



Evaluations 2003 – 2006

A concise overview

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Evaluations 2003-2006. A concise overview.

by

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A	Introduction	4
B	Evaluations completed – the Inspection steering instrument.....	5
1	Evaluation of inspections	5
1.1	<i>Inspection research</i>	5
1.2	<i>Evaluation methodology</i>	5
1.3	<i>The good work</i>	5
2	Experimental scheme of co-ordinated supervision.....	6
2.1	<i>Introduction</i>	6
2.2	<i>Do stipulations become more uniform?</i>	7
2.3	<i>Is AV’s aggregate competence utilised?</i>	7
2.4	<i>Does information spread to workplaces not inspected?</i>	7
2.5	<i>The process of change</i>	7
2.6	<i>How can the work organisation be developed?</i>	8
3	Outcomes of work environment supervision.....	8
3.1	<i>Introduction</i>	8
3.2	<i>Evaluation of work environment supervision</i>	9
3.3	<i>Causes of sickness absence</i>	9
3.4	<i>Psychosocial factors</i>	10
3.5	<i>Physical factors</i>	10
3.6	<i>Conclusions and recommendations</i>	11
4	Evaluation of the Work Environment Authority’s Accident Investigation Commission (HAKO)	12
4.1	<i>Introduction</i>	12
4.2	<i>Time lags</i>	12
4.3	<i>Dissemination of the reports</i>	13
4.4	<i>Follow-up</i>	13
4.5	<i>Synthesis</i>	13
4.6	<i>Procedure</i>	13
5.	Effects of different inspection methods.....	14
5.1	<i>Introduction</i>	14
5.2	<i>Results – overview</i>	14
5.3	<i>Recommendations</i>	15
6.	Evaluation of the anti-noise supervision campaign.....	16
7	More reliable completion	16
C	Inspections completed – Provisions as a steering instrument.....	17
1	Survey concerning Systematic Work Environment Management.....	17
1.1	<i>Introduction</i>	17
1.2	<i>Results</i>	17
2	Evaluation of the Provisions on Workplace Design.....	18
2.1	<i>Marketing and information initiatives by the Work Environment Authority</i>	18
2.2	<i>Marketing and information initiatives by other agents</i>	18
2.3	<i>Assessment of knowledge concerning the Provisions (AFS 2000:42)</i>	18
3	Evaluation of the Provisions on Ergonomics for the Prevention of Musculoskeletal Disorders (AFS 1998:1)	19
3.1	<i>Introduction</i>	19
3.2	<i>Results</i>	20
3.3	<i>Conclusion</i>	20
D	Evaluations completed – the Information steering instrument.....	21
1	Information initiatives by the Work Environment Authority – a meta-analysis	21
E	Evaluations completed – the Sundry group.....	21
1	Evaluation of the Health and Medical Care sectoral programme.....	21
2	Evaluation of the reorganisation of the Central Supervision Department (CT)	22

2.1	<i>Introduction</i>	22
2.2	<i>Results</i>	22
3	Evaluation of inspection notices.....	23
4	Evaluation of supervision training	24
4.1	<i>Effect target 1</i>	24
4.2	<i>Effect target 2</i>	24
5	Evaluation of the development programme Work organisation and negative stress (ARNE) 25	
5.1	<i>A programme for evaluation</i>	25
5.2	<i>Recruitment and the recruitment process</i>	25
5.3	<i>Competence development</i>	26
5.4	<i>Methods development</i>	26
5.4.1	<i>Introduction</i>	26
5.4.2	<i>Results and effects</i>	26
F	Evaluation activities at the Work Environment Authority	27
1	Retrospect in brief	27
2	Analysis.....	28
3	Thoughts concerning the future.....	30
3.1	<i>Evaluation – part of the organisation’s analysis of outcomes</i>	30
3.2	<i>Effect magnitudes and structure of steering instruments</i>	31
3.3	<i>Philosophy of supervision</i>	32
3.4	<i>Other components</i>	32
	Appendix 1: Evaluations completed 1999-2006	36

A Introduction

Sometimes overviews of different kinds are needed in various fields. Evaluation is no exception in this respect. In addition to being able to keep external and internal interested parties informed about a certain field, all activities need at regular intervals to pause and reflect on the measures accomplished. What knowledge has the activity succeeded in generating? Has this knowledge led to any kind of reaction, externally or internally? What “blank spots” remain to be plotted on the map of knowledge? What factors have, respectively, furthered and impeded the activity? Are there any remaining methodological hurdles to be cleared?

In the Work Environment Authority’s appropriation warrant for 2002, both targets and feedback requirements were formulated for the evaluation field. The Annual Report for 2002 included an account of current development work. This, however, also prompted a somewhat more exhaustive, separate account of the field in question, and a report was therefore published in 2003, aimed at facilitating an understanding of the Authority’s initiatives in the evaluation field by placing them in a conceptual, historical and contextual context.

More specifically, the report contained the following:

- A brief presentation of outcome evaluations in the work environment sector, viewed in an international perspective.
- A presentation of the Work Environment Authority’s principles regarding the evaluation field.
- A general description of the development of the evaluation field within the Work Environment Authority, instancing completed evaluation projects by brief presentations of results achieved.
- An account of evaluation projects in progress and of ongoing development work in the field¹.

The present report is confined to the last two mentioned points. What outcomes have concluded evaluation inputs generated for the period chosen? In the light of experience gained, how does the Authority want evaluation activities to be conducted in future? These two questions, then, are at the centre of attention for present purposes.

An account of this kind can of course be given in several different ways. The present report employs a breakdown corresponding to the three different steering instruments (inspection, provisions and information). However, not all the evaluations completed can be accommodated in these categories, and those which cannot have been consigned to a Sundry category. The overview focuses exclusively on the outcome descriptions in the reports. Readers in search of further information (about methods, for example) should study the individual report concerned.

It should also be made clear that the projects presented differ in character. Some are more theoretically oriented and/or concerned with synthesising established empirical data, while others present empirical data of their own. Project also vary in scale, and this is inevitably mirrored by the presentation. For safety sake it must also be emphasised that the account given of the different projects (sections B-E) only mirrors the content of those reports, and does not necessarily represent the opinions or assessments of the compilers of this overview. Thus the pronoun “we” (or its equivalent) refers to the individual author or authors of each report. We ourselves, on the other hand, are of course responsible both for the selection of project content and for the content of the introductory and concluding sections (A and F respectively).

¹ Eriksson, O – Effektutvärdering inom Arbetsmiljöverket - En beskrivning av insatser inom utvärderingsområdet (AV-rapport 2003:4). Also available in English.

B Evaluations completed – the Inspection steering instrument

1 Evaluation of inspections²

1.1 *Inspection research*

Work environment inspections are an important instrument for improving the work environment. Surprisingly little research has been done to investigate whether inspections have the desired effect on the work environment, but there is adequate evidence that inspections can augment compliance with the law, reduce emissions and enhance safety in the workplace. Individual studies have shown that the first inspection means more than succeeding ones, that the level of fines is irrelevant, and that the greatest effects are achieved in medium and one-person enterprises. Most of these findings emanate from American research and are not directly applicable to other countries. There is a great need for research into the methodology of work environment inspections in a European context.

1.2 *Evaluation methodology*

Four prioritising criteria for the allocation of inspection resources are presented and discussed in the report.

- (1) Take the worst first: top priority is given to the problems judged gravest.
- (2) Greatest possible effect: top priority is given to measures producing the greatest effect (injury reduction).
- (3) Best use of the Authority's resources: the greatest possible effect (injury reduction) per Authority resource unit committed.
- (4) The best use of society's resources: the greatest possible effect (injury reduction) per community resource unit committed.

In practice the choice between these principles is often of limited importance, lacking as we do the most elementary knowledge required for their implementation: we do not know the extent to which inspections actually lead to improvements in the work environment. First, therefore, we need to decide whether inspections have the desired effects on the work environment. Research into the effects and efficacy of inspections is only possible if inspection activities are planned in a way which makes them evaluable (e.g. through the inclusion of control groups). Evaluation of work environment inspections, then, cannot be carried out post facto by outside evaluators. Instead the work of evaluation has to be integrated with the Authority's operative work.

1.3 *The good work*

Evaluations need ideals. The consensus among evaluation theorists is that the first step towards being able to value is to define the properties pertaining to a good evaluation object. One problem in this connection is that our notions of the good work are multidimensional. It is not immediately clear in any situation how different factors impacting on working conditions should be factored in.

² Lindblom, L/Hansson S O – The Evaluation of Inspections, AV-rapport 2003:3. This study employs a wholly theoretical approach.

The authors have investigated five theory traditions in order to identify values which can form the basis of a theory of the good work: philosophy, occupational health and safety research, management theory, work sociology and business ethics. The philosophical study of work centres round the question of self-realisation through work. In occupational health and safety research, the focus of attention, for obvious reasons, is on health and safety. Management theory is many-faceted and includes many aspects of work, but productivity can still be termed the overarching value aimed for. Innumerable aspects of work are discussed in the social sciences, but in “quality of working life” (QWL), the most inclusive part of work sociology, there seems to be a consensus that workers’ wellbeing is the pivotal value. Fairness can be said to be the pivotal value discussed in business ethics. Summing up, this review results in the following list.

β Good work leads to self-realisation.

β Good work is healthy and safe.

β Good work is productive.

β Good work promotes wellbeing.

β Good work is fairly organised.

One argument against the possibility of defining good work is that the perception of what amounts to good work is ultimately subjective. This objection can be met by focusing on working conditions and not directly on subjective experience.

One way of moving ahead in the development of a theory of good work is to tie in with the well-known political philosopher John Rawls’ theory of justice. There are at least three problems which have to be solved in order to arrive at a Rawlsian theory of good work:

1. Decide what are our well-founded opinions of work.
2. Decide what should be distributed with regard to work.
3. Decide what type of distributive problem work is, i.e. should the fruits and risks of work be distributed in the community as a whole, or within the enterprise, or in some sort of combination of the two?

2 Experimental scheme of co-ordinated supervision³

2.1 Introduction

Fourteen “chain concerns”, operating nationwide, were included in the Work Environment Authority’s (AV’s) experimental scheme of co-ordinated supervision. This working approach was expected to lead to more uniform stipulations, better use of AV’s aggregate competence and remediation by the employers of work environment deficiencies throughout the chain concern. The view of AV’s professionalism was also expected to improve, together with efficacy in general.

The main emphasis of the evaluation was on learning, i.e. on giving AV supporting data with which to see how the methodology and working approach could be developed. To ensure feedback, the evaluation was carried out at an early stage of the transformation process. Not all effects, consequently, could be read off, but the direction was clear. The evaluation was based on a review of supervisory strategies and inspection notices and on interviews and questionnaire surveys of representatives of the chain concerns and those concerned within AV.

³ Lundqvist, K/Ahlgren, M - Försöksverksamhet med samordnad tillsyn av flerdistriktsföretag – en lärande utvärdering, AV-rapport 2003:9.

2.2 Do stipulations become more uniform?

A review of about a hundred inspection notices from 6 of the 14 chain concerns indicated relatively high uniformity as regards the problem areas addressed and the functional stipulations made. Most comments from the company interviews, however, referred to the lack of uniformity. Certain centrally positioned people observed stipulations being made in some places but not in others. SAM (Systematic Work Environment Management) stipulations had sometimes also been addressed directly to workplaces. Thus there was uncertainty as to which stipulations should be made locally and which centrally. Different districts had different routines for defining inspection notice addressees. Moreover, chain concerns with many workplaces were liable to be inundated with local inspection notices. A common inspection notice addressed to the head office, and with a list of deficiencies at the various workplaces appended, would have been preferable.

Another dimension concerned the relevance of issuing stipulations. The company interviews showed the great majority to have confidence in AV's competence and to consider that AV on the whole had focused on the right problems in its inspections. The psychosocial environment and problems referable to organisation and management seemed, however, to be somewhat underestimated. The encounter with AV was generally found constructive and the dialogue properly balanced.

2.3 Is AV's aggregate competence utilised?

The greatest competence utilisation hitherto was between inspectors. Co-operation was found highly rewarding. On the other hand, co-operation between the Central Supervision Division (CT) and the Work Environment Inspection (AI) Division had yet to take shape properly. The capacity of the Authority and the district managements for co-ordinating resources nationwide must be developed. One important question is whether the Authority's steering and monitoring systems encourage co-ordinated supervision.

2.4 Does information spread to workplaces not inspected?

All parties took a highly positive attitude towards co-ordinated supervision. No drawbacks have emerged. The working approach was considered to provide good opportunities for disseminating policy measures throughout the enterprise. Positive effects had already been noticeable. The managements had begun taking an interest in the work environment, stipulations were carrying more weight, company-wide solutions were easier to find and, moreover, the atmosphere had improved in some quarters. Having a co-ordinator within the Authority to contact made things easier for company work environment co-ordinators. Uninspected workplaces too had noticed a growth of activity at central level, suggesting a dissemination effect in three enterprises studied in depth. The main emphasis there was on information, training, new routines, follow-up and mapping.

2.5 The process of change

Fourteen AV teams worked in parallel, following certain targets and guidelines, to develop the working approach. Roughly a hundred people (mostly inspectors) throughout the country were involved in the development process.

Both the companies and the AV personnel involved took a highly positive attitude. One important point of departure is that the inspection teams are to work on a preventive, co-ordinated and target-referenced basis with reference to a supervisory strategy. This latter, unfortunately, did not turn into the guidance and consensus instrument envisaged, the reason being that not all the teams took part in

its construction. Coordinated supervision requires universal support of common targets and strategies, added to which, the teams must be given common tools and aids for supervision. The ideal is to meet physically, at least to begin with, but with present-day technology and a good structure, co-operation is possible either way.

2.6 How can the work organisation be developed?

Chain concerns are growing in number, and so are district-wide activities. This is making heavy demands on the management's overview and co-ordinating capacity. Given the right strategy, preparations and organisation, inspection yields can be multiplied. Work can be developed. A number of recommendations were made in the report.

* Concentrate efforts on the chain concerns with the poorest work environments – select wisely!

Form smaller inspection teams for several chain concerns in the same industry. The team inspecting Dressman can also inspect OnOff, ÖB, IKEA etc. In this way every chain concern will get its own co-ordinator, who will also be a contact person for the others. This at the same time improves the chances of uniformity within the industries, in keeping with employers' demands.

* Involve the enterprises from the very beginning.

Hasten the inspection process; reduce throughput times, raise commitment and relevance by involving enterprises right from the framing of the supervision strategy and then keep up a dialogue at every stage. Preparatory to the next phase we recommend AV to set up an intranet/extranet, administered by the co-ordinator, for all communication relating to the chain concern.

* Cut down on stress – strengthen the co-ordinator's role – create cohesion, support and development at work.

Interaction has meant a very great deal to the inspectors; they are not isolated in their framing of stipulations, they give each other hints and advice. Being a co-ordinator was found instructive and developmental. Eventually the co-ordinator role is likely to become an integral part of the normal role of the inspector. A smaller, close-knit team provides stability and security amid the process of change.

3 Outcomes of work environment supervision⁴

3.1 Introduction

Main conclusion: *It has been clearly established, mainly by studies in other countries, that work environment inspections can improve the work environment. Both Swedish and foreign studies have also yielded abundant proof of poor work environment conditions leading to a growth of sickness absence. On the other hand there is no firm evidence of work environment inspections leading to a fall in sickness absence, one possible explanation being that the few studies in which a search has been made for this kind of connection have been low on discriminating capacity. More and better studies of the connection between inspections and sickness absence are urgently needed.*

A survey has been made of published scientific studies on effects of supervision, to assess the state of knowledge as to whether official supervision of the work environment has an effect in the form of a

⁴ Björkdahl, C - Arbetsmiljöutvärderingens effekter på regelefterlevnad, arbetsmiljö och sjukfrånvaro. En litteraturoversikt, AV-rapport 2006:8.

demonstrable reduction of sickness absence. The survey also includes a literature overview identifying factors potentially influencing sickness absence.

Two separate literature surveys were undertaken in order to collect the material. In the first survey, a search was made for scientifically published articles evaluating the effect of official supervision. In the second, a search was made for scientifically published articles investigating cause and the connection between various factors and sickness absence related primarily to the work environment. A comprehensive survey of literature on causes of sicklisting has been carried out by SBU, the Swedish Council on Technology Assessment in Health Care, and was accordingly made the starting point of the study to identify factors causing sickness absence.

3.2 Evaluation of work environment supervision

The effects of work environment supervision have been evaluated mainly with three different focal points: (1) effects of inspections on compliance with the rules, (2) effects of inspections on the work environment, and (3) effects of rules on the work environment.

The studies dealing with the effect of inspections on compliance with the rules have all arrived at the conclusion that work environment inspections have entailed greater compliance with the rules.

On the question of whether inspections have led to a better work environment, e.g. in terms of injury statistics, different studies have arrived at different conclusions. Division of the studies according to the level at which data were analysed, and also by design, revealed that when a correlation design was used the studies using less aggregated data found the inspections to have had an effect, while the studies with aggregated data at industrial level tended more often not to find any such effect.

The sole method employing an experimental design, which is the accepted design for testing causal connections, arrived at a mixed result concerning the effect of inspections conducted by the Work Environment Authority. For the workplaces which had been inspected and where inspection notices had been served, no significant reduction was found in the workload of those previously reporting work injuries, but an improvement was obtained in their colleagues' workload.

One way of overcoming the problems of evaluating effects may be to employ more experimental approaches. Since this may be difficult or impossible to do in certain cases, e.g. in connection with the implementation of rules, quantitative methods combined with qualitative ones could be an alternative solution for reducing the element of uncertainty.

3.3 Causes of sickness absence

Sickness absence is correlated with a number of different factors at work, but also apart from work. Roughly half of all sicklisted persons in Sweden who had been working before they were sicklisted considered their sickness absence to be work-related. Then again, not all work accidents lead to sickness absence. For men, work-related accidents entailing sickness absence amounted to roughly half the total number of accidents. For women, work-related accidents not entailing illness were nearly twice as numerous as those entailing sickness absence. Women have also accounted for a larger number of registered cases of work-related illness than men. In total terms they have also had higher sickness absence than men. For women registered as absent from work in 2003 because of work-related illnesses, the median value was 74 days absence, compared with 36 for men.

The work injury reporting system has been altered several times, and any trends therefore have to be cautiously interpreted. The changes detract from the usefulness of accident statistics for investigating the effect of supervisory measures.

In its overview of literature, SBU notes that studies where general conclusions could be drawn regarding causal connections were only to be found in very limited areas. This situation has not changed appreciably in recent years, even though many further studies have been undertaken.

Altogether more than 700 different correlations have been investigated in the past three years. More than half of these concerned psychosocial variables. The other variables found in the literature survey concerned the physical work environment, background factors of various kinds (e.g. demographic factors such as age and gender, unemployment, lifestyle and whether or not the individual has children), and social class. A brief summary now follows of the psychosocial and physical factors investigated in relation to the work environment.

3.4 Psychosocial factors

Psychosocial factors deal to a great extent with variables relevant to Karasek's model of psychological demands, decision latitude and social support at work. High demands are dominated by studies which have found this variable to have no statistically significant correlation with sickness absence, although both a positive and a negative correlation have also been found. For low control or decision latitude, a positive correlation with sickness absence was found to a greater extent than for demands, but here again, in several cases no correlation was found. The SBU literature overview also revealed a negative correlation in one instance.

Both positive correlations and lack of correlation were found between low social support and increased sickness absence. As regards support from superiors, none of the studies investigating this variable found any significant correlation.

The demands-latitude-support model is based on a combination of these variables leading to stress and increased sickness absence. These are usually combined in four different types of work: strained (high demands and low control), passive (low demands and low control), active (high demands and high control), and relaxed (high control and low demands). These can then be combined with low or high support. For strained work, both a positive correlation and none at all with sickness absence were found. For strained work with low support, a positive correlation was found in the majority of cases.

For active work, no correlation with sickness absence was found in the majority of cases, but here again one negative and one positive correlation were found. For passive work and passive work with low support, both a positive correlation and no correlation were found. No statistically significant connection was found in any of the studies investigating whether a low level of perceived fairness was correlated with sickness absence. On the other hand, when fairness was specifically related to the variables procedures and relations, a low level of perceived fairness related to these factors was found to be correlated with increased sickness absence.

Several different type of organisational change have also been investigated, e.g. expansion, cutbacks and merges. For expansion and cutbacks, either a positive correlation with sickness absence or none at all was found. In the majority of studies, a poor organisational climate was found to be uncorrelated with sickness absence. Only in one study was a significant positive correlation found. A positive correlation was found when low involvement within the organisation was investigated.

3.5 Physical factors

Considerably fewer variables have been investigated in relation to the physical work environment, compared with the psychosocial variables. The variables studied were to a great extent concerned with different types of exposure, such as physical labour, general physical health, pain and tiredness. In one

study, exposure to noise, dust and chemicals was investigated. For the high noise variable, a positive correlation was found for men but not for women. For high dust exposure, a negative correlation was found for women but no correlation for men, i.e. women with a high level of dust exposure had less sickness absence. The SBU literature overview revealed in various studies a positive correlation and no correlation between high dust exposure and sickness absence. No connection could be established between the indoor carbon dioxide level and sickness absence. For women metal workers a positive correlation was found between sickness absence and exposure to gas, dust, smoke, oil and dirt. The SBU literature overview revealed several positive connections between indexes for general work environment factors and increased sickness absence.

A positive correlation with sickness absence was found to a great extent for variables relating to various physical exertions. A positive correlation was also found for reduced mobility.

Poor health, health problems or physical symptoms were to a great extent positively correlated with sickness absence. For various variables concerning perceived pain (in the lumbar region of the spine, in the shoulders or in connection with musculoskeletal disorders), several surveys indicated a positive connection with sickness absence.

A number of variables related to fatigue and physical exhaustion have also been investigated. In the majority of instances a significant positive correlation was found with sickness absence. Sickness absence in connection with influenza or gastro-intestinal inflammation and sickness absence of more than 30 days duration were exceptions in this respect.

One study investigated the connection between accidents and sickness absence. No correlation was found between women's sickness absence and a large number of accidents. The result for men was unclear. Data for the analysis were based on a questionnaire which was sent to employers and to an employee representative at each firm.

Sickness absence statistics are a complex social phenomenon which does not hinge solely on actual illness or work injury. There is great uncertainty regarding many possible causal connections, but many different factors have been found to be significantly correlated with sickness absence.

If sickness absence were to be used for measuring the effect of supervisory inputs, this would require many factors over and above the actual supervisory input to be checked for.

3.6 Conclusions and recommendations

There are considerable methodological difficulties involved in evaluating the effect of work environment supervision, due mainly, not to a lack of suitable evaluation methodology (experiments, for example), but to the preconditions of this method's usefulness seldom prevailing or being possible to create for the daily activities of a national authority.

It is hard to say which is the best method for evaluating work environment supervision. The choice of design for the evaluation should be governed by the evaluation's purpose. An experimental design may be appropriate, for example, when a new inspection method is to be evaluated compared with an existing one. This requires suitable variables to be available for measuring the effect. Optimal design is not sufficient to capture an effect if there are great uncertainties attaching to the actual yardstick of success.

When evaluation methods are used which do not have the same discrimination capacity as an experiment, allowance has to be made for the result obtained being less dependable. This makes it far more difficult to draw conclusions regarding causal relations.

Even so, it seems that when a less complex connection has been studied, e.g. whether inspections have led to greater compliance with the rules, an effect has been demonstrable, whereas for more complex relations, e.g. whether inspections have led to a fall in sickness absence, it has been much harder to tell whether the inputs have had an effect or not.

One recommendation for future evaluations, therefore, may be that connections and effects should be evaluated by several stages, starting with an evaluation of whether inspections lead to better compliance with the rules and going on to evaluate whether compliance with the rules leads to better work environment conditions and, lastly, whether better work environment conditions lead to improved health. In this way one peels away some of the complexity and the potential effects of the supervisory inputs are rendered more easily distinguishable.

It is, however, clearly apparent from the literature review that supervisory inputs can affect work environment conditions and that conditions in the work environment in turn affect sickness absence, even though there are also many other factors involved.

4 Evaluation of the Work Environment Authority's Accident Investigation Commission (HAKO) ⁵

4.1 Introduction

This report notes that during its early years the Accident Investigation Commission (HAKO) has very successfully established a qualitative standard for accident investigations which should also be of importance for other investigative activity.

Thanks to a systematic, methodical approach, it has been possible in each investigation to establish, not only the direct cause but also underlying technical, human and organisational contributory causes of the accident. This greatly helps to make the reports serviceable for proactive purposes. There is every justification for this high-quality work continuing.

However, the report identifies three problems which will have to be solved as work continues, namely time lags, distribution of the reports and follow-up of the proposals which the reports contain.

4.2 Time lags

As has already been shown, the delay in producing a report is the commonest point of criticism against HAKO. In order to have the effect intended, the reports must be produced as quickly as possible. This should be the overriding assessment criterion when considering HAKO's future organisation. The aim should be to reduce the average investigation time by at least half. We maintain, however, that it is very important for the quality of the reports to be preserved. To sustain the quality of the investigations while at the same time reducing the investigation time, the terms of investigation should be improved. We recommend that in future every decision to launch a HAKO investigation be accompanied by a plan indicating when the investigation should be completed.

⁵Hansson, S O/Lindberg, A-K, Filosifienheten KTH - Utvärdering av Arbetsmiljöverkets haverikommission, AV-rapport 2004:5.

4.3 Dissemination of the reports

Work on communication plans should be reinforced so as to ensure that those whom a report concerns are reached by it, which does not always seem to have been achieved hitherto. Distribution to the relevant labour market organisations also needs to be improved. Our assessment, as is also made clear by the questionnaire and interview material, is that the main need for improvement concerns information about a report having appeared. The material does not seem to support the proposition that the actual reports should be distributed. For the improvement of general dissemination, HAKO should have a page of its own on the AV website and an e-mail list of persons (in-house and externally) wishing to be informed of new and concluded HAKO investigations.

4.4 Follow-up

All recommendations in HAKO's reports should where possible have a distinct addressee, i.e. a party called on to implement the recommendation.

An internal report follow-up system should be introduced. One of the senior AV executives should be made responsible, when the report is completed, for agreeing with the district concerned on a time for a short follow-up meeting (which can take the form of a teleconference, though notes should still be taken). At this meeting both the district and the central unit concerned will give an account of the measures they have taken or decided to take in response to the report. It will at the same time be decided whether additional follow-up is needed.

Commenting on two of the reports (2002:7 and 2004:2), the Machinery and Personal Protective Equipment Division has remarked that follow-up would be made easier by a representative of the central AV unit most immediately affected taking part in every HAKO investigation. We consider it desirable to make clear, at the commencement of every investigation, who should monitor the progress of the investigation and on what basis.

4.5 Synthesis

So many HAKO reports have now been completed that they can be used as supporting documentation for general conclusions about underlying causal factors contributing towards the occurrence of accidents. We recommend that the reports be used as input documentation for a synthesis which should result in a report in which the experience accumulated is summarised in such a way that it can be used by work environment inspectors and others actively concerned with accident prevention.

4.6 Procedure

A procedure should be defined for HAKO. The following should be added to the existing proposal:

□□ Clarification that every decision to launch a HAKO investigation must be accompanied by a timetable.

□□ Clarification that everyone taking part in an investigation must devote the requisite amount of time to it.

□□ Clarification that the members of the secretariat must be enabled to reserve time for secretariat duties.

□□ Principles of co-ordination with police investigations, agreed on with the Prosecutor-General.

□□ Indication that the reports are to be distributed to those specially responsible for implementing the proposals.

□□ Rules for follow-up meetings, as already stated.

5. Effects of different inspection methods⁶

5.1 Introduction

The working party opted to try and answer the question of what we know about the effects of different inspection methods by examining the Authority's official document on the subject, the methods handbook. The examination was based on the following topics of enquiry:

- Is there a clear description of the method itself?
- Does the description of the method also include a valuation of its effects?
- Is the method in use today?
- Has the method been used separately? What assessment can be made of the method used for the evaluation? What do the evaluation results have to tell us?

In order to convey a clear picture of our conclusions, we have chosen to present them in tabular form. When reading the table the reader should bear in mind that this form of presentation inevitably entails a number of simplifications, with the result that a number of nuances are lost. For a more balanced assessment, the reader is referred to the section dealing with the method/working procedure concerned.

5.2 Results – overview

Method/procedure	Description	Use	Evaluation?	Evaluation method	Evaluation result
System inspections in large operations	Clear	Limited	No	-	-
System inspections in small undertakings	Method?	Not relevant	Yes	Acceptable	Positive
PSI	Clear	Limited	Yes	Doubtful	Positive/negative
Focus	Clear	Limited	Yes	Doubtful	Positive/negative
Macro	Clear	Limited	Yes	Advanced	Positive/negative
RÅK	Clear	Limited	Yes	Advanced	Positive
Supervision campaign	Method?	Widespread	Yes	Advanced	Positive/negative

⁶Eriksson, Ove et al. - Vad vet vi om effekterna av olika inspektionsmetoder? En rapport från projektet Effekter av inspektion, October 2004.

- In all cases but two, the working party found no reason to doubt the description of the method concerned (using, however, quite a benevolent interpretation of the stringency of the definition and its application).
- It was unclear how frequently the different methods are used and whether they are used in a manner corresponding to the description in the methods handbook. The main impression, however, was that the methods are put to limited use.
- In certain cases the evaluation method chosen was doubtful or incompletely presented. Sometimes it was unclear whether the purpose of the evaluation had been formative or summative⁷, and sometimes a formative evaluation was marketed as though it were summative. Sometimes too, the empirical basis of the evaluation was rather on the thin side.

5.3 Recommendations

The working party proposed as follows:

1. If there is to be a methods handbook of the existing type, adequate resources must be committed to keeping it updated. If so, the methods in the methods handbook must be the only ones applicable, in which case the existing policy for methods development work will have to be applied better. In addition, the management of Division AI must see to it that use of “unauthorised” methods is discontinued.
2. Another alternative is to try and pigeonhole existing inspection methods into different “type methods”. Compared with the descriptions in the existing methods handbook, the descriptive level of these “type methods” should be somewhat rougher and thus better able to withstand the ravages of time and different applications in different districts, without each of these applications needing to be given a particular name.
3. Whatever the options, the working party feels that the definition of an inspection method needs to be sharpened and then consistently applied. This means being able to sort out what is not a method (e.g. the way in which work is organised) and being able to distinguish method A from method B.
4. A discussion of methods does exist today to a certain extent, but the working party believes that the internal discussion of methods can be both broadened and deepened, regionally and nationally. This will mean, not only discussing individual methods but also engaging in an overarching discussion. Topics include the way in which different methods relate to each other and how far one can or should go in standardising inspection methods.
5. When a new method is to be developed, it is vital to be able to answer the question: “Why?” One must be able to describe the way in which existing methods have been found wanting. This is important, because evaluation of “the new” should take comparison with “the old” as its starting point.
6. “Formative” evaluations are used in the development phase of a new method. The forms of evaluation can vary, depending on the type of model involved. They can vary from internal structured talks to process-oriented studies by an outside consultant. When the method has taken shape, a “summative” evaluation is carried out. This too can assume various forms, but should include some kind of comparison with the method(s) used previously in terms of the relation between outcome and resource input.

⁷ Putting it simply, a “summative evaluation” implies a post facto scrutiny for the purpose of verifying results achieved. Depending on the purpose, this can be done in slightly different ways. This type of evaluation addresses strategic levels (management level) in an organisation. “Formative evaluation” is concerned with continuously evaluating, say, a development project with a view to achieving successive improvements. This type of evaluative approach mainly addresses operative levels in an organisation.

6. Evaluation of the anti-noise supervision campaign⁸

As part of its *Stop that Noise!* campaign, the Work Environment Authority carried out inspections of 1,721 workplaces on 24th-25th October 2005. A questionnaire was addressed to undertakings inspected in manufacturing industry and to other firms chosen so as to resemble the inspected businesses as closely as possible. The survey included 3,062 undertakings and the response rate was 65.6%.

Inspected and uninspected undertakings were asked whether they had taken noise abatement measures following the inspection campaign. The question referred to measures of eight different kinds. All of them were about twice as common among inspected as among uninspected firms. Compilation of an action plan was nearly seven times more common among the inspected companies than among the uninspected ones. Measurements were about five times more common and noise reduction measures more than twice as common. Altogether the inspected workplaces stated on average that they had taken 2.5 measures, as against 0.8 for the uninspected. When the inspected firms were asked for their main reason for taking these measures, 88% of them referred to the inspection or to information or stipulations from the Work Environment Authority. The inspected workplaces stated to a greater extent than the uninspected ones that they knew about the new Noise Provisions and that their employees had access to hearing protectors.

It should be noted that the inspections producing these effects were comparatively simple and brief inspections in campaign form. The cost per inspection was roughly SEK 2,000. Even with very conservative assumptions about corporate compliance with the stipulations made, this inspection campaign probably reduced the cost to society of sicklisting, medical care, early retirement etc. by an amount exceeding the cost of the inspections themselves.

For this survey an attempt was made at applying a methods approach seldom employed in this connection, namely what in the literature on evaluation is usually called a quasi-experimental method approach. Methodologically the survey was a success, and it is recommended that more surveys be conducted using the same method.

7 More reliable completion⁹

The authority has recently been discussing the value of following up inspections by visits. Statistics indicate a growth of follow-up visits in recent years. If the inspectorate applies resources to follow-up visits in order to acquire reliable data for completing the inspection, this means fewer resources available for inspecting new workplaces. One problem today is that employers' replies are insufficient for it to be reliably known how the case should be processed further. The Work Environment Authority has an interest in devising alternative ways of procuring good supporting data prior to the completion of an inspection, so as to reduce the need for follow-up visits.

The study shows that simple instructions can govern the content of the employers' replies to inspection notices, so as to simplify assessment of an employer's remedial activity in response to inspection notice stipulations. In this way the inspector, by using the instructions, gets a sounder basis for deciding the further handling of a case. This in turn should reduce the number of follow-up visits. The follow-up visits which the inspector chooses to make should also be justified in the light of the clearer responses expected to inspection notices.

⁸ Björkdahl, C/Wesser-Herber, M/Hansson, S O – Utvärdering av Arbetsmiljöverkets tillsynskampanj 2005 – Bort med bullret!, AV-rapport 2006:14.

⁹ Rydén, M-L – Metodutveckling av säkrare avslut av inspektioner, VUS 2005/31263.

The inspectors taking part in the study were already in favour of the instructions beforehand. When they began using the instructions they saw that they led to better answers. A number of employers have also spontaneously expressed themselves in favour of the instructions.

Thus the assessment arrived at is that the instructions compiled should be used in the course of inspection activities. It is suggested that the instructions be added to the template for inspection notices. It must, however, be possible to remove them in case where the inspector judges them to be irrelevant to the stipulations made in the inspection notice.

C Inspections completed – Provisions as a steering instrument

1 Survey concerning Systematic Work Environment Management¹⁰

1.1 Introduction

In the autumn of 2002 Inregia AB conducted, on the Work Environment Authority's behalf, a survey of employers and safety delegates concerning systematic work environment management. A similar survey was conducted in the spring of 2001.

The purpose of the present survey was to compare findings with the previous one, so as to ascertain what changes, if any, had occurred in systematic work environment management. The results of the chronological comparison suggest that the process of implementing systematic work environment management is moving in the right direction. It is not always that big changes are reported, but there are no findings to suggest any retrograde developments.

The following summary is concerned with results at total level and – as far as possible – with comparing 2001 and 2002.

1.2 Results

Here are some of the survey findings.

* 41% of the employers consider systematic work environment management to be up and running. This is 11 percentage units up on 2001. The same view is taken by 29% of the safety delegates, which is 3 percentage units up on 2001.

* Upwards of 90% of the safety delegates state that they have access to regulations applying at their workplace and 60% state that they are acquainted with the Provisions of the Work Environment Authority.

The results show 90% of the employers to agree that systematic work environment management leads to fewer work-related accidents and illnesses and also to general improvements in the operation. Employers do not, however, agree to the same extent that systematic work environment management leads to better financial performance. Roughly 65% of them agree with this.

¹⁰ Blomquist, A/Johnsson, H – Undersökning om Systematiskt arbetsmiljöarbete, Inregia Performance AB, AV-rapport 2003:2.

* Upwards of 80% of employers consider their workplaces to have a good work environment. The level in 2001 was the same. The proportion of safety delegates considering the work environment good today is 60% in both surveys.

* 60% of the employers state that the work environment has improved compared with the situation a couple of years ago. About 40% consider the situation to be unaltered. The level is roughly the same in both surveys. 50% of the safety delegates consider the work environment to have improved, as against 36% in the previous survey.

2 Evaluation of the Provisions on Workplace Design¹¹

2.1 Marketing and information initiatives by the Work Environment Authority

The Work Environment Authority's marketing and information initiatives are mainly addressed to employers listed in the Information Division's customer database. In view of the very broad scope of the Provisions on Workplace Design (AFS 2000:42), information was distributed to all employers in the customer database. It was also sent to all undertakings in Sweden with over 200 employees which were not included in the database (about 18,000 firms altogether). Demand was slow to begin with, but upwards of 32,000 copies were sold during the autumn of 2004. The digital file has been opened and the Provisions, presumably, downloaded or printed out 120,000 times. About 100 copies of the Provisions are ordered monthly. The Provisions are also being distributed through the Work Environment Authority's industrial package. The Authority's marketing measures suggest that a large number of employers have received information about the Provisions.

2.2 Marketing and information initiatives by other agents

Interviews with industrial organisations and trade unions show them to be redistributing the information from the Work Environment Authority to their members. The information is mainly disseminated in the form of recurrent circulars, bulletins, courses, seminars, training programmes, members' meetings, website information and links to the Work Environment Authority's website. The general impression gained from the interviews is that there is no reason why employers generally should not have received information concerning AFS 2000:42.

2.3 Assessment of knowledge concerning the Provisions (AFS 2000:42)

Due to the low response rate, great care should be exercised when drawing conclusions from the questionnaire results. Some of the findings from the interview survey, however, were corroborated, while others were not.

The Work Environment Authority's marketing initiatives suggested that a large number of employers had received information concerning AFS 2000:42, and the general impression gained from the interviews was that there was no reason why employers generally should not be acquainted with the Provisions. The questionnaire results show that 61% of the employers knew about AFS 2000:42. In

¹¹ Johnsson, H/Blomquist, A, Inregia AB - Arbetsmiljöverkets föreskrifter om Arbetsplatsens utformning. Förstudie - AFS 2000:42, June 2005.

view of the marketing initiatives taken, a higher percentage might possibly have been expected, but, considering that the employers were also found to merely know of the existence of Provisions, as opposed to being apprised of their exact content, the results can also be termed better than expected.

Furthermore, it was judged doubtful whether the employers studied the information. But the results show that nearly all those who were acquainted with the Provisions had done so, partly or wholly. Employers are the target group which has given least effect to the rules in practice. This seems reasonable in view of the character of the Provisions and on the assumption that the employers who have commissioned new buildings or made alterations to existing ones are acquainted with AFS 2000:42, while those who have not yet had occasion to implement the rules know less about them.

Planners, developers and safety delegates were judged likely to be acquainted with AFS 2000:42, and indeed the results show between 75 and 83% of these target groups to be acquainted with them. It is above all planners and safety delegates who state that they have tried translating the rules into practice, but little more than half the developers have done so. Viewed in relation to familiarity, this is a plausible result, but in view of the target group's activity a somewhat higher level of implementation might possibly have been expected.

The interviews, with the interior architect and teacher at the Chalmers University of Technology, suggested a low level of knowledge among architects, whereas other players believed architects to be acquainted with AFS 2000:42. This finding is not unambiguous. 67% profess to be acquainted with the Provisions, and 64% of these have studied the content. Just over half the architects have translated the rules into practice. Viewed in relation to familiarity, this is a plausible result, but in view of the target group's activity a somewhat higher level of implementation might possibly have been expected.

A large proportion of those implementing the rules state that implementation did not lead to any concrete measures being taken. Only a few state that implementation did not lead to concrete measures because the concrete implications of the stipulations could not be understood.

Developers and architects do little to pass on the information, which presumably has to do with these target groups not having a function in which they are expected to distribute information further. Employers, safety delegates and planners seem to redistribute the information within their own organisations.

The majority find the practical implications of the Provisions abundantly clear, and the majority also felt that the General Recommendations do much to enhance understanding of the practical implications of the stipulations. Suggestions for further improving the General Recommendations include pictures, sketches and examples, greater clarity and an educational approach.

3 Evaluation of the Provisions on Ergonomics for the Prevention of Musculoskeletal Disorders (AFS 1998:1)¹²

3.1 Introduction

Various angles of approach were tested in the pilot project to find out how the Provisions are used. The combination of SARA statistics, interviews with work environment inspectors and review of inspection notices conveyed a picture of how the inspectorate for caring services and construction uses AFS 1998:1. The interviews with supervisory staff and safety delegates, on the other hand, were not very informative. They hardly knew about the Provisions and had not made use of them, which ruled out any in-depth discussion of them. A questionnaire could have given answers to the question of

¹² Carlsson, R - En pilotstudie över hur föreskrifterna om belastningsergonomi tillämpas, AV-rapport 2003:10.

whether people were acquainted with and used the Provisions, and a wider group could then have been reached at the same time.

3.2 Results

The construction sector had a relatively small number of ergonomic stipulations for the prevention of musculoskeletal disorders, which is remarkable for a sector with very heavy manhandling operations and unfavourable work postures. In the interviews, Building and Civil Engineering Work was given as the Provisions primarily referred to and complied with, also as regards stipulations concerning ergonomics for the prevention of musculoskeletal disorders.

The interviews also revealed that, even though the caring service inspectors often made use of the Provisions, there were more sections and assessment models which they could have used. Use by inspectors of the Provisions on Ergonomics for the Prevention of Musculoskeletal Disorders can still be developed with a view to effective ergonomic supervision. Courses and projects encouraging intensified use of ergonomic stipulations based on AFS 1998:1 on Ergonomics for the Prevention of Musculoskeletal Disorders could be a means of further increasing the use of the Provisions by inspectors.

The interviews with supervisory personnel and safety delegates confirmed the picture given by the inspectors, namely that the Provisions are not known. The programme for this pilot study did not include in-depth discussion of the way in which the Provisions are used and of whether there is scope for improvement. There is awareness of musculoskeletal problems, but people do not know what is covered by the Provisions. The interviews also revealed that there had been no systematic discussion of the problems with a view to devising solutions.

3.3 Conclusion

The sample was small, but the results indicate that the Work Environment Authority needs to devote far greater effort to disseminating information about the Provisions. The interviewees' replies made clear that Provisions focusing directly on a particular problem of the work environment, such as display screen work or threats and violence, are easier to assimilate than collective Provisions. Safety delegates pointed to the difficulty of obtaining information about new Provisions and about alterations made when Provisions are rewritten. It is also important that Provisions should be highlighted in work environment training programmes for safety delegates. Supervisory personnel have contacts higher up in the organisation where policy issues etc. are discussed, but the content of Provisions is not penetrated in depth until a concrete need arises.

Nationwide campaigns with plenty of media coverage would be one way of raising awareness of the Provisions among the general public. The Work Environment Authority's website is another way of focusing on a specific problem, e.g. ergonomics for the prevention of musculoskeletal disorders, possibly with reference to the appropriate sections.

The labour market parties and industrial organisations are important channels for communicating questions about Ergonomics for the Prevention of Musculoskeletal Disorders and the possible proactive use of the Provisions in the workplace.

Intensified ergonomic supervision based on the Provisions (AFS 1998:1) might eventually also compel people to study more closely what the Implications imply for both employers and employees.

D Evaluations completed – the Information steering instrument

1 Information initiatives by the Work Environment Authority – a meta-analysis¹³

Altogether 23 different evaluations have been studied and analysed in this report. The evaluations show, firstly, that the Authority has difficulty in conveying its information to the broad target group comprising the general public. Work environment issues do not have the attraction one would like them to have among the general public. Media coverage too is unsatisfactory, in that it is difficult to get onto the media agenda with work environment issues. These things taken together cause the work environment to be excluded from the media agenda and also from the interpersonal agenda – that is to say, the question is not much talked about person to person. The evaluations also reveal quite a low level of knowledge on the part of the general public where the Work Environment Authority is concerned.

Moreover the evaluations show the employers target group to be far more observant than the general public target group of the Work Environment Authority wishing to communicate with them. On the other hand, few employers, it would seem, actually study the information distributed, but those professing to have studied the information are satisfied with it.

As regards choice of media or communication channel, the Authority mainly employs printed media, which have low interactivity, low attentiveness and low efficacy.

E Evaluations completed – the Sundry group

1 Evaluation of the Health and Medical Care sectoral programme¹⁴

There is a widespread and positive consensus on nearly all points of this sectoral programme. The biggest difference between the “inward” and “outward” perspectives¹⁵ concerns the issue of whether the programme should be continued or discontinued. Several of those representing the “outward” perspective seem more amenable to at least discussing conceivable alternatives to the present structure, even though their basic view is that the programme should be retained at least for a time. They also tend more than representatives of the “inward” perspective to stress the need for greater efficiency and, accordingly, an overhaul of working procedures. Somewhat paradoxically, they also tend more often to advocate elements representing discontinuity in the activity, e.g. in the form of swifter replacement of representatives taking part in the programme, on the grounds that the efficiency loses which this can entail can be turned into potentially greater efficiency in the sense of the inspectors being given the chance of competence development. Considering, however, that those representing an “outward” perspective present a greater fragmentation of views than those representing the “inward perspective”, this result should not be overstated. Those representing the “inward perspective” seem if anything to emphasise the need for continuity combined with further

¹³ Jarlbro, G – Arbetsmiljöverkets informationssatsningar. En metaanalys av utvärderingar genomförda under åren 1996-2005, Lund April 2006 (stencil).

¹⁴ Eriksson, O – Utvärdering av branschprogrammet Hälso- och sjukvård, AV/VUS PM 2003-01-23.

¹⁵ The “inward perspective” mirrors views held by the programme participants, while the “outward perspective” is concerned with the views held by a number of line managers.

broadening of participation. In practice this would mean heavier resource inputs for running the programme.

2 Evaluation of the reorganisation of the Central Supervision Department (CT) ¹⁶

2.1 Introduction

The purpose of the reorganisation was to reduce the Director-General's control span, to reduce expenditure, to augment the consensus view of the operation and to facilitate the transfer of competence within the amalgamated Central Supervision Department (CT).

The reorganisation has been followed by a far bigger change, namely the Work Environment Authority becoming **one** authority. This can make it hard to isolate effects and results of the earlier change. Several respondents argued that the 1999 CT reorganisation could be viewed as a first step towards the new, amalgamated Authority.

The CT Department had also received additional funding allocations since the 1999 change. For this reason the client found it hard to tell whether any economisation had been effected.

The evaluation focussed primarily on the question of increased consensus and on competence issues. The size of the new Department and its implications for management and employees is described and commented on here, because it cropped up in all interviews.

2.2 Results

The evaluation shows the *consensus* view of activities to have improved somewhat within the department. Interest parties outside the department – the four persons interviewed in other departments – convey the same description. Several refer to “moving towards greater consensus.”

One innovation entailed by the reorganisation was the lateral *processes*. There is uncertainty regarding the mission of the processes. Those involved in the processes are more positive than those outside. More information is called for from the processes. There is also a need for greater clarity in mandates, performance targets, manning and the time allowed for processes.

As part of the reorganisation, the *ergonomics area* was organised into a process, so that this field of competence would be integrated with several units. The ergonomists were stationed in different units. Although this new order of things was described in negative terms at the time of its introduction, the ergonomic process is now described in relatively positive terms.

As regards *competence issues*, the effects of the reorganisation are less clear. Many say that a positive view is taken of competence development and always has been. “competence development” most often means training, in which desired opportunities are said to be achieved. It is clear, however, that knowledge transfer within CT can be improved. It is up to the individual to look for development and new knowledge. There is a desire for this to be encouraged by management. Sectoral groups should be able to promote both consensus and learning.

¹⁶ Fröberg, M/Frost Danielsen, G – Utvärdering av omorganisation vid avdelningen CT, Arbetsmiljöverket , svenskt PA forum AB, stencil spring 2003.

The work process leading to the formation of the new division is a target of great dissatisfaction. It gave the impression of their being great opportunities for influencing the department's design, but these proved to be illusory.

It is clear that *the Director-General's control span* has diminished. A unified department with a head of department has created opportunities of greater consensus and learning, but the change has also resulted in every head of division acquiring a greater number of associates. There is great discontent with the large divisions and the ability of managers to make themselves available to every associate. The size of the new department is in fact the subject of greatest discontent. In addition to finding it more difficult to obtain the support desired from their manager, people felt that contacts have been made more difficult and the in-house handling procedure less straightforward.

The arrangement of a *special division for the administrators* is viewed in a positive light by the administration and by interests outside CT. Many handling officers, though, take a negative view of it, because it has left them having to do a great deal of administrative service work themselves.

The biggest development issue for CT probably concerns the articulation and development of its different professional roles. It is important for everyone to know assignment, content and responsibilities, both in the managerial rolls and in the handling officer and administrator roles. Another important development issue is the description of what *consensus (system for consensus)* is supposed to mean and support for it can be systematically devised in various work processes and work procedures.

3 Evaluation of inspection notices¹⁷

Two simplified methods of producing and delivering inspection notices were tested in 2000 to investigate the possibility of reducing the amount of time the inspector needs to spend at the office for the inspection and thus increasing the amount of time spent in the field. The experiments were conducted during about 200 inspections in industry branches (Ngr) 28 and 29.

In one experimental group the work environment deficiencies observed were described by the inspector in the inspection notice afterwards at the office, but with only a general stipulation that the employer give an account of measures taken or planned. In the other group an inspection notice had been compiled directly at the workplace, immediately after the inspection. In the evaluation of the two groups, various comparisons were made with a control group of about 100 inspections in the same industry branches, for which inspection notices had been drawn up and delivered in the traditional way.

The evaluation result showed the total time input for an inspection to have diminished by an average of 21% in the experimental group where inspection notices were compiled and delivered on the spot during the inspection, compared with the control group. On the other hand the evaluation showed that direct compilation of inspection notices at the workplace was difficult in cases other than those involving a few, easily describable shortcomings. In the other experimental group there was no difference in time input compared with the control group.

The questionnaire survey administered to the group of employers receiving an inspection notice in the course of the experimental scheme did not indicate any palpable differences between the experimental groups and the control group. One important detail emerging from the questionnaire survey, however, was that practically all employers considered the verbal information supplied during the inspection concerning the work environment deficiencies observed to be of the utmost importance for understanding.

¹⁷ Isaksson, T et al. – Utvärdering av försöksverksamhet med olika sätt att utforma och lämna inspektionsmeddelande, Stencil, 2003-04-23.

4 Evaluation of supervision training¹⁸

4.1 Effect target 1

On completion of their basic training, the inspectors shall be ready to take charge of limited inspections.

The training target has been formulated (for personnel with supervisory duties) as ability after the training to carry out limited inspections unaided. Although it is too early to judge the degree of target achievement, the image obtained was positive in all essential respects: both the participants themselves and the majority of training co-ordinators and experts judged this target to have been achieved. The changed structure made it possible to halve the time elapsing between hiring and commencement of independent inspections.

4.2 Effect target 2

The training shall contribute towards greater uniformity within the Work Environment Authority.

Through both its structure and its implementation, the course also contributed towards greater insight and knowledge concerning the fields covered by other departments. The decentralised conduct of the training in the work environment sectors led to a high level of commitment, which the evaluators believe encourages the ethos of a unified authority.

Merits predominated and the overall impression was good, but the evaluators also noted certain implementation problems, and these were addressed in a number of recommendations, set forth below.

- Develop and communicate the training strategy- in the immediate term to clarify structure and content, in the longer term to tie in with the supervisory brief and competence supply.
- Establish principles of information work so that everyone will know whether information comes spontaneously or has to be searched for, and if so, how and where.
- Clarify the orders for the training sections in the five work environment sectors with regard to course and lecture materials, directions, exercises, knowledge requirements, debriefings and joint inspections. Implementing responsibility can then be retained at district level.
- Make the performers participants in the process (i.e. of defining the order in the respects outlined in the preceding point); in this way, for example, uncertainty regarding the balance between foundation and continuation course will be dispelled.
- Clarify the conditions of the training in terms of calendar time, sequence of training items and “delivery points” – co-ordinate implementation.
- Take steps to reserve time primarily for the conduct of the training. Participation in activities not having a direct bearing on the training must be given lower priority.
- Make sure that the course management is responsible for creating mechanisms whereby the people selected have the “right” combination of expert knowledge and teaching ability.
- Clarify the orders for the training sections in the five work environment sectors with regard to the forms of achievement verification.
- Those in charge of courses should consider the need for clearer standardisation of joint inspections in both quantitative and qualitative (content-related) terms.
- The changes preceding this year’s two rounds of training are extensive enough to argue against adjustments prompted by interest in trying new approaches. Before the project ends at the turn of

¹⁸ Eriksson, O/Schäfer, J – Basutbildningen i den nya tillsynsutbildningen. Three evaluations, dated 2005-05-03.

the year, we wish to recall the possibilities of continuing to develop the training, *par préférence* by means of continuous minor changes. Adjustments of this kind must of course be attuned to the training's more long-term objectives.

- Plan for further evaluation focusing on efficiency aspects, above all costs and benefits associated with the reallocation of training time, but also outcomes viewed in the light of the transformation of the role of the inspector and the Authority's strategy for competence supply.

5 Evaluation of the development programme Work organisation and negative stress (ARNE) ¹⁹

5.1 A programme for evaluation

During the autumn of 2002 a working party devised a three-year plan for evaluating the ARNE programme. The plan was cleared with the ARNE steering group and with representatives of the Ministry of Employment, Industry and Communications. To a great extent it was based on ideas and proposals from three external consultants representing two different consulting firms. The evaluation focused on the three main components of the ARNE programme: recruitment, competence development and methods development. The various interim reports describe more closely the questions formulated and the evaluation methods used. The present account is confined to a summary of the results presented in the various interim reports, including proposals for a more or less comprehensive catalogue of remedial measures.

5.2 Recruitment and the recruitment process

Has the recruitment effected reinforced the supervisory parts of the Work Environment Authority?
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The Authority recruited a total of 224 persons between 2001 and 2003. Of these, 158 (inspectors and others) were recruited for the Inspection Department (AI) and 26 (handling officers and others) for the Central Supervision Department (CT). Altogether 184 persons or 82 per cent were recruited for the departments directly concerned with supervision. All in all this recruitment substantially reinforced the Authority's supervisory resources.

Has the Work Environment Authority achieved its predefined targets in terms of recruitment strengthening its competence in the direction indicated by the appropriation warrant?
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The appropriation warrant required the additional resources to focus on improving supervision within the organisational sphere, the reference here being to "negative stress, social factors, workload, monotonous physical labour etc." Job modification also came under this head.

¹⁹ Eriksson, O – Utvärdering av utvecklingsprogrammet ARbetsorganisation och NEgativ stress (ARNE). Bakgrund – Sammanfattning av resultat – Slutsatser och rekommendationer, AV-rapport 2006:2.

Eriksson, O – Rekrytering och rekryteringsprocessen 2001/2003. En delrapport i utvärderingen av utvecklingsprogrammet ARbetsorganisation NEgativ stress (ARNE), AV-rapport 2006:3.

Spång-Rosén, E – Kompetensutveckling. En delrapport i utvärderingen av utvecklingsprogrammet ARbetsorganisation NEgativ stress (ARNE), AV-rapport 2006:4.

Frick, K/Bruhn, A/Lehto, A – Metodutveckling. En delrapport i utvärderingen av utvecklingsprogrammet ARbetsorganisation NEgativ stress (ARNE), AV-rapport 2006:5.

For the recruitment of inspectors, an internal target of 48 new inspectors with ASP specialities (ASP: organisational, social and psychological aspects of the workplace) were recruited; the Personnel Division defined ASP as comprising the organisational and psychosocial spheres together with ergonomics for the avoidance of musculoskeletal disorders. The actual figure was 54, i.e. in excess of the target, but the outflow of inspectors with this speciality numbered 8 persons. Even so, the inspection staff can be said to have been substantially reinforced in the ASP sector, but see below.

No internal quantitative target had been defined for the CT Department. In the event, 5 handling officers with ASP specialities were recruited for CT. Two more were recruited with MTO (Man-Technology-Organisation) specialities, which can be said to tie in with the ASP areas. Of the 143 persons recruited as inspectors/handling officers with supervisory duties, 61 (43%) had an ASP/MTO speciality. In total figures, then, even allowing for the outflow of ASP specialists, the real reinforcement in this sphere remained considerable.

Of those recruited, 95 per cent of the women and 94 per cent of the men declared a positive or highly positive overall impression of the recruitment process. The main impression given by those responsible for recruitment was one of satisfaction with both process and outcome.

Finally it was noted that the internal decision-making process had been affected by certain shortcomings.

5.3 Competence development

Summing up, the training initiatives were found to have developed the Work Environment Authority's competence. The aims of raising the level of knowledge seemed to have impacted on practically all training programmes, albeit to varying extents. In particular, certain aspects of competence, such as knowledge of current worklife research, had improved. With the exception of the MTO and focus training, the use made of the additional knowledge had also been commended by those replying to the questionnaire.

The training initiatives had improved the self-confidence of one-third of the participants. This was a distinct effect over and above the augmentation of the participants' knowledge. It also emerged from interviews that the lines of demarcation previously experienced within the organisation between behavioural scientists and technical specialists had become less noticeable.

5.4 Methods development

5.4.1 Introduction

At the time of planning the evaluation, the aim was to test the serviceability of the methods devised (in both an inspection and a workplace perspective) and the process of methods development. In the absence of any finished methods to be tested, the aim had to be reduced to conducting a couple of more formatively oriented evaluations of a couple of methods. So instead the aim now was for the evaluation to be included as a conditioning factor in the construction of the methods concerned (KASP = Communication concerning organisational and psychological hazards of the workplace; KOPS = Communication concerning the psychological work environment in small businesses).

5.4.2 Results and effects

The ARNE programme should be seen as stages of a development process within the Authority. One stage was that of reconstitution as a national authority. Another was the focus on elevating the inspectors' competence and a third the development of methods. One problem was that these stages

appeared to coincide. The ARNE initiative could probably have been more successful if they had been kept separate, i.e. if the first stage had been allowed to “settle” before the second began, and so on. Perhaps too the link between these two stages, the way in which they were conceived of as relating to and influencing each other, should have been more closely investigated. In the event, the ARNE programme was to a great extent permitted to lead “a life of its own” to one side of the general development of the Authority, and in practice to one side of most things which would have been relevant, especially to its methods development.

Probably the main positive effect of the ARNE programme as a whole is that ASP issues (organisational, social and psychological aspects of the workplace) have, status-wise, “arrived” within the Authority. The recruitment of new associates with interest in and competence for addressing behavioural-scientific issues, coupled with the training initiatives for other inspectors, should have greatly increased the number of inspections focusing on ASP issues. The changed personnel structure should also mean these issues being observed and discussed in-house in quite a different way from what was previously the case.

F Evaluation activities at the Work Environment Authority

1 Retrospect in brief

The then National Board of Occupational Safety and Health began carrying out evaluations at the end of the 1980s. Those evaluations related to a number of the Board’s Provisions. A number of different projects were launched in which various methodological approaches were tested. The evaluations took place in the field of information/communication (dissemination, reading, comprehension etc.). There are also instances of evaluations where the importance of the Board’s initiatives could be established with regard to long-term effects on the work environment (asbestos and quartz). In this way the Board can be termed quite an early starter with at least some kind of effect measurement.

This was followed in the early 1990s by seminar activities and a publication summarising a number of practical hints and recommendations. In 1991 a group was formed for the further development of the Board’s evaluation activities. In its final report, presented in 1993, this group pointed to the need for a concerted evaluation strategy.²⁰ Input documentation for this purpose was presented in an internal report just over two years later.²¹

During the first half of the 1990s both the then National Board of Occupational Safety and Health (ASS) and the National Institute for Working Life jointly endeavoured, unsuccessfully, to interest universities and colleges in launching initiatives in the field of “intervention research”.

In the spring of 1995 the Investigation and Planning Division of the then National Board of Occupational Safety and Health took the initiative in gathering a number of researchers and consultants for a seminar to discuss how the Provisions on Internal Control of the Working Environment (now Systematic Work Environment Management) were to be evaluated. There was a consensus among the seminar participants on the need to devise a framework programme for a broad-based evaluation research. Lack of resources (in terms of both finance and competence) made it natural for the Board to turn to the then Council for Working Life Research (as funding agency) and the

²⁰ ASS – Utvärdering av tillsynens effekter, Slutrapport 1993-12-06.

²¹ Eriksson, O – Utvärdering/uppföljning – teori och verklighet. Underlag till en vidareutveckling av Arbetarskyddsverkets resultatanalys, ASS March 1995.

National Institute for Working Life (as potential co-financier and co-ordinating agent for the programme). For various reasons, however, this initiative also petered out.²²

In addition, during the early 1990s the then National Board of Occupational Safety and Health took the initiative of gathering a number of supervisory authorities once every year to discuss various matters of common concern, evaluation issues among them. The Board convened two such conferences.

During 1995/96 the Board invested in competence development in this field, in the form of training programmes and seminars. As a result of initiatives from the then National Board of Occupational Safety and Health, seminars on evaluation were convened with other supervisory authorities also taking part.

One decisive weakness from an evaluation viewpoint, however, was that the activities were conducted on too much of an *ad hoc* basis. For this reason, in 2000, a policy was introduced for the Board's initiatives in the evaluation context.²³ In it a view of the evaluation sphere was introduced whereby proposed evaluation initiatives are in principle to be treated in the same way as other proposals for initiatives, namely in the regular budgeting and operational planning process. The policy includes a number of criteria for the selection of evaluation projects. It was revised in 2002²⁴ and a further review is currently in progress, aimed above all at strengthening the utilisation of evaluation findings.

2 Analysis

One way of sorting evaluation activity is on a line between Effects – Methods – Processes. In this case the concern is with the purpose which the evaluation sets out to illuminate. Another dimension is Inspection – Prescriptions – Information, the concern here being with the type of steering instrument on which the evaluation focuses.

One way of analysing evaluation activities hitherto could be to combine these two dimensions so as to see where the emphasis has been in recent years. We have chosen to take the last 36 projects conducted since 1999. For analytical reasons, the account is divided into two periods: 1999-2002 and 2003-2006. The figures in the tables below come after each project in the appendix.²⁵

Table 1: Evaluation projects completed 1999-2002 (17 reports)

	Effects	Methods	Processes
Inspection	(22) (23) (25) (27) (28) (30) (31) (35)	(22) (24)	
Prescriptions	(20) (21) (25) (26) (29)	(20)	(21)
Information	(25) (27)		
Sundry	(34)		(32) (33) (36)

²² Eriksson, O – En utvärdering av föreskrifterna om Internkontroll – Varför? Hur? Ett diskussionsunderlag, ASS PM 1995-03-21; Eriksson, O/Frostberg, C – Utvärdering av Internkontroll av arbetsmiljön – hur går vi vidare?, ASS PM 1995-05-17.

²³ Policy angående utvärdering inom Arbetsmiljöverket, Tillsynsserien 5/2000, 2000-05-15.

²⁴ Policy angående utvärdering inom Arbetsmiljöverket, Tillsynsserien 6/2002, 2002-12-16.

²⁵ A project can have several locations, added to which, it was difficult in some cases to squeeze a concrete evaluation project into the diagram, hence the category of Sundry. We realise that this analytical scheme is not perfect, but it is nonetheless good enough to furnish a rough idea of points of emphasis and “blank spots”.

Table 2: Evaluation projects completed 2003-2006 (19 reports)

	Effects	Methods	Processes
Inspection	(1) (6) (10) (11) (13) (14) (16) (17) (19)	(5) (7) (10) (11) (13) (14)	(13) (19)
Prescriptions	(1) (8) (12) (16) (18)		
Information	(16)		
Sundry			(2) (3) (4) (9) (15)

The most striking similarity between the two periods is, firstly, that the volume (number of projects completed) is roughly the same. Secondly, there is the low coverage of the Information steering instrument in all three dimensions. In terms of the “purpose dimension”, one cannot help noticing that Effects has received most attention, while Methods and Processes have been observed to roughly equal extents. If instead the “steering instruments” dimension is employed, Inspection has quite definitely come in for most attention. Despite the aim of focusing more attention on the steering instrument Prescriptions, this has not happened. All projects in the Sundry category have been process-oriented in character, purely quantitatively speaking.

The question now is whether the breakdown is to be of a similar kind in future. This concerns the view taken of the role of evaluation in an operation. Presupposing that the evaluation function is mainly to be included as part of an advanced management by objectives/outcomes, then probably the point of emphasis must remain on the effect dimension. The question then is whether it is reasonable for the breakdown between the different steering instruments to continue to look the way it does.

If on the other hand the emphasis is placed on the evaluation function as a locomotive of the organisation’s qualitative development, perhaps greater importance should be attached to Methods and Processes. One interesting fact is that the steering instrument Information does not appear to have been studied at all with reference to either of these aspects.

What knowledge have the evaluations generated? Considering that the evaluation projects really constitute quite “narrow” sections of the operation, it is both difficult and hazardous to answer such a question in general terms. Both theoretical and empirical work would really be needed to this end. For the future, analysis of these kinds at regular intervals should be included in evaluation activities.²⁶ These should also include assessments of the use made of the evaluation findings (cf. below). An attempt will now nevertheless be made to make an assessment on an intuitive basis.

The analytical diagram above might lead one to suppose that good knowledge exists concerning the effect of both inspection and prescriptions. This is not the case. The projects indicated concerning the effects of inspection are partly a mixture of descriptive or theoretical overviews or else have a formative (process-oriented) emphasis. In certain cases there is some justification for saying that the Authority’s initiatives have influenced the work environment in a positive direction. On the other hand there are also instances to the contrary (or where, despite the Authority’s initiatives, development proved negative). On the prescription side, only one project has endeavoured to investigate the effect of a prescription as an independent steering instrument. The results showed that, despite fairly heavy information inputs, the prescriptions were little known in working life. Two of the three projects concerning effects of information suggest a certain positive influence from the initiatives. Generally, though, the choice of evaluation methods for all three steering instruments needs to be developed so as to arrive at more reliable results in measurements of effects.

The only firm knowledge we possess concerning different inspection methods and the results they generate is that we really know very little about the matter. For other parts of the analytical schema,

²⁶ Modelled perhaps on a publication from the Swedish Environmental Protection Agency: “21 utvärderingar – vad lär de oss? En syntes av ett antal utvärderingar på miljöområdet 2000 – 2003, Rapport 5366, May 2004.

the foundation is too slender for there to be any point in essaying even an intuitive account of the state of knowledge.

What use, then, has been made of the results generated by the evaluations? No firm knowledge exists on this point, for the simple reason that there have been no systematic studies in the field. As was mentioned at the end of the previous section, the current evaluation policy is under review, with the use of evaluation findings as an important area for improvement.

The use concept, however, presents a problem and there is an extensive body of research literature on the subject.²⁷ Basically, the Work Environment Authority's evaluations can be divided into three main categories:

1. Evaluations employing a purely theoretical approach or a mixture of theory and overarching descriptive approach.
2. Evaluations where the prime purpose is to report findings to an external interest (mainly the Government and Riksdag, i.e. Swedish parliament).
3. Evaluations intended to form the basis of internal decisions for developing activities.

The boundary between categories (2) and (3), of course, is not razor-sharp. In category (2) there is sometimes also a question of indirect use in the sense of evaluation findings being used for reporting, e.g. in the Authority's annual report, which in turn reaches the Government and Riksdag.

In category (3) there are examples of evaluation findings having been utilised. The evaluation of HAKO led to a decision to investigate in what way HAKO activities can be made more efficient. Examination of the handbook of inspection methods has led Department AI to take the initiative in starting a development project in the field. Evaluation of the first experiment with co-ordinated supervision of multi-district businesses has also been of some consequence for the new round of supervision in progress. But there are certainly also instances of results not having been used (in the sense of being translated into operative decisions). Perhaps what matters is not whether evaluation findings are used but that all the time a standpoint is actively adopted by the recipient. Ignoring the evaluation findings, partly or wholly, may be perfectly acceptable if there are good and clearly expressed reasons for so doing.

3 Thoughts concerning the future

3.1 *Evaluation – part of the organisation's analysis of outcomes*

In an article published in the bulletin *Arbetarskydd*, Professor Michael Tåhlin emphatically argued that all evaluation should be based on observing differences in results achieved between, on the one hand, condition where some type of intervention has occurred and, on the other hand, conditions where there has not been any intervention. The scientific experiment is portrayed as the ideal to be pursued. Unfortunately, Tåhlin maintained, work environment research has heeded this ideal insufficiently and instead has occupied itself with "action research". Here, Tåhlin argued, we see a world where there are only experimental groups in which the uniqueness of each person's experience is emphasised. Without

²⁷ Some examples: Björkemarmen, M - Implementeringsanalys som komplement till utvärderingen i fråga om perspektiv och förklaring. Doktorsavhandling vid sociologiska institutionen vid universitetet i Göteborg, Monografi nr 56, April 1995; Palmlund, I (ed.) - Utvärderingar i offentliga beslutsprocesser. Den offentliga förvaltningens roll i samhället (Liber, 1986); Alkin, M (ed.) - Debates on evaluation (Sage, 1990); Berk, RA/Rossi, PH - Thinking About Program Evaluation (Sage, 1990); Vedung, E - Utvärdering och de sex användningarna. In Rombach, B /Sahlin-Anderson, K - Från sanningssökande till styrmedel. Moderna utvärderingar i offentlig sektor (Nerenius & Santérus förlag, 1995).

comparisons, Thålin maintained, all evaluation becomes impossible, and without evaluation there can be no practical progress.²⁸

Although partly agreeing, we sought in a rebuttal to deny that the experiment had any sole prerogative of evaluating the results achieved. It could well be an ideal worth pursuing, but, we maintained, conditions are seldom ideal in reality. On the contrary there are often both substantial, economic and ethical reasons against such an approach. An approach based on case studies or analyses making comparisons between different points in time is often, we argued, the practical compromise which we are forced to work by. Besides, the emphasis of experimental design is on quantitative analysis, which usually answers questions of how and what but seldom questions of why. We therefore pleaded for a pluralism of method whereby the problem under consideration was allowed to decide which approach or approaches would be most fruitful.²⁹ This becomes clear, not least, if we are to preserve the ambition for evaluation activity to span all the dimensions referred to above (cf. tables 1 and 2). The clearest example of a quasi-experimental design during the period is the evaluation of the noise campaign. Otherwise the projects completed (with primary data of their own) contain a mixture of target-achievement or before-and-after evaluations.

The Administrative Affairs and Information Department (AD) includes a division (ADVUS) for Operational Development and Co-ordination. The core of ADVUS' responsibility is the formal management system. In the operational cycle of planning-implementation-follow-up, ADVUS has an important overarching responsibility for the first and final stages.³⁰ When an organisation is to perform an activity, a number of choices have to be made. To be able to do this, operational environment factors of different kinds should be taken into account. One such factor of importance is of course the traces left by previous initiatives and what those traces have to tell us concerning future choices of direction. The question of using performance information produced (follow-up/evaluation) is therefore pivotal.

As has already been observed, the use concept presents a problem. It would be going too far at present to delve into this subject more deeply. Earlier we noted that hitherto there has been no systematic follow-up of use, be it in terms of nature or degree. This is a deficiency which will have to be remedied. One natural context for considering this issue is in connection with a revision of current policy for evaluation activities. Evaluation activities need to be clarified as a part of performance analysis, which in turn is part of the formal management system. This propels one towards the standpoint that it is natural for decisions concerning evaluation activities (both programme and plan) to be taken at top management level. If so it is equally natural for a standpoint concerning the results generated by evaluation activities to be taken at the same level.

3.2 Effect magnitudes and structure of steering instruments

Disposition of the programme according to steering instruments (branches of activity) can convey the false impression of ambition stopping short at assessing their individual steering effect. In fact it is our endeavour to augment knowledge concerning the way in which the steering instruments at the

²⁸ Thålin, M – Utan jämförelse blir all utvärdering omöjlig, *Arbetarskydd* nr 12/2004. This article is a short digest of an article in *Ekonomisk Debatt* nr 2/2001 (“Trettio års arbetsmiljösatsning – till vad nytta?”), which prompted an exchange of opinions: von Otter, C – Om ”handling som forskning” – kommentarer till kritiken av arbetsmiljösatsningarna; Johansson, S/Mellander, E – Satsa på personalekonomi för att förbättra arbetsmiljön; Thålin, M – Svar till Johansson/Mellander och von Otter, *Ekonomisk Debatt* nr 3/2001.

²⁹ Eriksson, O/Schäfer, J - Metodologiska myter och fällor, *Arbetarskydd* nr 14/2004; Vi kan, vi vill, vi törs!, *Arbetarskydd* nr 1/2005.

³⁰ This year, prior to the planning of evaluation activities, ADVUS has introduced presentation of a document containing both a programme and a plan. The programme indicates a number of directions of principle for the coming four years, while the plan extracts from this a number of projects for the coming year.

Authority's disposal should be composed in order to produce the greatest possible effect at the least possible expense in different situations.³¹

The ambition must be viewed in the longer term, where it encounters major methodological and practical obstacles. As an inaugural measure, above all of methods development, the evaluation function has begun discussing and framing a project which, by a very preliminary assessment, will take updating of the Provisions on Chemical Hazards in the Working Environment as an application instance.

The idea is to focus inputs on a carefully designed sample of workplaces and in such a way that the effect of individual steering instruments or various combinations of such instruments can be rated. Even if an evaluation of this kind requires extensive preparations, a fairly long implementation time and greater resources than usual, one is not entitled to expect results of a kind permitting firm conclusions about the composition of steering instruments.

3.3 *Philosophy of supervision*

We have noted, recurrently and in various connections, that the "supervision" phenomenon has been sparsely researched. As regards the Authority's sphere of responsibility, we also have to admit that a working system of evaluation is lacking, which in turn helps to explain the very limited output of evaluation studies.³²

Not only is little known concerning history, current status and trends, the field also lacks players capable of contributing towards the discussion of such philosophically tinged aspects as conceptual development (not least the buzzwords efficiency, credibility, dependability, rule of law and uniformity, and also, for example, the conceptual array of risk-deficiency-stipulation and counselling), knowledge of incentives (e.g. human resource management, economics and norms) for improving work environments, the problematisation of steering instrument choices (including the basic impact theory for this field and the balance between proactive and corrective measures), the discussion of principles of selection (e.g. concerning focus on risk and considerations of general prevention), development of evaluation methods and bases of assessment.

The efforts made, for example, by the School of Public Administration, Göteborg University, to form a centre for research into supervision, and by the School of Work Environment Studies (Arbetsmiljöhögskolan), Lund University to evaluate work environment measures are more than welcome. Urgent consideration therefore needs to be given to ways in which a deeper study of the exercise of authority is to be organised and conducted.

3.4 *Other components*

Other fields of surveillance are entitled knowledge development and liaison with (selected) higher education establishments. Specific to the evaluative function is the justification that several of the "main lines" discussed are of such a kind that they have to be pursued by means of (commissioned applied) research. Within ADVUS we have noted that it is not infrequently hard to find suitable environments and persons for assignments to be allotted to. The value of liaison activity can also become apparent if and when the Work Environment Authority acquires the independent research

³¹ Evaluation of the noise campaign hints that inspection, in addition to its "own" effects, also leads to a high yield from the information tool.

³² See, e.g., Eriksson, O – Evaluation of interventions in the government sector in Sweden – a need for change, Policy & Practice in Health and Safety, 02. 1 2004.

budget which it longs for. Given the new political signals from the government which took office recently, this vision seems if anything to have become utopian.

In 2005 the Swedish Council for Working Life and Social Research (FAS) was commissioned to evaluate working life research in Sweden. The group of experts entrusted with the evaluation published its report recently.³³ Here we have chosen to concentrate exclusively on matters with a bearing on the present context. Part of the summary of the report reads as follows (p. 10):

“More systematic intervention studies are needed. There is a major need for development of scientific methods for determining the efficacy and effectiveness of interventions. It is also recommended to pay more attention to the use of appropriate study designs and methods for exposure and outcome assessment in intervention studies along with economic evaluation techniques. Interdisciplinarity is likely to be important to achieve this objective.”

It is unclear what the remit of evaluating Swedish work environment research implies for the prospects of obtaining special research funding. The final report to FAS is due not later than 31st October 2006, and if, as seems likely, the Government chooses to wait on the findings, raising of the barrier will not become possible until the end of the decade.

The evaluation function is also searching for a new forum of collegial interchange. Membership of and work in both national and international bodies shows object similarities to be more important than political culture/administrative system or perspective, methods and techniques. In other words, channels are needed for an exchange of ideas, experience and knowledge with evaluators of work environment supervision, above all within the circle of EU Member States. The appearance of *Tillsynsforum* is also a welcome addition, but we should not expect any of these agents to give prominence to the questions mentioned, except insofar as they are made a basis of orders from the Work Environment Authority.

One aspect of the link with the higher education community concerns the place occupied by work environment issues in higher education study programmes, above all, but not necessarily exclusively, in engineering degree study programmes. The available knowledge suggest that the state of things leaves a good deal to be desired.³⁴

An evaluative function with responsibilities extending throughout the authority cannot be foreign to the idea of also addressing the authority's internal management.

If the above mentioned overhaul of evaluation policy is to have any practical significance, it will have to go beyond codifying the prevailing administrative practice. The function must be given a development target and a firm strategy for achieving it, the purpose being to act more vigorously to increase the utilisation of outcome information.

Operationalisable targets at overarching level can indeed be formulated, but since they cannot be followed up (evaluated) continuously, it is more appropriate to discuss targets for individual projects.

The strategy for achieving the targets involves (a) the planning process (influence of potential users), (b) the technical quality of evaluations, (c) integration of follow-up and evaluation as part of the working day.

³³ Wegman, D et al. – International evaluation of Swedish work environment research, Swedish Council for Working Life and Social Research, November 2006.

³⁴ Uppdrag att utarbeta kunskapsstrategier. Rapport till Regeringskansliet 2003-11-07 (VUS 2003/23428); Arbetsmiljökunskap i högskoleutbildningar (unpublished conspectus, summer 2005).

But this apparently self-evident objective and simple strategy conceals a number of thorny problems. Apart from the question of level of aspiration (money and working time), they are also concerned with:

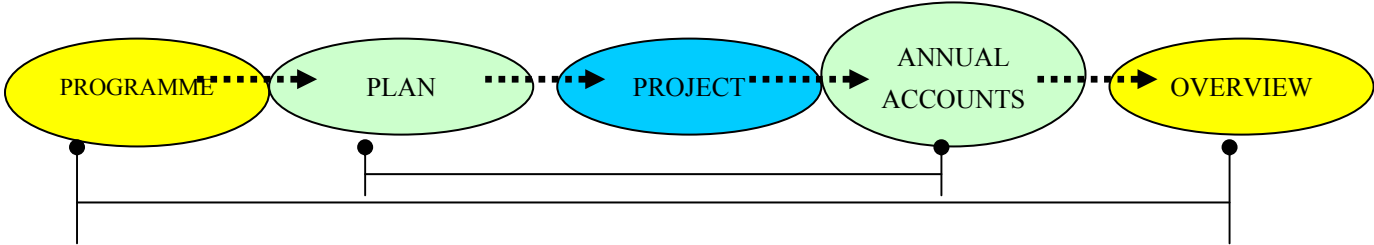
- Operationalising the targets so as to make them both distinct (giving them a steering effect) and amenable to evaluation.
- How the evaluation function should be organised in terms of allocation of responsibilities within and between departments: is evaluative competence to be concentrated within ADVUS and staffs or integrated so that the line will also participate?³⁵
- How ADVUS is to balance the requirements of acting as an independent subject critique (authoritative but soft-spoken) and at the same time acting to augment utilisation.

To a great extent this is because, ideally, the standpoints adopted should derive from the principles of internal management of the authority, but today there is a lack of clear declarations of intent or images of needs to go by.

The task of the evaluation function is to support operational development by problematising the same and to frame and implement evaluation projects based on a long-term strategy. We have judged four years to be a suitably proportioned period: it is still surveyable but at the same time long enough to make possible the framing and implementation of the individual projects required in order to achieve the knowledge targets. The programme must be a rolling one, with the planning period shifting by one year at a time. The aim is in future to draw up proposals for new programmes in the light of annual accounts (see below), needs inventories, operational environment analysis, experience of participation in the projects of other divisions or departments, relevant evaluation results from other authorities, audit reports, committee reports, codification of declared preferences and suchlike.

The programme is operationalised in annual *evaluation plans* based on priorities and an estimated suitable workload for coming years. The documentary structure is supplemented by *annual accounts* (the first of which will be presented at the beginning of 2007) of projects completed. These accounts are to show concrete outcomes, methodological experience gained from completed projects, and indications of new initiatives needed. As previously, outcomes etc. will also be presented in *overviews* covering longer periods, the present report being one such example. The intention, then, is for plans and annual accounts to correspond to each other in the same way as programmes and overviews are conceived of as doing.

The documentary structure:

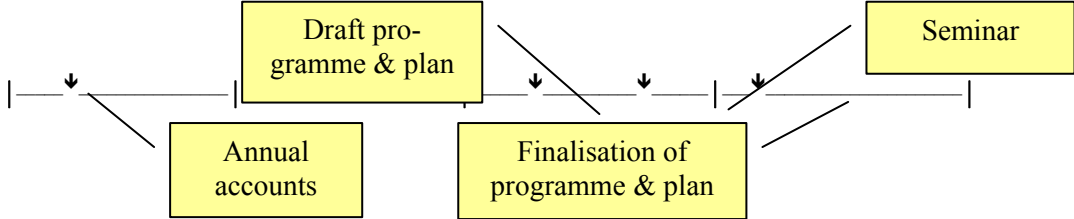


If we link up documents with planning process and presentation of outcomes, the first action during an individual calendar year will be the compilation of annual accounts (having the same structure as the evaluation plan for the preceding year). The annual accounts must be ready in time for the more important outcomes to be presented in the Authority’s annual report.

³⁵ The latest Budget Bill gives cause to consider a rewording of the Authority’s remit and an organisation to match.

Proposals for evaluation programmes and a plan for the coming year will be presented and discussed at an annual *strategy seminar*. Prior to the seminar, the current programme will be modified in the light of outcomes, newly arisen needs and declared preferences.

Annual rhythm of the evaluation function:



Documentary structure and decision-making procedures will be dealt with at greater length in a proposal for new *valuation guidelines* (in preparation). In the coming proposal, *use* (of evaluation information produced) will be highlighted as an overriding objective for the function. In order to give the analysis of outcomes (\approx follow-up and evaluation together) a clearer position in the internal management of the Authority, it is further proposed that the evaluation programme be approved by the Director-General and other documents (evaluation plan and annual accounts) by the head of ADVUS (barring organisational changes).

In consequence of the use target (and also, to some extent, of the manner in which decisions are taken), we also contemplate recommending a procedure for the handling of evaluation results. In our opinion, results of individual projects must always be presented (in suitable form) to the Authority management, which then has to evaluate the operational usefulness of the information and, if the results are found to call for action, indicate the organisational level which will be primarily responsible for translating them into policy measures.

Appendix 1: Evaluations completed 1999-2006

2006

- (1) Björkdahl, C - Arbetsmiljö tillsynens effekter på regelefterlevnad, arbetsmiljö och sjukfrånvaro. En litteraturöversikt. (AV-rapport 2006:8)
- (2) Eriksson, O – Utvärdering av utvecklingsprogrammet ARbetsorganisation och NEgativ stress (ARNE). Bakgrund – Sammanfattning av resultat – Slutsatser och rekommendationer (AV-rapport 2006:2)
- (3) Eriksson, O – Rekrytering och rekryteringsprocessen 2001/2003. An interim report on the evaluation of the development programme ARbetsorganisation NEgativ stress (ARNE) (AV-rapport 2006:3)
- (4) Spång-Rosén, E – Kompetensutveckling. An interim report on the evaluation of the development programme ARbetsorganisation NEgativ stress (ARNE) (AV-rapport 2006:4)
- (5) Frick, K/Bruhn, A/Lehto, A – Metodutveckling. An interim report on the evaluation of the development programme ARbetsorganisation NEgativ stress (ARNE) (AV-rapport 2006:5)
- (6) Björkdahl, C/Wesser-Herber, M/Hansson, S O – Utvärdering av Arbetsmiljöverkets tillsynskampanj 2005 – Bort med bullret (AV-rapport 2006:14)
- (7) Rydén, M-L – Metodutveckling av säkrare avslut av inspektioner, VUS 2005/31263

2005

- (8) Johnsson, H/Blomquist, A, Inregia AB - Arbetsmiljöverkets föreskrifter om Arbetsplatsens utformning - AFS 2000:42, Rapport June 2005
- (9) Eriksson, O/Schäfer, J - Basutbildningen i den nya tillsynsutbildningen. Tre utvärderingar, daterad 2005-05-03 (stencil)

2004

- (10) Eriksson, O et al. - Vad vet vi om effekterna av olika inspektionsmetoder? En rapport från projektet Effekter av inspektion, October 2004.
- (11) Hansson, S O/Lindberg, A-K, Filofsifienheten KTH - Utvärdering av Arbetsmiljöverkets haverikommission (AV-rapport 2004:5)

2003

- (12) Carlsson, R - En pilotstudie över hur föreskrifterna om belastningsergonomi tillämpas (AV-rapport 2003:10).
- (13) Lundqvist, K/Ahlgren, M - Försöksverksamhet med samordnad tillsyn av flerdistriktsföretag – en lärande utvärdering (AV-rapport 2003:9).
- (14) Isaksson, T et al. – Utvärdering av försöksverksamhet med olika sätt att utforma och lämna inspektionsmeddelande (Stencil, 2003-04-23)

- (15) Fröberg, M/Frost Danielsen, G – Utvärdering av omorganisation vid avdelningen CT, Arbetsmiljöverket (svenskt PA forum AB, stencil spring 2003)
- (16) Eriksson, O – Effektutvärderingar inom Arbetsmiljöverket, En beskrivning av insatser inom utvärderingsområdet (AV-rapport 2003:4)
- (17) Lindblom, L/Hansson S O – The Evaluation of Inspections (AV-rapport 2003:3)
- (18) Blomquist, A/Johnsson, H – Undersökning om Systematiskt arbetsmiljöarbete (Inregia Performance AB) (AV-rapport 2003:2)
- (19) Eriksson, O - Utvärdering av branschprogrammet Hälso- och sjukvård, AV/VUS PM 2003-01-23

2002

- (20) Karlsson, R et al. – Handböcker i tillsynen? – en utvärdering av desinfektionshandboken (AV-rapport 2002:9)
- (21) Eriksson, O/Lindberg, K – Regler inom arbetsmiljöområdet – om konsekvensutredningars kvalitet. Bakgrund, nuläge och förslag till förbättringar. (AV-rapport 2002:3)
- (22) Levin, R – Utvärdering av makrometoden vid AI i Malmö. (AV-rapport 2002:4)

2001

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