies, procedures, guidelines, practices or organisational structures which can be administrative, technical, management, or legal in nature”. The note also gives some examples of the operational controls. This means that an organisation does not only have to have operational controls but also has to control the security risks identified by them.

Lastly, adder 7.1.C.3 requires that “the continuing effectiveness of the design and operational controls shall be assessed throughout the product life cycle”. An organisation has to select and use appropriate security measurements to demonstrate that its design and operational controls are effective in terms of preventing and control the security risks.

The newly introduced TL 9000 requirement for product security may have different levels of impact on TL 9000 organisations’ quality management systems depending on the maturity level of the security risk management of an organisation. It will certainly improve the awareness and performance of organisations in the ICT supply chain so that they can better protect the interests of customers, end users and interested parties in terms of information security in this “big data” world, in which ICT technology is ever-evolving and ever more critical.



虽然这图表显示改变的地方不多，不过某些变动确实会对机构的TL 9000质量管理体系带来重要和深远影响。当中最显著的改变，是在要求手册5.5版内新加了7.1.C.3产品安全要求。根据这全新要求，机构「于整个产品生命周期中，应建立和维持对产品安全风险和漏洞的辨识和分析方案」，并须先定下贯彻的机制、过程或程序，以辨识和分析产品或服务于生命周期中的风险和漏洞。该机制亦应与现时7.1.C.1要求的生命周期模型兼容；换言之，机构须「建立和维持一套综合方案以覆盖产品的生命周期」，而这方案亦要包含产品生命周期由概念、定义、开发、引进、生产、运作、维护至丢弃处理的相关过程、活动和工作。这两项要求阐明，由产品概念至丢弃处理的整个产品生命周期所涉及的过程、活动和工作，必须辨识和分析产品的安全风险和漏洞。

此外，7.1.C.3亦要求「风险分析结果应该用以支援网络的安全运作，预防或减轻产品设计和营运管制的安全漏洞。」因此，机构必须应用适当的安全风险处理措施，以预防或控制这些漏洞。7.1.C.3的附录2，便根据ISO 27001标准解释营运管制「是管理风险的方法，包括行政、技术、管理或法律层面的各种政策、程序、指引、做法或组织架构」，并列举了一些营运管制的例子。总言之，机构不但要具备营运管制能力，亦必须辨识和掌控其安全风险。

最后，7.1.C.3要求机构必须「于整个产品生命周期里，评审其设计和营运管制的持续有效性」，并应选择和运用适当的安全措施，以展示其设计和营运管制能有效地防止和控制安全风险。

TL 9000新加入的产品安全要求，会因应机构安全风险管理的成熟程度，对其质量管理体系带来不同程度的影响。尽管如此，新要求无疑有助资讯及通讯科技供应链上的机构，提高警觉和改善表现，让它们在今天日趋重要、瞬息万变的「大数据世界」里，更好地保障顾客、用户和利益相关者的资讯安全。





# Management Seminar for Owners and Executives by the Renowned W. Edwards Deming Institute 经营者及行政人员应用「戴明管理法」研讨会

HKQAA held a Management Guru Seminar Series - The Deming Management Method for Owners and Executives - from 12 to 14 June. The guest speakers from the W. Edwards Deming Institute were Mr Kelly Allan, the lead facilitator and Deming Institute advisory board member, and Mr John Hunter, senior facilitator.

The event focused on providing hands-on learning for senior executives to enable them to recognise and experience the power of the Deming Management Method and understand what it might mean for them and their organisations. A number of real-world case examples were presented in order to expose senior leaders to a variety of different ways to implement this management principal, developed by the eminent scholar known as the Father of Quality. The speakers addressed various issues in the seminar including:

- Four Key components of Deming-based leadership
- Management's Five Deadly Diseases
- Integrated knowledge of Productivity, Competitiveness and Learning that lead to superior profits
- Deming's Chain Reaction
- Leadership that strengthens the organisation, reduces turnover, and attracts the right suppliers, customers and employees
- Power of PLAN-DO-STUDY-ACT

The seminar received good feedback from participants. They commented that the seminar "provided inspiration, particularly to those who have the authority to define the direction of an organisation and implement a positive system change"; and that "it's a very effective, thought provoking presentation on the challenges we are facing".

Participants proactively formed the first study group dedicated to the Deming Institute in Hong Kong to further study and promote the Deming Management Method in the business community.



本局于6月12至14日举行「管理达人研讨会系列：经营者及行政人员应用『戴明管理法』」研讨会，并邀请了来自「戴明学院」的知名讲者主讲，包括学院首席导师及顾问委员 Mr Kelly Allan，以及高级导师 Mr John Hunter。



「戴明管理法」由被誉为「质量管理之父」的戴明博士创立，此课程旨在为管理人员提供「戴明管理法」的实战培训，透过企业实践个案，学习执行「戴明管理法」的效益和各种方法。研讨会上，讲者向学员分享了多个管理题目：

- 戴明管理学的四大基石
- 五大管理绝症
- 带来丰厚利润的生产力、竞争力和知识
- 戴明「连锁反应」理论
- 透过领导力增强公司实力、减低流失，以及吸引适合的供应商、顾客和员工
- 「策划-执行-调查-行动」原则的强大效益



是次研讨会获得学员甚佳的评价，认为「对需主管机构系统优化的管理者甚具启发性」、「有效刺激学员思考，有助解决公司遇到的难题」。



此外，完成是次研讨会后，所有学员更自发地组成了本港首个「戴明学院」的学习小组，继续于这交流网络中学习及推广「戴明管理法」。

## Media Sponsors 媒体赞助



## Supporting Organisations 支持机构





## Quality Building Award (QBA) 2014 建筑业盛事「2014年度优质建筑大奖」



HKQAA and eight professional organisations from the Hong Kong construction industry jointly organised the Quality Building Award 2014, this year on the theme of "Collaboration for Quality". The QBA is a biennial award which gives public recognition to buildings of outstanding quality that have demonstrated excellent teamwork. It aims to promote a collective commitment by the building industry to maintaining the highest standards of professionalism and competitiveness.

QBA 2014 received overwhelming support and a large number of nominations from each industry. After eighteen months of planning, assessments and judging processes, the results were announced at an award presentation ceremony held on 6 June. The Hon. Mr Leung Chun Ying, GBM, GBS, JP, Chief Executive of HKSAR, was Guest of Honour at the ceremony. Ir C. S. Ho, Deputy Chairman of HKQAA, was also present at the event on behalf of the Agency.

本局联同本地八大建筑专业学会及机构，举办「2014年度优质建筑大奖」。大奖旨在认同优质的建筑项目，并表扬能充分发挥团队精神的项目队伍，藉此加强业界竞争力，建立及提升业界形象。

今届优质建筑大奖的主题是「携手创建优质」，经过十八个月的筹备、评审及甄选过程，颁奖典礼及晚宴已于6月6日举行，并邀请了香港特区行政长官梁振英先生、大紫荆勋贤，GBS，太平绅士，担任主礼嘉宾。本局副主席何志诚工程师亦代表本局出席是次典礼。

## Chairman Visits HKQAA Shanghai Office 主席到访上海办公室

HKQAA's Chairman, Ir Dr Hon. Lo Wai Kwok; Deputy Chairman, Ir C. S. Ho; and Governing Council member, Mr Ronald Y. F. Lau, visited our Shanghai office on 30 June. During the visit, they learned more about the business of the Agency in the Yangtze River Delta and talked with staff about the future direction for the Agency.

Since entering the mainland China, HKQAA has been dedicated to assisting enterprises in the region to develop good management practices by introducing visionary management concepts, sharing knowledge and transferring management technology. With its extensive knowledge and experience in the industry, our mainland team will continue to provide clients with professional conformity assessment services.



本局主席卢伟国议员博士工程师、副主席何志诚工程师及董事局成员刘耀辉先生，于6月30日到访公司的上海办公室，了解本局在长三角地区的业务情况，并向员工阐述对本局国内业务发展的期望。

本局多年来一直致力为内地企业引入前瞻性的管理理念，透过知识传递和技术转移，协助企业树立良好的管理规范。相信本局具备丰富行业知识和经验的内地团队，定当努力不懈，继续为业界提供专业的合格评定服务。



## International 国际

### New ISO 45001 standard for Health & Safety Management begins to take shape

ISO's Project Committee PC 283 has already held two meetings to work on the ISO 45001 standard, and the first Committee Draft is scheduled for distribution to ISO member bodies in July 2014.

ISO 45001, scheduled for publication in 2016, is expected to replace the current OHSAS 18001, which is widely used for certification, but is not an official ISO publication. ISO 45001 will also follow the High Level Clause Structure and contain many requirements that are identical to those contained in the future ISO 9001 and ISO 14001 standards, thereby further facilitating the implementation of integrated systems for those organisations that choose to do so.

### 健康及安全新标准ISO 45001 草案即将完成

国际标准化组织(ISO)工作小组PC 283已为ISO 45001的制订工作举行两次会议，并计划于2014年7月向各ISO成员发布首份委员会草案。

ISO 45001预期于2016年出版，并会取代现时十分普及，但并非正式ISO标准的OHSAS 18001。ISO 45001将会以「高阶架构」方式编写，而当中不少要求亦会与新修订版的ISO 9001和ISO 14001标准相同，让机构能更容易实行综合管理体系。

## 迎新天地 Welcome on Board

### New Certified Clients 新认证客户

February to April 2014  
2014年2月至4月

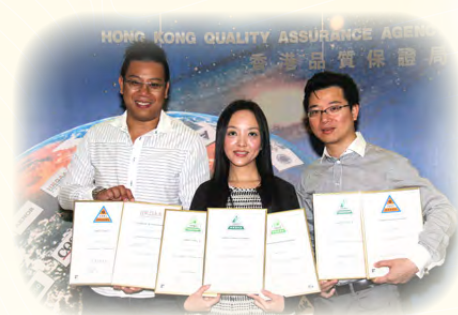
## Memorable Moments 纪念一刻

Hong Kong Quality Assurance Agency (HKQAA) has been helping industrial and commercial bodies to develop effective management systems to achieve organisational and business goals since 1989.

From February to April 2014, we have been pleased to welcome 17 organisations to our community. Among them, they have obtained 20 certificates of ISO 9001, ISO 14001, OHSAS 18001, ISO 20000, ISO 22000, ISO 50001, BFA MS, QSPSC, SA8000 and WSMS-FINE-2013. We believe the new members will contribute to the overall success of the brand that adds values to stakeholders.

香港品质保证局自1989年成立以来，致力协助工商界实施管理体系，有效地达至机构和营商目标。























由2014年2月至4月期间，香港品质保证局共颁发20张证书，包括ISO 9001、ISO 14001、OHSAS 18001、ISO 20000、ISO 22000、ISO 50001、BFA MS、QSPSC、SA8000、WSMS-FINE-2013。在此谨祝贺17家机构加入获认证的行列。本局深信，新成员的加入将可为我们的品牌和持份者带来更大的裨益。





## Mainland China 中国内地

Aug to Nov 2014 2014年8月至11月


Course Title 课程名称	Duration (Day) 课程长度 (天)	Fee (per head) RMB 收费 (每人) 人民币	Course Code & Date 课程编号及日期			
			Aug 八月	Sep 九月	Oct 十月	Nov 十一月
Quality 质量						
ISO 9001:2008 Quality Management Systems - Understanding & Application ISO 9001:2008 质量管理体系－理解与应用	 1	RMB 600	VM1P/GZ-08A GZ 27 VM1P/SH-08A SH 20	VM1P/SH-09A SH 10	VM1P/GZ-10A GZ 15	VM1P/SH-11A SH 05
ISO 9001:2008 Quality Management Systems - Internal QMS Auditor Training ISO 9001:2008 质量管理体系－内部质量管理体系审核员培训	 2	RMB 1,200	VM3P/GZ-08A GZ 28-29 VM3P/SH-08A SH 21-22	VM3P/SH-09A SH 11-12	VM3P/GZ-10A GZ 16-17	VM3P/SH-11A SH 06-07
The Must-know Essentials for Quality System Management Representative 质量管理体系－管理者代表的重要须知	 1	RMB 980		MT23P/GZ-09A GZ 10		
ISO 9001:2008 Quality Management Systems Documentation Training ISO 9001:2008 质量管理体系文件课程	 1	RMB 780			QMS4P/GZ-10A SH 06	
Environment 环境						
ISO 14001:2004 Environmental Management Systems – Understanding & Application ISO 14001:2004 环境管理体系－理解与应用	 1	RMB 600	EMS2P/GZ-09A GZ 24 EMS2P/SH-08A SH 20	EMS2P/SH-09A SH 17		EMS2P/GZ-11A GZ 10 EMS2P/SH-11A SH 12
ISO 14001:2004 Environmental Management Systems – Internal EMS Auditor Training ISO 14001:2004 环境管理体系－内部环境管理体系审核员培训	 2	RMB 1,200	EMS3P/GZ-09A GZ 25-26 EMS3P/SH-09A SH 18-19			EMS3P/GZ-11A GZ 11-12 EMS3P/SH-11A SH 13-14
IECQ HSPM QC080000 - Internal Auditor Training IECQ HSPM QC080000 - 内部审核员培训	 2	RMB 1,500	IE01P/SH-08A SH 07-08	IE01P/SH-09A GZ 04-05		
Occupational Health and Safety 职业健康和安全						
OHSAS 18001:2007 Occupational Health and Safety Management Systems – Understanding & Application OHSAS 18001:2007 职业健康和安全管理体系－理解与应用	 1	RMB 600	OHS8P/GZ-08A GZ 28 OHS8P/SH-08A SH 20		OHS8P/SH-10A SH 08	OHS8P/GZ-11A GZ 18 OHS8P/SH-11A SH 17
OHSAS 18001:2007 Occupational Health and Safety Management Systems – Internal OHS Auditor Training OHSAS 18001:2007 职业健康和安全管理体系－内部职业健康和安全管理体系审核员培训	 2	RMB 1,200	OHS9P/GZ-08A GZ 29-30 OHS9P/SH-08A SH 21-22		OHS9P/SH-10A SH 09-10	OHS9P/GZ-11A GZ 19-20 OHS9P/SH-11A SH 18-19
Social Accountability 社会责任						
SA8000:2008 Social Accountability Management Systems - Internal Auditor Training SA8000:2008 社会责任管理体系－内部审核员培训	 2	RMB 1,800		SA01P/SH-09A SH 03-04	SA01P/GZ-10A GZ 23-24 SA01P/SH-10A SH 15-16	
An in-depth Understanding of ISO26000 – What Does Social Responsibility Mean to Your Organization? 深入剖析ISO26000－社会责任对机构的意义	 1	RMB 2,500	SP03P/GZ-08A GZ 14	SP03P/GZ-09A GZ 09		
BSCI (Business Social Compliance Initiative) Understanding Training BSCI 倡议商界遵守社会责任之条文讲解	 1	RMB 780		BS02P/SH-09A SH 29	BS02P/GZ-10A GZ 29	
Management Tools and Skills 管理工具和技能						
The 5 Core Tools - APQP/PPAP/MSA/FMEA/SPC 五大核心工具 (APQP/PPAP/MSA/FMEA/SPC)	 5	RMB 4,800				MS01P/GZ-11A GZ 24-28
Establishing Safety Culture in Your Enterprise 企业安全文化建设	 2	RMB 3,500		GM01P/GZ-09A GZ 29-30		
Telecommunications and Information Service 电讯和资讯服务						
Understanding the Essence of TL 9000 Requirements Handbook R5.5 TL 9000 R5.5 质量管理体系要求手册改版精要	 1	RMB 1,300	TL03P/GZ-08A GZ 08	TL03P/GZ-09A GZ 12 TL03P/SH-09A SH 16	TL03P/SH-10A SH 21	TL03P/SH-11A SH 25
Understanding the Essence of TL 9000 Measurements Handbook R5.0 TL 9000 R5.0 质量管理体系测量手册改版精要	 1	RMB 1,300		TL05P/SH-09A SH 23		TL05P/SH-11A SH 24
TL 9000 R5.5/R5.0 Quality Management Systems - Internal Auditor Training TL 9000 R5.5/R5.0 质量管理体系－内部审核员培训	 3	RMB 3,800	TL04P/SH-08A SH 13-15	TL04P/SH-09A SH 24-26	TL04P/GZ-10A GZ 20-22 TL04P/SH-10A SH 22-24	TL04P/SH-11A SH 26-28
TL 9000 R5.0/R5.0 Quality Management Systems - Auditing TL 9000 R5.0/R5.0 质量管理体系审核课程 (QuEST 论坛认可课程)	 3	RMB 9,600				TL02P/GZ-11A GZ 05-07
Environmental, Health and Safety Management 环境、职业健康安全管理						
Practical Occupational Health and Safety Management 职业健康安全实务	 2	RMB 1,800			OH13P/GZ-10A GZ 13-14	
On-site First Aid Course 企业EHS现场急救课程	 1	RMB 900	EH09P/GZ-08A GZ 22		EH09P/GZ-10A GZ 21	
Integrated Management Systems 综合管理系列课程						
Integrated Management Systems (ISO 9001 / ISO 14001 / OHSAS 18001) - Internal Auditor Training 综合管理体系IMS (ISO9001/ISO14001/OHSAS18001) 内审员培训	 4	RMB 3,500			IMS4P/GZ-10A GZ 07-10	
Identification of EHS Factors and Risk Assessment EHS因素识别与风险评价	 2	RMB 1,800			EH01P/GZ-10A GZ 09-10	

For registration and enquiry  
报名及查询

Hong Kong Office 香港办事处 • Tel 电话: (852) 2202 9111 • Email 电邮: training@hkqaa.org




































HKQAA Certification (Shanghai) Ltd. 标准认证服务(上海)有限公司 • Tel 电话: (86 21) 6876 9911

HKQAA Certification (Shanghai) Ltd. Guangzhou Branch 标准认证服务(上海)有限公司广州分公司 • Tel 电话: (86 20) 8383 3777

 Conducted in Cantonese 以广东话授课	 Conducted in English 以英语授课	 Conducted in Putonghua 以普通话授课	 Guangzhou 广州	 Shanghai 上海	 Macau 澳门
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For training course details and online registration, please visit HKQAA website 详细课程资料及网上报名, 请浏览香港品质保证局网页  
<http://www.hkqaa.org>







Course Title 课程名称	Duration (Day) 课程长度 (天)	Fee (per head) HKD 收费 (每人) 港币	Course Code & Date 课程编号及日期			
			Aug 八月	Sep 九月	Oct 十月	Nov 十一月
Quality and Integrated Management Systems 质量和综合管理						
ISO 9001:2008 Quality Management Systems - Introduction ISO 9001:2008 质量管理体系 — 入门	 9:00am-12:00 noon Half-day	HKD 200		QMS1C/HK-09A 01		QMS1C/HK-11A 03
ISO 9001:2008 Quality Management Systems - Understanding & Application ISO 9001:2008 质量管理体系 — 理解与应用	 1	HKD 1,500	VM1C/HK-08A 04	VM1C/HK-09A 03	VM1C/HK-10A 06	VM1C/HK-11A 07
ISO 9001:2008 Quality Management Systems - Internal QMS Auditor Training ISO 9001:2008 质量管理体系 — 内部审核员培训	 2	HKD 3,200	VM3C/HK-08A 14-15	VM3C/HK-09A 15-16	VM3C/HK-10A 30-31	VM3C/HK-11A 13-14
ISO 9001:2008 Quality Management Systems Documentation ISO 9001:2008 质量管理体系文件	 1	HKD 1,600/ HKD 1,500*			QMS4C/HK-10A 08	
The Must-know Essentials for Quality System Management Representative 质量管理体系 — 管理者代表重要须知	 1	HKD 1,600/ HKD 1,500*	MT23C/HK-08A 06		MT23C/HK-10A 22	
ISO 9001:2008 Quality Management Systems - Advanced Internal Auditing Techniques ISO 9001:2008 质量管理体系 — 进阶内部审核技巧	 2	HKD 3,500/ HKD 3,300*	QMS5C/HK-08A 11-12			
Integrated Management Systems Set Up & Audit Approach 综合管理体系 — 建立与审核方法	 2	HKD 3,500/ HKD 3,300*	IMS2C/HK-08A 25-26			
ISO 9001:2008 Quality Management Systems - Auditor/Lead Auditor Training Course ISO 9001:2008 质量管理体系 — 主任审核员证书培训课程	 5	HKD 11,000/ HKD 10,500*			QMS/IRCA/10 13-17	
Environmental Conservation 环境保育						
ISO 14001:2004 Environmental Management Systems - Understanding & Application ISO 14001:2004 环境管理体系 — 理解与应用	 1	HKD 1,600/ HKD 1,500*		EMS2C/HK-09A 04		EMS2C/HK-11A 04
ISO 14001:2004 Environmental Management Systems - Internal EMS Auditor Training ISO 14001:2004 环境管理体系 — 内部环境管理体系审核员培训	 2	HKD 3,200/ HKD 3,000*	EMS3C/HK-08A 20-21		EMS3C/HK-10A 20-21	
ISO 14001:2004 Environmental Management Systems - Implementation and Documentation ISO 14001:2004 环境管理体系 — 实施及文件指引	 1	HKD 1,600/ HKD 1,500*		EMS8C/HK-09A 29		
ISO 14001:2004 Environmental Management Systems Auditor / Lead Auditor Training ISO 14001:2004 环境管理体系 — 主任审核员证书培训课程	 5	HKD 11,000/ HKD 10,500*				EM01E/HK-11A 24-28
ISO 50001:2011 Energy Management Systems - Internal Auditor Training ISO 50001:2011 能源管理体系 — 内部审核员培训	 2	HKD 3,500/ HKD 3,300*			EM08C/HK-10A 23-24	
GreenHouse Gas Verifier Training 温室气体验证员	 2	HKD 3,500/ HKD 3,300*			EM09C/HK-10A 27-28	
Occupational Health and Safety Management 职业健康和安全						
OHSAS 18001:2007 Occupational Health and Safety Management Systems - Understanding & Application OHSAS 18001:2007 职业健康和安全管理体系 — 理解与应用	 1	HKD 1,600/ HKD 1,500*	OHS8C/HK-08A 18			OHS8C/HK-11A 06
OHSAS 18001:2007 Occupational Health and Safety Management Systems - Internal OHS Auditor Training OHSAS 18001:2007 职业健康和安全管理体系 — 内部审核员培训	 2	HKD 3,200/ HKD 3,000*		OHS9C/HK-09A 18-19		OHS9C/HK-09A 24-25
OHSAS 18001 Occupational Health and Safety Management Systems Auditor / Lead Auditor Training Course OHSAS 18001:2007 职业健康和安全管理体系 — 主任审核员证书培训课程	 5	HKD 11,000/ HKD 10,500*				OH06E/HK-11A 17-21
Hygiene, Food Safety & Wine Storage 卫生、食品安全及酒贮存						
Implementing HACCP for Food Businesses Programme 实践食物安全重点控制课程	 2	HKD 3,500/ HKD 3,200*	HA10C/HK-08A 28-29			
ISO 22000:2005 Food Safety Management Systems - Understanding and Application ISO 22000:2005 食品安全管理体系 — 理解与应用	 1	HKD 1,600/ HKD 1,500*		HA5C/HK-09A 12		
ISO 22000:2005 Food Safety Management Systems - Internal FSMS Auditor Training ISO 22000:2005 食品安全管理体系 — 内部审核员课程	 2	HKD 3,500/ HKD 3,300*			HA7C/HK-10A 21-22	
ISO 22000:2005 Food Safety Management Systems Auditor/Lead Auditor Course ISO 22000:2005 食品安全管理体系 — 主任审核员证书培训课程	 5	HKD 11,000/ HKD 10,500*			FSMS/IRCA/10 06-10	
Application of 7S to Food Manufacturing and Catering 七常法应用于食品的制造和餐饮服务	 1	HKD 1,600	GP06C/HK-08A 20			
Foundation of HKQAA Wine Storage Management Systems Specifications 建立优良存酒设备 — 基础	 2:00pm-6:00pm Half-day	HKD 900/ HKD 820*		QM04C/HK-09A 01		QM04C/HK-11A 03
Management Tools, Skill for Improvement 管理工具和技巧						
Implementation of HKQAA 5S in the Workplace Operation 实施HKQAA 5S在工作间的营运	 1	HKD 1,600	GP03C/HK-08A 05			
Mediation: A Win-Win Approach to Settle Labour Disputes 调解劳工纠纷达至双赢	 1	HKD 1,900		EW50C/HK-09A 11		
Dancing with the Media 与传媒共舞	 1	HKD 2,400/ HKD 1,900*	EW47C/HK-08A 27			
Get New Customers Through Low-Cost Search Engine Marketing 妙用搜索引擎开拓新客源	 1	HKD 2,100/ HKD 1,900*		MT66C/HK-09A 05		
管理者必备的风范	 2:30pm-5:30pm Half-day	HKD 1,500				S173C/HK-11A 12
Business Continuity Management, Risk and Crises Management 营运持续管理体系、风险及危机管理						
ISO 22301 Business Continuity Management Systems - Understanding & Application ISO 22301 营运持续管理体系 — 理解与应用	 1	HKD 1,600		RM01C/HK-09A 30		
ISO 22301 Business Continuity Management Systems - Internal Auditor Training ISO 22301 营运持续管理体系 — 内部审核员课程	 2	HKD 3,700/ HKD 3,500*			RM02C/HK-10A 30-31	
Business Continuity Planning and Management 营运持续计划及管理	 3	HKD 6,000/ HKD 5,800*	RM03C/HK-08A 13, 15 & 18			
Business Continuity Management System (BCMS) Auditor / Lead Auditor Conversion Training Course 营运持续管理体系 — 主任审核员转证培训课程	 3	HKD 9,500/ HKD 9,000*		RM08C/HK-09A 17-19		
Psychological Support for Crises Situations 应对灾难情绪支援	 1	HKD 2,100/ HKD 1,900*			RM05C/HK-10A 15	
Strategic Crises Management Workshop 策略危机管理工作坊	 1	HKD 4,000/ HKD 3,600*		RM06C/HK-09A 23		
Media Management in Crisis Communications 危机中的传媒管理	 1	HKD 2,400/ HKD 1,900*				RM07C/HK-11A 17



## Hong Kong 香港

Aug to Nov 2014 2014年8月至11月

Course Title 课程名称	Duration (Day) 课程长度 (天)	Fee (per head) HKD 收费 (每人) 港币	Course Code & Date 课程编号及日期			
			Aug 八月	Sep 九月	Oct 十月	Nov 十一月
Customer Service: From Good To Great 顾客服务：迈向优越						
ISO 10002:2004 Customer Satisfaction - Guidelines for Complaints Handling - Understanding & Application ISO 10002:2004 客户满意度 — 投诉处理指引 — 理解与应用	 1	HKD 1,600/ HKD 1,500*		MT14C/HK-09A 11		
Effective Servicing & Selling Skills On Phone 优质电话营销及顾客服务	 1	HKD 1,900	EW51C/HK-08A 08			
Corporate Social Responsibility 企业社会责任						
How to Prepare Corporate Sustainability Report? 如何撰写企业持续发展报告	 1	HKD 1,600				SR01C/HK-11A 10
Telecommunications, Information Security and Management 电信、资讯保安与管理						
ISO/IEC20000 IT Service Management Auditor Course ISO/IEC20000 信息技术服务管理审核员培训	 2	HKD 6,200/ HKD 5,800*	IS03C/HK-08A 11-12			
ISO 27001:2013 Information Security Management Systems - Understanding & Application ISO 27001:2013 信息安全管理体系 — 理解与应用	 1	HKD 1,600/ HKD 1,500*		ISE3C/HK-09A 22		
ISO 27001:2013 Information Security Management Systems - Internal Auditor Training ISO 27001:2013 信息安全管理体系 — 内部审核员课程	 2	HKD 3,200/ HKD 3,000*			ISE7C/HK-10A 23-24	
Implementation of ISO 27001:2013 Information Security Management Systems 实践 ISO 27001 信息安全管理体系	 3	HKD 5,100/ HKD 4,800*		ISE5C/HK-09A 02-04		

Remarks  
备注

\* Please refer the early bird payment deadline to our website 请于本网页参看优先报名之付款详情  
The course schedule is subject to change. Please refer to the most updated schedule in our web-site 课程内容或会略为改动，最新详情请参看本网页  
Organisations contracted HKQAA as their management system certification service providers have no obligation to enroll in any HKQAA training services  
聘用本局管理体系认证服务的机构并无义务参加本局所举办的培训课程

For enquiries, please contact our Training Service Unit at Tel : 2202 9111 Our web-site : <http://training.hkqaa.org> Email : [training@hkqaa.org](mailto:training@hkqaa.org)

Last Updated Date : 8 July 2014

# GRI's Introductory Workshop on Sustainability Reporting

Open in 4th quarter of 2014

The Global Reporting Initiative (GRI) is a non-profit organization that works towards a sustainable global economy by providing sustainability reporting guidance.



## Speakers

**Timothy Hui** Director, GRI Greater China  
**Elyse Chen** China Specialist, GRI China Focal Point

## Programme

Introduction: GRI and G4 Guidelines  
Sustainability Reporting Process and Challenges at Each Phase  
Group Exercise 1) Identify Key Stakeholders  
Group Exercise 2) Apply the GRI Materiality Test  
G4 Materiality Matters Check Introduction  
Panel Discussion & Networking  
\*Guests of companies that have been producing their own GRI reports will be invited as Panelists

## Enquiry &amp; Registration

Mr Anson Wong Tel: 2202 9395 / 2202 9111  
Email: [anson.wong@hkqaa.org](mailto:anson.wong@hkqaa.org)  
Website: <http://training.hkqaa.org>





# CARBON DISCLOSURE

Making Your Contribution to Sustainability

## 碳披露

为可持续发展作出贡献



### Highlights 研讨会内容

- Findings of researches on carbon management performance  
香港机构的碳管理表现调查分析
  - HKQAA-HKJC Carbon Disclosure e-Platform (CDeP) — Carbon Performance Questionnaire results in 2013  
「HKQAA-HKJC碳披露电子平台」——2013年碳表现问卷调查结果
  - Hang Seng Corporate Sustainability Indexes research and rating  
「恒生可持续发展企业指数系列」调查及评级
- Kick off HKQAA-HKJC carbon research and disclosure project 2014  
2014年HKQAA-HKJC碳表现调查及披露计划启动
- Overview of common carbon quantification methods  
简介机构常用的碳量计算方式
  - ISO 14064 series of international standard for GHG management activities  
ISO 14064温室气体管理国际标准系列
  - Clean Development Mechanism (CDM) methodologies  
清洁发展机制计算办法
  - ISO/TS 14067:2013 Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification and communication  
ISO/TS 14067:2013产品碳足迹量化和沟通的要求和指导



### Speaker 讲者

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### Date 日期

21 / 8 / 2014 (Thu)



### Time 时间

3:00 pm - 5:00 pm



### Venue 地点

Scope Lecture room, UR8, 8/F, United Centre, Admiralty  
金钟统一中心8楼香港城市大学专业进修学院UR8演讲室



### Language 语言

Cantonese 广东话



### Enrolment & Enquiries 报名及查询

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