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A comparison of Internal  
Control of the Working  
Environment, ISO 9000  
and ISO 14000



Arbetskyddsstyrelsen

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ISO 9000 and ISO 14000**

Bernt Nilsson and Carin Frostberg  
Swedish National Board of Occupational Safety and Health

Analysis and Planning Division  
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## **Preface**

In May 1994 the National Board of Occupational Safety and Health published the report "Internal Control of the Working Environment and ISO 9000 in a Co-ordination Perspective" (Rapport 1994:6). The discussion which prompted that publication is still going on. To broaden the basis of comparison between provisions and standards and for an assessment of opportunities of co-ordination, this revised report also includes ISO 14000.

Our hope is that this publication will furnish guidance for the work of the Labour Inspectorate, but also that it will be of interest to others affected by the matters dealt with.

Bernt Nilsson

Carin Frostberg

# **A COMPARISON BETWEEN INTERNAL CONTROL OF THE WORKING ENVIRONMENT, ISO 9000 AND ISO 14000**

## **Introduction**

A discussion is in progress concerning "Internal Control of the Working Environment", various ISO systems and relations between them. Consideration is being given to the necessity and possibility of entirely or partly uniting the systems. This is a matter of practical consequence to enterprises, which often wish to be spared an excessive amount of documentation, routines and instruction and also to reduce the number of inspections and suchlike visits. The point at issue to the National Board of Occupational Safety and Health (NBOSH) and the Labour Inspectorate (LI) concerns what is best for the working environment.

Before addressing these questions, a description will be given of some of the most frequently discussed systems for operational development. These will also be placed in their international context.

As a starting point for the discussion, an overview is given of similarities and dissimilarities between Internal Control of the Working Environment, ISO 9000 and ISO 14000.

## **Systems of operational development**

Internal Control of the Working Environment (IC) is governed by provisions issued by NBOSH and based on Chap. 3, Sections 2 and 2 a of the Work Environment Act, which require the employer to systematically plan, implement and follow up activities in such a way that the statutory requirements for the work environment are satisfied. The first IC provisions came into force on 1st January 1993 (AFS 1992:6). These were superseded by revised rules effective from 1st March 1997 (AFS 1996:6). AFS 1996:6 contains provisions, i.e. peremptory rules, as well as general recommendations.

ISO standards have been drawn up by an international body, the International Organisation for Standardisation, ISO. ISO 9000 is a collective term for standards describing quality systems. Some contain guidelines, others contain stipulations. Several of the 9000 standards, including those with stipulations, were revised in 1994. The term "quality system" refers to an organisational structure, routines, processes and resources for directing and controlling activities with reference to quality (ISO 9004-1). The following standards are of interest for the purposes of this report.

### *Guides*

9000-1 Quality system standards - Part 1: General guidelines for selection and use.

9004-1 Quality management and quality system elements - Part 1: General guidelines.

9004-2 Quality systems - Part 2: General guidelines for services.

### *Mandatory standards*

9001 Quality systems - Quality assurance in connection with technical design, development, production, installation and service.

9002 Quality systems - Quality assurance in connection with production, installation and service.

9003 Quality systems - Stipulations for final inspection and final testing.

ISO 14000 is an overarching term for standards concerning environmental management systems, i.e. organisational structure, planning, responsibilities, practice, routines, processes and resources for

developing, introducing, meeting, revising and sustaining environmental policy (ISO 14004). The reference here is to the external environment. ISO 14000 lays down guidelines, while ISO 14001 contains stipulations for environmental management systems. The latest 14000 standards were introduced in 1996.

In 1993 the Council of the European Communities issued a Regulation on an Eco Management and Audit Scheme (EMAS). In Sweden, this Ordinance, EEC 1836/93, means that an industrial facility can be registered with the Swedish EMAS Council. The requirements include compilation of a public eco-audit. The requirements of EMAS resemble those of ISO 14001, though the latter do not include provisions on eco-auditing.

The Swedish Institute for Quality, SIQ, arranges an annual competition in which organisations can win the Swedish Quality Award (USK). The seven competitive criteria include leadership, employee development and customer satisfaction. SIQ stresses that the award is a tool for the systematic improvement of operations, with the focus of attention on customers, employees and processes.

Sandholm Associates AB is a consulting enterprise which has long been working with quality issues in a pragmatical and target-oriented perspective. Leadership for quality, massive quality training, market orientation and quality improvement programmes are emphasised as effective quality strategies.

The terms internal control and quality assurance are also used outside their original fields. The Railway Inspectorate has issued provisions on internal control through safety management (BV -FS 1996:1). The Nuclear Power Inspectorate has issued provisions on quality assurance at nuclear facilities and in connection with the transport of nuclear substances or nuclear waste (SKI 1991-01-01). The National Board of Health and Welfare has provisions on quality systems in health and medical services (SOSFS 1996:24), based on the definitions in SS-ISO 8402. There is also a quality assurance model for Swedish occupational health services, based on SS-ISO 90001 and USK.

## **Relations to other national systems**

The EU has a framework Directive on safety and health at work (89/391/EEC), dating from 1989 and containing provisions on “the introduction of measures to encourage improvements in the safety and health of workers at work”. That Directive, which lays down the basic rules for the working environment, has been transposed to Swedish provisions, partly through the provisions of IC. In Norway it has been transposed through provisions on systematic management of health, the environment and safety in the operation (the IC provisions), which cover six different legislative fields.

The framework Directive requires all Member States to have statutory rules of some kind corresponding to the provisions of the framework Directive.

AFS 1996:6 applies only in Sweden. The ISO standards exist in about 90 countries. When the standards are transposed to Swedish standard, the designation SS is added, as for example in SS-ISO 9000. In Europe the same standard is called EN 29000.

In 1993 the Council of Ministers resolved on a system of modules for “assessment of congruence”. That resolution lays down guidelines for the selection of control procedures in the framing of product Directives. The modules contain references to EN 29001, EN 29002 and EN 29003. Insofar, then, as the Directives refer to the ISO 9000 family, ISO standards are made part of the European regulatory system for testing and control. In Sweden, this model occurs in provisions on the design of personal protective equipment, AFS 1996:7.

The British Standard BS 8800, dating from 1996, contains guidelines for occupational health and safety management systems (OH&S). That standard is aimed at facilitating integration of OH&S with the general fabric of corporate management. The standard describes various procedures which

can be employed. One of them is to go by the guidelines issued by the British Health and Safety Executive (the approximate counterpart of Sweden's National Board of Occupational Safety and Health), and another is to build on ISO 14001. The standard also contains a list of cross-references to ISO 9001.

Recently the possibility has been discussed of drawing up an ISO standard for the working environment. The same question has been broached within the European Standardisation Committee (CEN). No such standard is planned at present, however.

## **Similarities**

The following is an overview of similarities and dissimilarities between the three "systems": IC, ISO 9000 and ISO 14000. It should be noted, as emphasised in AFS 1996:6, that IC is not primarily a system but practical work. The collective term has been employed for the sake of simplicity.

The basis of this overview comes from the provisions and recommendations in AFS 1996:6 and from stipulations and guidance in various standards belonging to the ISO 9000 and ISO 14000 families. Reference is primarily made to the standards containing stipulations. Of the three stipulation standards ISO 9001, 9002 and 9003, the first is most similar to IC, encompassing as it does the entire production process. Stipulations concerning eco-management systems are only contained in ISO 14001. Both these standards have therefore been selected for the comparisons. No separate consideration is given to the EMAS Regulation, which is very similar to ISO 14001.

### **\* Systematisation**

In all cases the reference is to activities with a process orientation. IC refers to the systematic planning, implementation and follow-up. The standards of the ISO 9000 family "are based on the view that all work is achieved through a process". ISO 14004 contains a picture of an arrow in the form of an upward spiral, marked with the terms planning, implementation and operation, together with supervision and improvement.

The focus on improvement is common to all the instruments. IC which does not work well must be improved. One of the main purposes of quality management is to "improve systems and processes so that a steady qualitative improvement can be achieved". An eco-management system also includes a "process for constant improvement".

The character of methodology is revealed by the systems not containing any specific requirements concerning the working environment, products or the external environment. There are a large number of such stipulations to be applied. The idea is for this to take place within the framework of the system. This is the case, for example, with various provisions on the working environment, as well as standards and technical specifications for products. It follows from the very definition of IC that other provisions on the work environment are to be complied with. AFS 1996:6 also contains a special provision to the effect that the work environment provisions applying to the operation in question shall be available and shall be used.

## **\* Terminology and content**

IC, ISO 9001 and ISO 14001 contain rules on work environment policy, quality policy and eco-policy, and also concerning an action plan, quality plan and timetable. IC makes certain stipulations concerning the action plan, but is less definite concerning the quality plan and the timetable. The three systems also contain rules on routines and documentation.

IC shall be a natural, integral part of the operation. ISO 14004 lays down that eco-management shall be an “integral part of the organisation’s total management system”. This wording has no counterpart in ISO 9000.

IC lays down that the employer shall give the employees an opportunity of taking part in IC. The nearest counterpart to this in ISO 14001 is the stipulation of routines of internal communication between different levels and functions within the organisation, while in ISO 9001 it is the stipulation that conditions for co-operation be defined and documented.

IC’s division of tasks, comprising duties, powers and resources, recurs in ISO 9001 as responsibilities, powers and conditions of co-operation, and in ISO 14001 as roles, responsibilities, powers and resources. Both ISO 9001 and ISO 14001 stipulate that the management shall appoint a management representative to ensure that the system is drawn up, introduced and maintained and also to report to the management on the working of the system. IC has no such stipulations. Instead it makes the employer’s senior management wholly responsible for deciding how the tasks of IC are to be allocated within the organisation.

IC deals with questions of knowledge, ISO 9001 with questions of training and ISO 14001 with questions of training, awareness and competence.

The duty enjoined by IC of investigating and assessing risks and of investigating injuries and incidents actually occurring is matched in ISO 9001 by several items under the heading Technical Design Management and Procurement. The ISO 14000 family contains recommendations on charting the current environmental situation and stipulations concerning identification of environmental aspects and monitoring and measurement.

The IC stipulation for the follow-up of measures taken is matched by sections in ISO 9000 concerning corrective and preventive measures and in ISO 14001 concerning non-compliance and corrective and preventive measures.

Follow-up is stipulated by all three systems. The term itself is employed by IC, while in ISO 9001 and ISO 14001 it is matched by review and audit by the management.

## **\* Responsibilities**

All three instruments make the top management responsible for the systems. The employer is to carry on internal control of the working environment. The supplier shall establish, document and maintain a quality system. The organisation shall establish and maintain an eco-management system. This is an essential common factor.

## Differences

### \* Purpose

The really essential difference between the systems is that they serve different interests. The definition of IC lays down that planning, implementation and follow-up shall take place “so that the statutory requirements for the working environment are satisfied”. IC, in other words, exists for the prevention of ill-health and accidents at work. No such exact definitions are contained in the two standards.

The quality assurance systems in ISO 9001 indicate that “within the whole of the ISO 9000 family, the main emphasis is on satisfying the customer’s needs”. The concern here, in other words, is with products and services having the quality which the customer needs.

ISO 14000 lays down that “an organisation should introduce an effective eco-management system which can help to protect human health and the environment from the potential impact caused by the organisation’s activities, products or services, and to make it possible to sustain and improve the environment”. ISO 14000, then, exists for the protection of human beings and the external environment from environmental impact.

ISO 9004-2 is intended to make provision for the customer as the recipient of a service. In content, this system very closely resembles the intentions of IC and the working environment. It is interesting to perform the experiment of substituting the employees in the operation for the customer. The content of ISO 9004-2 would then make ample provision in several respects for the requirements of IC. A number of excerpts from ISO 9004-2 with an interesting bearing on the working environment are appended to this report.

Important parts of the working environment and, accordingly, of IC are concerned with matters which have no counterpart in the quality and environmental sectors, namely psychosocial and ergonomic conditions and questions of job modification and rehabilitation. The same goes for the working procedures laid down in IC, based on co-operation through safety delegates, the safety committee and individual employees.

IC is an instrument for the employer and employees to use in jointly improving the working environment of the operation. ISO 9000 and ISO 14000 are also intended as internal aids for streamlining the management of quality and the environment. Today it seems to be important mainly as an external competitive asset based on certification.

### \* Status of the rules

The Work Environment Act makes it the employer’s duty to carry out IC within his operation. A supplier or an organisation, on the other hand, is at liberty to employ, respectively, ISO 9000 and 14001 or refrain from doing so. If, on the other hand, standard requirements are made conditions of a contract, compliance with them becomes a contractual obligation.

Stipulations can be addressed by LI to an employer not complying with the provisions of AFS 1996:6. As a last resort, LI can resort to coercive action by issuing the employer with an injunction or prohibition, either of which can carry a contingent fine. If a contractual condition is not fulfilled, the breach of contract can lead to damages, deterioration of goodwill and loss of customers.

## \* Scope

The IC provisions apply to all employers with both large and small, public and private operations. The rules apply to all work environment aspects everywhere in the operation. The stipulations of standards ISO 9001, 9002 and 9003 apply only to the suppliers who are committed to them by contract. The system need not cover the whole of an operation. Certain supportive functions may be excluded, e.g. personnel administration, cleaning and maintenance of facilities.

To take another example, application can be limited to a certain product or department. ISO 14001, similarly, can be used within the whole of the operation or parts of it. The eco-management system, for example, can be introduced by stages until it eventually applies to the whole operation.

## \* Construction

The stipulation parts of the three systems differ in both scope and degree of detail. As a rough indication, AFS 1996:6 contains upwards of two pages of provisions in A5 format. ISO 9001, which goes closest to resembling the IC rules, contains about seven A4 pages of standard stipulations, while the stipulations in ISO 14001 run to about three A4 pages.

AFS 1996:6 contains provisions formulated as overarching stipulations for a particular function or result. ISO 9001, 9002 and 9003 contain partly general, partly detailed stipulations. The sections on technical design management and treatment of measuring and testing equipment are highly detailed. The stipulation in ISO 14001 are less detailed and contain many overarching requirements with, among other things, a large number of definitions.

Generally speaking, AFS 1996:6 is quite simple in structure while the ISO standards are of more complex design.

## \* Documentation and routines

Documentation and routines are ascribed nothing like as much importance in IC as in the quality and eco-management systems. IC does not stipulate any documentation of the system as such. Documentation requirements apply only to certain specified parts. ISO 9001 and ISO 14001, on the other hand, require the actual systems to be documented.

AFS 1996:6 requires the employer to draw up lists of injuries and incidents and action plans on an annual basis and in writing. This, of course, only applies if injuries or incidents have actually occurred and if there are any measures to be dealt with.

Work environment policy, allocation of tasks, investigation reports, risk assessment and follow-up of IC activities, as well as routines, are to be documented in writing if necessary, having regard to the risks at work, the size of the operation or its geographical distribution. It is the needs of the employer and the employees that decide.

A small enterprise with no great risks at work and with all its activities in one and the same place seldom needs any written documentation except as required for annual lists and action plans.

A different situation applies concerning ISO 9001 and ISO 14001. Apart from documentation of the systems themselves, ISO 9001 requires 30 or more different conditions to be documented. The corresponding ISO 14000 figure is approximately ten. There are no exceptions to these stipulations of written documents. Certain wordings, however, relax the extensive documentation requirements. ISO 9001 states that in every situation one should “look for a suitable balance between the extent

of documentation and the extent of skills and training". ISO 14001 states that "the character of the documentation can vary, depending on the size and complexity of the organisation".

The documentation requirements of IC are very flexible and depend among other things on the size of the operation. In certain situations no documentation is required at all. In the ISO systems, most parts always have to be in writing, but there are no stipulations concerning a particular design or volume of the documents.

Routines present much the same picture. The IC provisions stipulate routines in relation to the need for IC work, whereas both the ISO systems make about 15 stipulations each where routines are concerned. There are no exceptions to these stipulations.

### **\* Measures to be taken**

As a consequence of experience gained through the first IC provisions, the revised rules emphasise IC as practical work, not as a system. This has been codified in a provision whereby the employer is to take measures immediately if it is practically possible to do so. The documentation requirements have been toned down. ISO 9000 and 14000 contain no similar provisions concerning direct action. Instead they stipulate routines for measures of different kinds. The character of methodology is distinctly apparent here.

### **\* Supervision and certification**

LI verifies compliance with AFS 1996:6 by inspecting workplaces. If there are deficiencies regarding IC work, the Inspectorate issues the employer with stipulations, requiring abuses to be rectified. On the other hand, an employer whose IC is working well cannot have his operation approved by the LI. This is contrary to the Inspectorate's role.

Approval at a given point in time could petrify or even inhibit development of the IC process. That process has to go on continuously, regardless of whether LI pays a visit or not. IC is an internal aid to the improvement of the working environment and is not intended for the satisfaction of the supervisory authority.

Neither ISO 9001 or ISO 14001 has any in-built stipulations of certification, but the majority of suppliers/organisations opt to apply for certification of their system. Being able to produce a certificate is a strong competitive asset. Certification is carried out by private, independent bodies. These may be accredited with (approved by) SWEDAC which in this connection examines their competence and capacity for the assessments concerned. Enterprises, however, have a free choice of certification bodies, and these do not necessarily have to be accredited.

It is important to distinguish between follow-up under IC, where the review is expected to be carried out by the employer's own personnel, possibly with some outside assistance. (*Fattas något här?*) This follow-up is most nearly resembled by the management's review. In addition, both ISO 9001 and ISO 14001 stipulate internal quality audits/audits of eco-management systems. These audits have to be carried out by "independent personnel" and "persons whose position enables them to make an impartial and objective assessment".

Certification is sometimes called third-party auditing. When the customer himself carries out an audit of the supplier's facility, this is called a second-party audit. In addition, of course, there is the internal audit carried out by the enterprise itself.

There are certification bodies which make assessments of the enterprise's work environment management. A certificate issued by this kind of body, however, does not prevent LI from making the work environment stipulations which are needed. Nor does work environment certification

guarantee the employer's compliance with LI's stipulations. It is for LI to decide whether those stipulations are to be deemed satisfied or not.

The labour inspector is sometimes regarded by enterprises as a work environment auditor, on the same lines as a quality auditor. LI's task, however, is to verify compliance with environment stipulations, not to carry out audits. An audit report under ISO 10011-1 has to deal with "the capacity of the system for achieving definite qualitative targets and the extent to which the organisation meets the stipulations of the applicable standards". The auditor is under no obligation to stipulate the rectification of deficiencies. LI, on the other hand, has to make the stipulations necessary in order for the statutory work environment requirements to be satisfied.

## **Mutual effects**

As we have already seen, there are many similarities between IC and the ISO system with regard to system, terminology, content and responsibilities. If, therefore, an enterprise applies one of the two ISO systems, this provides, both pedagogically and in practical terms, an appropriate point of departure for the inauguration of IC within the operation. Employer and employees will find themselves on familiar ground and will more easily get into the way of systematic work environment management.

IC work which leads to a good working environment will result in the personnel experiencing greater job satisfaction and more easily avoiding injury at work. This in turn can lead to fewer disruptions, fewer manufacturing defects and fewer output losses. Production will be made steadier and productivity increased. Quality can be elevated and the environment improved. All things considered, contented, healthy employees are most often the foundation of a profitable business.

Personnel taking part in a quality and eco-management process which results in rising demand can take pride in their work and derive satisfaction from it. This in turn has a very important bearing on the quality of the mental and social environment at work.

IC and the ISO systems imply the creation of order within the operation, which is good for working conditions and for qualitative and environmental aspects.

There is also a mutual connection in that the measures taken under the various systems have repercussions on and must be observed in other systems. Planning in the section Management of Operations and Preventive Measures in Control and Corrective Measures (ISO 14001), for example, can entail requirements of investigation, risk assessment and remedial action under IC.

Implementation of IC, ISO 9000 and ISO 14000, then, can have a positive impact on other fields as well. But situations can also arise where the systems have a negative impact.

## **Physical and mental strain**

Implementation of the ISO systems can have negative consequences for the employees. A certain time for the delivery of a product or service may have been determined, for example, with reference to ISO 9001. If the deadline is to be met, this can reduce the scope available for co-operation with the employees, e.g. in the matter of planning and organising the work. A fast working pace can generate negative stress and dissatisfaction and, eventually, mental ill-health.

Good quality for the customer, then, can in certain cases lead to ill-health at work for the employees. The design of a product or its packaging in keeping with the customer's preferences, for example, can mean ergonomic problems for the employees. Work with a care recipient may, from that person's quality perspective, need to be done without lifting aids, which can impose heavy physical loads on the caring personnel.

## Co-ordination

One of the main topics of discussion at present concerns the extent, if any, to which co-ordination is possible and worthwhile.

The background section of AFS 1996:6 has a certain amount to say regarding the relation between IC and other operational management, but the instrument contains no recommendations where co-ordination is concerned.

The fact of there being many similarities between IC, ISO 9000 and ISO 14000 does not automatically imply that the systems ought to be co-ordinated within the individual operation. For one thing, IC's provisions on integration apply to integration with *the operation*, not with other systems existing in the operation. It is essential that IC should not become a new "sidecar" to the rest of the operation.

ISO 9000-1 states that the principles of direction in that standard can "be serviceable in other sectors of society. If the views taken of systems of operational management within these different sectors are compatible with each other, this can improve the efficiency of an organisation." ISO 14004, as mentioned earlier, contains references to eco-management as an integral part of the overall system of management.

Thus there are turns of phrase which point in favour of co-ordination. But in that case, what does co-ordination mean? It can, for example, mean different questions being raised in the same document or coming under the same routines, or measures being taken in close conjunction with each other. It can mean documented objectives and allocations of tasks on different premisses, simultaneous verbal information of different kinds and improvement measures which benefit several different interests.

It has to be observed that, in the individual case, the standards do not always cover the entire operation or all production. What is more, ISO 9002 and 9003, by definition, only apply to some parts of the manufacturing process, whereas IC covers all activities which the employer engages in and factors of every kind in the working environment.

Where the documentation requirements are concerned, quite different points of departure apply. ISO stipulates more or less total documentation, while IC is based on the needs of the individual case. In those cases where AFS 1996:6 makes demands concerning documentation which correspond to stipulations in the ISO systems, it can sometimes be appropriate to include questions concerning the working environment, quality and the external environment in one and the same document, within reasonable limitations of text volume.

A policy can, for example, be written with reference to various fields of activity. Allocations of tasks can include all the tasks, powers and resources existing for different persons. All operational aspects will then be included. Induction programmes and working instructions can contain directions relating to both the working environment, quality and the external environment.

In certain cases, then, it may be appropriate to have common documentation of certain delimited parts of the systems. On the other hand, a single file containing several systems merged into one is probably less advisable. It can be hard to use, which can result in this work being impeded or even coming to a standstill. In any case, AFS 1996:6 does not make any stipulations concerning a special style.

Verbal information of various kinds, e.g. introduction, instructions and general information about the activity, can very often be based on various aspects of the operation. The working environment, quality and the external environment can then be included.

Routines for IC, ISO 9000 and ISO 14000 can in certain cases be co-ordinated, e.g. regarding procedures for procurement, service, maintenance and competence development. Large alterations

to facilities and major re-organisation measures need to be undertaken with due regard for all relevant aspects of the operation. Changes of this kind may call for co-ordinated planning routines.

Surveys of the working environment and assessments of risk, e.g. as part of the investigation of an accident, can also be conducted in terms of quality and the external environment. If so, the investigations will include both personal injuries and the destruction of capital.

ISO 9004-2, as we have already seen, contains many sections to remind us of important work environment aspects. Purely in terms of content, therefore, co-ordination of IC with the service standard may serve a useful purpose.

Various interest organisations have published material dealing with integration questions. Mention can be made here of *Samordnad internkontroll*, published by the Joint Industrial Safety Council, and the Handbook, published by the Association of Swedish Chemical Industries (Kemikontoret), concerning an integrated system of management for safety, health and the environment.

## Small enterprises

More and more small enterprises are being required, as sub-contractors, to apply for certification of quality and eco-management systems. Many small firms work on less structured lines than large organisations. If, therefore, IC is to be introduced, there must be an intrinsic value in the enterprise already working systematically to ISO 9000 or ISO 14000.

Since, for obvious reasons, a small undertaking does not have such extensive activities as a large one, co-ordination in various forms can entail less risk to the working environment being forgotten than in the case of a large undertaking. Small enterprises are also more accustomed to working with a large number and variety of tasks at once.

The standards do not make any formal distinction between large and small enterprises. AFS 1996:6 applies to all employers. One problem in the matter of co-ordination is that the IC provisions do not impose such heavy documentation requirements on small undertakings as the standards do. Co-ordination must not result in documentation being exacted from the small enterprises for the sake of uniformity in the system.

Co-ordination in small enterprises, therefore, only becomes meaningful when the operation is large enough to require a certain amount of IC documentation. In the case of really small enterprises, on the other hand, the low-level documentation rules indicated by AFS 1996:6 should be complied with.

## Conclusions

Clearly, then, the situation in the individual operation decides whether and to what extent co-operation of the systems is possible and worthwhile.

Anyone wishing to unite the systems, partly or wholly, must take care that work environment questions are not obscured or overlooked. There is a certain risk of this happening if attention is made to focus on customer needs. A good working environment does not yield the same direct profitability as a well-filled order book. Customer quality, therefore, can easily gain the upper hand in a common system for the working environment, quality and the external environment. Here it must be remembered that all employers are required by law to have continuous, systematic work environment management in the form of IC.

In a co-ordinated system, it is important that proper attention and space be devoted to the central work environment issues, *viz* ergonomics, psychosocial conditions and questions of job modification and rehabilitation.

The working procedures applying in the work environment sector also have to be observed. I refer to co-operation with the employees, e.g. through safety delegates and in the safety committee.

IC directly requires a variety of measures under the provisions of AFS 1996:6. The standard stipulations refer to routines, not concrete measures. Here, as in the case of documentation, there are great differences. The IC provisions emphasise the importance of IC leading to concrete measures and not to files of routines and documents which are never taken down off the shelf.

With IC, ISO 9000 and ISO 14000 alike, critical factors of success include the knowledge, involvement and energy of the top management. No system is likely to work in the long run without management interest and determination. This in turn is a very important common point of departure and an essential factor in getting a co-ordinated system up and running.