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Workers involvement in problem solving regarding occupational safety and working conditions: The Polish experience

Abstract

Employee involvement in solving the company's problems has become a certain standard at least in Western European countries. There even appeared a term defining company management with big involvement of employees and it is 'participatory management'. Employers perceive many benefits flowing from employee involvement in the company's management, which include rising productivity, quality or a stronger position of the company in the market. Among problems solved by employee teams there also appear those concerning work safety and hygiene.

The author's experience connected with operation of problem solving teams indicates explicitly that work safety and hygiene can be improved in a similar way. There could be quoted many arguments supporting direct employee involvement in such activity. They include their perfect familiarity with working conditions, activity in their own interest, possibility of shaping their own work environment, and so on. Such activities usually generate many small solutions, which are however important for employees. These are simultaneously solutions not requiring substantial outlays.

Introduction

The period after World War Two had a decisive influence on the rank and position held by employee participation in the company management. Earlier experience in this field – different in particular countries was tapped when preparing the domestic legislation. It could be best seen in the seventies, when new acts of law concerning this issue were passed or modified

considerably in many European countries. Those years can be treated as a breakthrough in the field of expanding employee participation. Such developments were due primarily to causes of economic nature. Namely, the development of participation was forced out by the biggest existing pressure, that is, economic pressure. Employers understood that participation carried numerous benefits for them and hence it is no wonder that these are employers who frequently advance initiatives of widening it¹.

There could be mentioned, among such benefits, the influence exerted by participation on releasing employee entrepreneurship and creativity. Employees' needs tend to change along with their improving education and skills, which are shifted towards higher and higher levels in the hierarchy of these needs such as the need for recognition or self-fulfilment. A condition for satisfying these needs is increased autonomy of employees in the workplace. A bigger autonomy means wider rights enjoyed by employees at the cost of management rights. But employee rights pave the way for their greater involvement and responsibility assumed by them for decisions taken. Thus, a bigger autonomy causes that work becomes creative and produces many original solutions.

Hence, it could be generally stated that employees' involvement in the company's problems is beneficial both for employees and for employers. Employees enjoy greater job satisfaction and a possibility of using their skills more effectively. In this way employees can participate in creating their own work environment. Such advantageous results scored by employees result in better economic effects and, thus, in better effectiveness, higher quality, reduction of production costs etc., which implies benefits for employers. It all leads to a greater effectiveness of the company in the market and it strengthens its position.

Such attitude of employees to their company's problems leads ultimately to emergence of the community of employee and management interests. A model of labour relations emerges, which is characterised by a small number of strikes or conflicts. This is a model, in which appearing problems can be identified and solved relatively early. Social partners in this model perceive their interrelationships, which strengthens the already mentioned community of interests. Their involvement in the company problems, in preserving its position

¹ The author formulates a thesis in his publications about an objective character of participation and industrial democracy processes. It should be understood in this way that the civilisation development forces out just such processes in long term (S. Rudolf, *The Objective Nature of the Democratisation Process in the Workplace*, „Comparative Labor Law Journal”, 1988, Vol. 9).

in the markets results from their awareness that when the company goes bankrupt both employees and management will lose work.

The above deliberations show explicitly that underdevelopment of employee participation is translated into economic effects scored by companies and their competitiveness. Companies eliminating employee participation do not tap a huge potential inherent in employees and they agree voluntarily to record worse effects.

1. Process of solving the company problems

Employee involvement in management of the company can assume different forms. We can most generally speak about indirect and direct forms of such participation². The latter include the so-called new forms of work organisation with a widened autonomy scope. These are primarily work organisation forms based on employee teams³ including, for instance, autonomous teams, 'quality circles,' task solving teams, and so on. Our further analysis will be focussed on problem solving teams. Such teams were appointed, for instance, in the framework of company programmes oriented at employee involvement in the company problems. There will be presented below an over ten-year experience of the author and his team derived from such programmes.

Collective work organisation forms are characterised most generally by two features. The first of them is a significant scope of autonomy possessed by the team. Irrespective of such type of collective work each team has to have a bigger or smaller scope of autonomy in such issues as identification of the company problems, choosing a problem to be solved, way of accomplishing tasks, right to decide or co-decide about the team's composition, choice of its leader, and so on. The other characteristic is voluntary participation in the team's activities. Employees cannot be induced to work in the team. Management, on

² The division criterion is here the mode in which employees participate in decisions. Such participation can take place through representatives elected by employees, for instance, in the company's management bodies (indirect forms). It can also involve direct employee participation in taking minor decisions on their jobs (direct forms).

³ Collective forms of work organisation appeared in the 1960s and they have been developing dynamically since that time. They became dominant forms in some countries. It is estimated that over 70% of employees work in such system in the United States, and 30% to 40% in West European countries. In Poland, on the other hand, after their rapid popularisation in the mid-1980s a regress took place in the early 1990s, and it is only recently that the interest in them has been increasing. It is estimated that about 10% of employees work in this system.

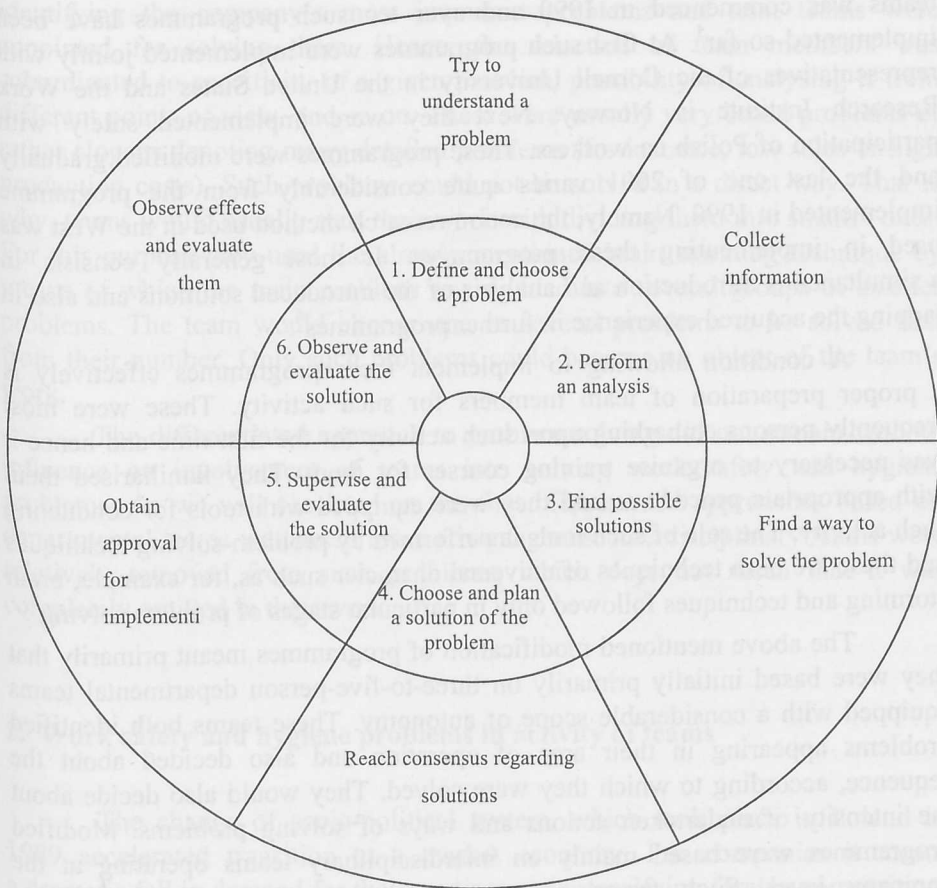
the other hand, can propose employees' participation in the team's work underlining the fact that the final decision is theirs. These are the two most universal characteristics referring to all types of teams.

Authors agree, in principle, that favourable results of team, work are connected primarily with the synergy effects. Namely, it has been recognised that the sum of knowledge and ideas of the team is always bigger than the sum of its individual, isolated members. Ideas or proposals uttered loudly are grasped, supplemented and enriched by the team's members producing numerous interesting solutions. It is also necessary to underline the fact that members of the team frequently represent different professions and they come from different departments of a given company. Consequently, solutions worked out by the team have a universal character and can be accepted by all departments. The team creates also a possibility of optimising solutions, which is due both to differentiated attitudes and also intellectual capabilities of its members. It creates also an opportunity for close collaboration and combined effort. It allows to put questions jointly and seek answers to them jointly. The team creates conditions releasing common enthusiasm and confidence in one's abilities. It also allows to overcome more easily defeats, which accompany all joint actions.

Further deliberations will be focussed on operation of teams oriented at solving the company's problems. Such activities accompany practically all types of teams mentioned earlier. Thus, they accompany both autonomous teams, for which it is an additional task alongside doing everyday jobs collectively. The teams usually meet once a week to discuss the most important problems and make attempts to solve them. It is the main object of activity of the so-called quality circles oriented at solving problems of their workplace. It is also the goal of activity of interdisciplinary problem-solving teams oriented at solving the company's most important problems. Thus, further deliberations will be connected primarily with the last mentioned type of teams.

The problem-solving process can assume the form of successive stages. The author used here a procedure composed of six such stages presenting them in the form of a problem-solving circle (Figure 1). The shape of this circle is to reflect the existence of a full cycle, which starts with identifying a problem and ends with an assessment of applied solution. Employee teams use diverse problem-solving techniques and perform different activities in the problem-solving process. More important of these activities are signalled in Figure 1.

Figure 1. Problem-solving circle



The following stages can be distinguished in this cycle⁴:

1. Identifying and choosing a problem to be solved;
2. Analysing the problem;
3. Seeking possible solutions;
4. Choosing the best solution;
5. Introducing the chosen solution;
6. Evaluating the introduced solution.

⁴ These stages are discussed in greater detail in: S. Rudolf, *Employee Entrepreneurship. Stages in Solving Problems*, in: *Entrepreneurship and Creative Thinking in Business*, University of Lodz, Lodz 2002.

The implementing of company programmes based on problem-solving teams was commenced in 1990 and over ten such programmes have been implemented so far⁵. At first such programmes were implemented jointly with representatives of the Cornell University in the United States and the Work Research Institute in Norway. Next they were implemented solely with participation of Polish co-workers. These programmes were modified gradually and the last one of 2001 varies quite considerably from the programme implemented in 1990. Namely, the action research method used in the West was used in implementing these programmes. It most generally consists in a simultaneous introduction and analysis of the introduced solutions and also in tapping the acquired experience in further programmes⁶.

A condition allowing to implement these programmes effectively is a proper preparation of team members for such activity. These were most frequently persons embarking upon such activity for the first time and hence it was necessary to organise training courses for them. They familiarised them with appropriate procedures and they were equipped with tools for conducting such activity. The role of such tools is performed by problem-solving techniques and these are both techniques of universal character such as, for example, brain storming and techniques followed only in particular stages of problem solving⁷.

The above mentioned modification of programmes meant primarily that they were based initially primarily on three-to-five-person departmental teams equipped with a considerable scope of autonomy. These teams both identified problems appearing in their area of operation and also decided about the sequence, according to which they were solved. They would also decide about the intensity of undertaken actions and ways of solving problems. Modified programmes were based mainly on interdisciplinary teams operating at the company level. Such teams composed of persons representing different organisational units were oriented at solving the most important company problems.

⁵ At first such programmes were implemented exclusively in state-owned enterprises, as a rule with a very difficult economic situation. Along with progress in privatisation processes in Poland such programmes were also implemented in private firms both those with good and very weak economic situation.

⁶ This method is most widely followed in the Scandinavian countries, although it can be also met in other countries of Western Europe, the USA or Australia (See: D. Greenwood, W. Whyte, *Participatory Action Research as a Process and a Goal*, „Human Relations” 1993, No 2; M. Elden, R. Chisholm, *Emerging Varieties of Action Research*, *ibid.*).

⁷ The biggest number of such techniques find application at the stage of problem analysis and they are used both for collecting information regularly and for preparing appropriate reports. There could be listed here, for instance, the chessboard technique, the Pareto diagram, graphs, and so on.

The implementing of modified programmes was starting with identifying the company's most important problems and next teams were appointed for solving them. Hence, the selection of team members was subordinated to specificity of a given problem, possibility of analysing it from different points of view, and so on. These were usually very broad problems or rather slogans denoting many detailed problems (for instance, low sales or high production costs). Such problems could not be solved in a direct way. That is why, teams would usually start their work with dividing them into smaller ones. For this purpose they used the already mentioned brain storming technique by means of which the main problem was divided into several groups of smaller problems. The team would choose one or several problems to be solved first from their number. Only such problems could become an object of the team's work.

The differentiated approach to problem solving did not remain without influence on involvement of teams into solving work safety and hygiene problems. As we will see later on the first of presented approaches based on departmental teams was much more advantageous. Interdisciplinary teams were relatively removed from such problems, which does not mean that it was completely omitted in their work.

2. Work safety and hygiene problems in activity of teams

The change of socio-political system, which took place in Poland in 1989 accelerated transition to a market economy. For companies it meant a dramatic fall in demand for their services and intensifying foreign competition. Hopes for a temporary character of these trends were not confirmed and some time later companies had to reduce their production volume drastically and next reduce employment. From that moment the vast majority of companies started making strenuous efforts to survive, to prolong their existence for successive months or weeks. Within just two years unemployment rose from its zero level to over 20%.

Deep economic recession faced by Poland caused that such issues as work safety and hygiene and working conditions became less important. After all, it is difficult to exact standards binding in this field if the company's days are counted, if money is missing for purchasing raw materials, and so on. Both company managers and sections responsible for improving work safety and hygiene, as well as employees realised it. The latter shared a view that it was better to have a dangerous job or a job harmful for health than none.

2.1. Experience of the Rubber Company „Fagum-Stomil” in Lodz

The experience of „Fagum-Stomil” stands in a clear contract with the above mentioned declining interest in work safety and hygiene problems. These problems became an object of interest among its employees in the framework of a programme aiming at effective improvement and preservation of jobs implemented there starting from September 1990. Within this programme, employees teams composed of three to five persons and appointed in particular departments attempted to identify existing problems and next solve them. It could be added that initially their members were delegated to this work on a full time basis for a three-month period. Economic and social effects of the programme were presented in other publications⁸. We would like to discuss here mainly its effects in the field of work safety and hygiene.

The already mentioned teams called effectiveness teams were equipped with a wide scope of autonomy both when identifying problems and when fixing the sequence of solving them. It should be noted that although the programme's main aim was improved effectiveness of the company, the teams were very frequently involved in problems connected with work safety and hygiene. It can be added that proposals of solutions advanced by them were carried out rapidly and it was due primarily to pressures exerted by employees. The proposals of this type were highly assessed by employees, who evaluated the work of teams just from the viewpoint of such solutions.

We will present below the accomplishment of selected effectiveness teams including all these proposals, which came to be implemented.

The semi-manufactures section team

- Modernization of sole-powdering and sole-beating carts. The carts used before were walled with metal plates on all sides as a result of which employees operating them worked in enormous dust. The working conditions improved fundamentally after the back plate was replaced with a net;

⁸ Experience connected with implementation of these programmes is described, for instance, in: L. Lazes, J. Johansen, S. Rudolf, *The Transformation of Polish Enterprises – Difficult Process*, „Economic and Industrial Democracy” 1992, Vol. 13; *Programme of Raising Effectiveness in Somil Company in Lodz*, „Ekonomika i Organizacja Przedsiębiorstwa” 1991, No. 9; *Company Adaptation Process to Market Economy Conditions*, „Studia Prawno-Ekonomiczne” 1993, Vol. XLVIII.

- **Change in the construction of belt vulcanisation carts.** Carts with mobile, flat plates proved unsuitable because a lot of belts were falling down or were damaged during their transport. The resultant waste amounted to 40-50 per cent. The metal plates were immobilised and raised by 3-4 cm, which contributed to improved quality of the product and safety of the operators who collect belts after their vulcanisation;
- **Replacement of blanking dies with an automatic stamping press.** The old, largely worn out dies were replaced with an automatic stamping press resulting in an increase in the output and a marked improvement in the working conditions. The blanking dies were dangerous to operate and there were frequent accidents.

Rubber footwear section team

- **Modernisation of the conveyor supplying the boots.** The conveyor used at present has no limiters in its upper part. Boots get screwed in and are damaged. If a boot gets screwed in it needs to be removed at once even though the machine is still working, which is very dangerous;
- **Introduction of trolleys to transport soles.** Previously female workers used to carry heavy sacks with soles on their backs. This work was strenuous and dangerous;
- **Construction of a new iron to press boots.** The old iron was heavy and caused frequent scalds. For lack of male operators, women often work at this workplace;
- **Preparation of suitably ventilated rooms to glue and lacquer boots.** Both operations are performed by hand in the fumes of glues and lacquers. Appropriate ventilation of these rooms would considerably improve the working conditions.

The injection section group

- **Containers to transport boots.** Previously women packers carried heavy cardboard boxes with boots to a place from which boots were trolleyed to the store. At present assorted boots are loaded directly from the workplace into containers on the trolley. This solution not only improved the organisation of work but also decreased the arduousness of work;

- **Installation of metal detecting device.** Such device is necessary for proper work of the granulating machine and for protecting operators from accidents. Interception of metal parts from the granulating material raises the quality of production and prevents such parts from spurting.

The sports footwear section

- **Replacement of a cutter with a pressing machine to cut uppers to sports boots.** In addition to a marked improvement in quality and considerable decline in strap, this solution leads to a marked improvement in work safety. Operations performed by means of the cutter are very dangerous due to a direct contact between this device and the operator. The automatic pressing machine eliminates this kind of menace
- **Change in the input forms at the injection, moulding machine.** The unification of the inputs results in the elimination of underflows or overflows in making soles to sports footwear, which reduces costs considerably. Elimination of overflows is of essential significance from the viewpoint of work safety. Overflows cause the necessity for the operator to tear the faulty sole off the machine, which is a very dangerous operation

Mixtures section group

- **Installation of a conveyor transporting the mixture.** This solution eliminates the hand cart used to transport mixtures from the store to the place where they are weighed and next to the taken to section. Operation of the cart is particularly dangerous in the vicinity of the rolling mill, for the operator feeding in the mixture is threatened with being pulled into the machine. This conveyor can eliminate most of these hazards
- **A deducting chamber.** Preparation of such a chamber for the employees would considerably improve their hygiene and would enable them to clean their working clothes to be used on the following day

The solutions presented above would have never been implemented without the action project. This experience shows that the employees are interested in improving the working conditions and occupational safety even at a time of such a deep recession. It is worth noting that many of the presented solutions resulted in both a considerable and measurable improvement in efficiency. Far more often, however, these solutions had an indirect influence on improvement in efficiency and hence their result is incommensurable.

The presented examples represent only a part of solutions proposed by employees and most frequently implemented⁹. Namely, it appeared that only a part of them were formally submitted as proposals of particular teams. Many others, most often minor solutions and mainly those, which were implemented at once, did not assume a formal character. Those proposals, mainly due to their mass character, brought about a significant improvement in work safety and hygiene, although they had never been recorded formally.

Stomil's experience seems to corroborate the thesis that improvement in occupational safety and working conditions is one of the most important ways to raise efficiency.

2.2. Experience of other companies

The already mentioned change in principles of implementing programmes caused that such problems as work safety and hygiene were more seldom tackled. As it was already said, departmental teams were replaced with the so-called problem teams appointed to solve the company's most important problems. Those were very complex problems, which could not be solved practically in a direct way. It was only their division into smaller problems, which made it possible for teams to undertake actions aimed at solving them. Among problems solved by teams were also such, which concerned work safety and hygiene.

Problems of this type were being solved, for instance, in a company making complex heat engineering installations. It was a joint stock company in a relatively good economic situation. Within the programme implemented there one team was requested to solve the following problem: „employees do not identify themselves with the company”. This problem was considered one of three most important problems for the company and it was decided that it would be solved first. There was appointed an eight-person team composed of people representing different departments in the company. The team started its work with dividing the problem into smaller ones. Brain storming permitted to

⁹ Namely, in reality these were proposals advanced by employees of different departments or sections and not only employee teams, because employee teams used widely remarks and proposals made by all employees either through individual talks held with them or discussions in small groups, or also through designing questionnaires dealing with this topic, which were next filled in by employees. Such forms of contacts between employee teams and employees included also general departmental meetings.

identify over 20 problems, with at least three of them concerning work safety and hygiene. These were the following problems:

- Inappropriate overalls for mechanics;
- Big threats to life and health on some jobs;
- Poor familiarity with work safety and hygiene regulations.

Two of these problems were an object of the team's work. The team paid especially a lot of attention to overalls. Inappropriate overalls combined with difficult working conditions of mechanics made their work very dangerous. The team worked in two directions. On the one hand, attempts were made to create overalls guaranteeing high safety level for mechanics and, on the other hand, overalls with high aesthetic values containing simultaneously visible elements of the company. The team members studied many products of this type, visited other companies, examined mechanics' opinions on this issue, and so on. Finally, completely new overalls were designed, which were extremely functional, contained proper pockets in right places, where small tools and measuring instruments could be placed. In this way there was eliminated their most important defect, that is, small functionality and their aesthetics were improved.

Another listed problem: „Big threats to life and health on some jobs” was also an object of studies by the team at least to some extent. The team identified the most dangerous jobs and initiated the company-wide discussion aimed at eliminating the existing threats. Most of the submitted proposals and postulates were implemented under supervision of experts in the field of work safety and hygiene.

A survey carried out at the end of one-year period in implementing this programme revealed that many changes were taking place including improved identification of employees with their company.

In another company dealing, among other things, with delivery of parcels to customers there could be heard remarks concerning arduousness of drivers' work for a long time. Their work was not only hard (delivering parcels frequently to the third or fourth floor in buildings without lifts or in skyscrapers with lifts out of order) but it was also dangerous. Namely, drivers were often assaulted. It was for this reason that many drivers abandoned jobs, which additionally made it very difficult to guarantee a high standard of services. The team, which was assigned this problem to solve, conducted talks with all employees providing such services, as well as consultations with other transport companies.

As a result, many proposals aimed at solving the problem emerged. A part of them were firmly rejected by management of the company, others were

implemented and still others are still an object of discussions. The company management rejected a postulate saying that all drivers should be equipped with gas weapons. Such postulate was made by some drivers although others opposed it. At first the team supported this postulate but in the light of management's arguments it gradually withdrew from it. Other proposals submitted by the team came to be implemented. The most important of them was equipping all cars with an appropriate system of communication with the company. At present drivers can be in a regular contact with the company transmitting information currently, and so on. Another solution particularly appreciated by drivers was equipping them with portable trolleys for transporting parcels. This solution not only reduced arduousness of their work but it also improved the quality of offered services, as well as effectiveness of drivers' work.

Examples of this type could be multiplied and work safety and hygiene problems were being solved in the framework of practically every implemented programme. It could be added that these were the problems which aroused a particularly big interest of teams and attempts to solve them were commented broadly by employees.

3. Participatory model of work safety and hygiene improvement

The effects of programmes discussed above allow to draw several interesting conclusions and make some generalisations. Applying them in practice can contribute significantly to the upgrading of work safety and hygiene standards in companies. The approach presented here departs considerably from the traditional way of ensuring these standards through introducing and monitoring relevant regulations in this field. The team activities presented above resemble TQM principles, where improving work safety and hygiene assumes a form of a long term process.

The main conclusion which could be drawn here is that it is necessary to arouse the interest in work safety and hygiene issues among employees themselves. They should be aware of a natural need to search for solutions in this field. Organisational forms of searching for such solutions can differ in particular companies or in particular countries, and they are not the most important here. Meanwhile, it is the most important challenge that a concern about work safety should become a natural need of employees, and that they should be characterised by an appropriate way of thinking about these issues.

There could be quoted many arguments in support of employees' direct involvement in improving their work safety and hygiene. They include such arguments as:

- Nobody knows better than employees their own work environment;
- These are primarily employees who experience negative consequences of negligence in the field of work safety and hygiene;
- Employees will conduct such activity in their own interest;
- Employees' involvement will generate proposals, which will most frequently concern small but simultaneously inexpensive solutions;
- Such activity leads ultimately to raising employees' knowledge and skills;
- A change takes place in the way they think about their company's problems;
- Employees participate in forming their own work environment.

Nobody can deny that employees are well familiarised with their company and, thus, also with conditions in which they work. It is due to the fact that these are most frequently persons, who have been working for the company even for twenty or thirty years. Nobody knows better than they the existing threats and difficulties, and these are employees who should have an opportunity to eliminate them. Experts hired from outside the company, for whom a given company and its problems are among many similar problems tackled by them, do not usually have such knowledge. A great deal of evidence shows that certain problems including occupational threats cannot be identified by nobody else but employees, who work there.

It is primarily due to the fact that these primarily employees who suffer consequences of existing threats or negligence in their workplace. Identifying such situations and submitting appropriate proposals or remarks how to eliminate them should lie in their interest. Experience shows that their role does not have to be limited to submitting such proposals. They can also counteract such situations. Employees do not always act in this way. Hence, it can happen that employees resign from showing concern about their interests fearing that they can lose their job or be nagged by their employers (for instance, an employee can be shifted to another job).

These remarks show that the concern about their own interests can be realised when employees are given a proper autonomy. Their autonomy allows them, in turn, to look differently at their own work environment, is allows them to look at it from an appropriate distance. New awareness emerging in this way makes it possible for employees to perceive all shortcomings and make attempts to eliminate them.

Launching the process of work safety and hygiene improvement in the workplace no matter whether employee teams accept this goal as the main one or a supplementary goal should bear fruit in very numerous proposals of changes or specific solutions. There can be expected here mainly minor solutions and such solutions, which can be introduced on their own without additional outlays or solutions requiring relatively small outlays. It is highly significant taking into account the fact that the process of upgrading work safety and hygiene in the company is usually costly and hence it encounters strong resistance on the part of employers. Activities of this kind such as those launched in the STOMIL Company did not arouse controversies mainly because they were relatively inexpensive and decisions to introduce the proposed solutions were taken by managers of departments, as such decisions lay in their powers.

The above programmes oriented solely at upgrading work safety and hygiene or more broadly at improving the company's effectiveness usually pave the way for improving employees' knowledge and skills. Such opinion refers, first of all, to members of teams, who owing to collected information and its analysis, and designing appropriate solutions can become experts in a given field. It can also happen that teams involve other employees in co-operation commissioning specific tasks to them or tapping their earlier experience. Ultimately, they derive numerous benefits from such co-operation.

The past experience shows explicitly that a direct involvement of employees in upgrading work safety and hygiene changes their attitude to their company and its problems. Employees can have a better insight into existing possibilities of their company, into existing conditions, its activity strategies and so on. Being able to exert an influence on decisions made in the company even if such influence concerns issues of minor importance causes that they start identifying themselves with its problems and show more understanding in the situation when difficulties appear. This situation allows to achieve what we call employees' identification with their company.

Such involvement of employees affords an opportunity for them to shape their broadly understood work environment. The concept implies both physical working conditions and also interhuman relationships existing in the workplace, employees' influence on decisions taken, and so on. Work safety and hygiene represents an important element of this environment.

It can be said in the light of the presented experience that employee involvement in the process of upgrading work safety and hygiene will probably not replace the work of company units directly responsible for these issues but it can support them. These units play an important role in every company, because they ensure the inflow of relevant knowledge and topical information in the field of work safety, they monitor the observance of obligatory standards and they constitute a channel for articulation of opinions and collecting remarks and proposals concerning these issues. Interest shown by employees in these problems can contribute to creating a favourable climate for such activity. Concern about work safety and hygiene can become an important element of work culture.

The source of described employees' involvement was mainly the fact that they could do something for themselves and their co-workers. Their activity was inspired by familiarity with arduousness of definite processes. Meanwhile, employers do not always realise how arduous these processes can be for employees. They do not know either how much satisfaction can be derived by employees even from small solutions in this field especially if they are proposed and introduced by employees themselves.

Initiatives of this kind can hope for support on the part of trade unions. The proposals advanced by teams described above received such support. But trade union support will not be sufficient here. Management must express consent for such activities and it is not easy to obtain such consent at least in Poland, because management perceive the improvement of work safety and hygiene from the viewpoint of costs. It should be remembered, however, that improving work safety does not have to be the main goal of undertaken programmes or activities. It can be an accompanying or hidden goal. It is particularly advisable here to link effectiveness improvement with work safety and hygiene improvement. Implementing such programmes, in particular, in longer periods should create natural associations between them. Ultimately, improving work safety and hygiene will no longer be associated with costs and it will be perceived in categories of effectiveness improvement.