CHAPTER 5

5. ADDRESSING THE KEY ISSUES

As stated previously the fifteen major issues that required improvement were:

1. Salary
2. Staff Shortage
3. Leave
4. Blocked telephones
5. Low level of Motivation
6. Work over weekends and overtime is badly planned – not optimised.
7. Not enough time to give best service or more than adequate service.
8. Implementation of decisions/solutions. Not everyone is involved.
9. Inadequate time and opportunities for learning. No time for individual professional growth or interests.
10. Lack of equipment – not repaired, dirty and not maintained.
11. Dirty environment – not because of a shortage of staff.
12. Stress.
13. Teambuilding exercises, courses and congresses.
14. Communication – staff do not always know what is going on.
15. Career development of assistants.

This chapter discusses how the Physiotherapy Department addressed these issues.

5.1 SALARY

Salary is something the department could not change as salaries are dependent on the Gauteng Department of Health. It was however decided to show appreciation of the physiotherapists, by developing a recognition system. It would probably not be possible to do this by paying them a bonus but could possibly be done by sending the physiotherapists on courses; conferences or congresses.

5.2 STAFF SHORTAGES

Under this heading the other issues also addressed are:

- Inadequate time to give optimal service (7)
- Inadequate time and opportunities for learning (9)
- Stress (12) and
- Career development of assistants (15)

After statistically analysing the timesheets, it became apparent that there was indeed a capacity constraint. The theory on capacity constraints and capacity planning was investigated to determine an approach to the problem.

5.2.1 Capacity planning

A definition of capacity:

Capacity is the rate at which the system can provide a service.

A definition of load:

Load is the rate at which patients impose on the system (Russel and Taylor, 2000).

To do capacity planning one needs to look at capacity as dependent on the production requirements or the specific load. The Physiotherapy Department needs to treat all the hospital patients in the various treatment areas that require physiotherapy treatment. The number of physiotherapists available defines the capacity. The number of patients that require physiotherapy defines the load. The objective of strategic capacity planning is to determine the overall level of resources required, that will best support the departments long-range objective. In the Physiotherapy Department, the long-range objective as defined in the vision, is to provide an optimal service while still maintaining a learning environment. Capacity levels have a critical impact on the organisation's ability to react, the cost structure as well as the management and staff support requirements. Inadequate capacity as well as excess capacity would have a negative impact.

If capacity is not adequate in the Physiotherapy Department, the result is that some patients are not treated or some treatments are inadequate. This has an impact on the long term cost of patient care. Optimal physiotherapy interventions can reduce hospitalisation times.

If capacity were excessive, the physiotherapists would be under-utilised. Due to financial constraints, it would not be possible for the hospital to maintain under-utilised

staff, as there are many other expenses in a hospital to be considered. Maintenance of many other services and equipment is required in the hospital.

The optimal operating level needs to be established. This is the level of capacity where the process works at the lowest cost for the volume of output required.

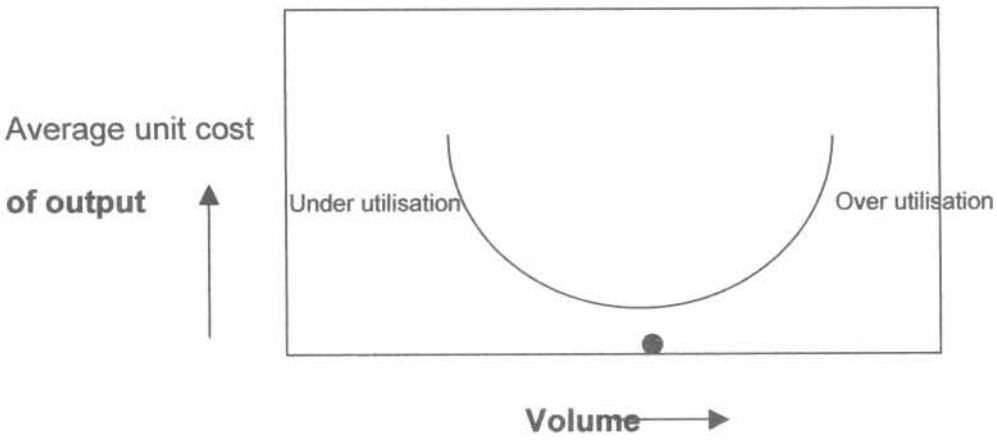

Figure 1: Best operating level

Service capacity is time and location dependent. Services cannot be stored; the capacity must be available when required. The Physiotherapy Department can treat some patients later but this leads to cost implications with patients remaining in hospitals for longer periods. For some patients, delayed treatment could have an impact on rehabilitation outcome.

When planning capacity in the service environment it is important to consider the relationship between the service utilisation and quality. The best operating point is near 70% of the maximum capacity (Chase and Aquilano, 1995). This operating level

provides enough time to serve customers individually without creating major capacity constraints when unexpected demand should occur. A capacity cushion should be in place to deal with sudden and unexpected demand. To determine the capacity requirements of the Physiotherapy Department, the time the department is required to spend in treatment or direct patient care, was determined. By analysing the current trend in increased admissions due to chronic disease linked to HIV/AIDS and the forecasted, increase in HIV/AIDS it is clear that the need for physiotherapy treatments will increase. Based on the statistical analyses there is currently a capacity constraint in the Physiotherapy Department. The Physiotherapy Department is operating with a negative capacity cushion.

Demand is far more volatile in a service environment. The processing time of each customer or patient is also a variable that differs according to the needs of each patient. In a hospital, the demand is also volatile as seasons have an influence on the demand. In winter months or immediately after the festive periods, there is typically a higher demand for treatment. When the operating point goes above 70% the quality of treatment typically declines. Therefore, one of the essential considerations when planning capacity for services is the effect of capacity on the quality of service. In health care, planning resource levels is difficult due to the volatility of demand and the pressures of cost containment as well as the consequences of inadequate capacity. In this document the capacity calculations were at 100% utilisation and not at the suggested 70% as would be preferable.

When deciding about what level to increase capacity to, the following needs to be considered:

- The certainty and volume of the anticipated demand
- The departments strategic objectives in terms of growth and quality of service
- Cost implications of expanding or not expanding

In the Physiotherapy Department, it is clear that capacity is not adequate to meet the current demand. It is also clear that the trend is for the demand to increase. It could be useful to do further investigations to determine the anticipated demand and calculate the optimal capacity levels based on that.

Possible solutions are:

- Create a floating unit, which could move between any treatment area as demand changes.
- To initiate the recruiting process as soon as the number of physiotherapists drops below 29 physiotherapists based on the current demand. The recruiting process should start as soon as the number of available physiotherapists is less than five below the required number for the demand.

5.3 LEAVE

The leave allocation problem is very severe, contractual leave benefits are currently being systematically eroded, in practice to mitigate the effects of understaffing. Huge accumulations of untaken leave result.

The various types of leave to take into consideration are:

- Normal leave, 30 days
- Study leave days
- Special leave for sport, courses, conferences and congresses
- Sick Leave
- Unpaid leave and
- Maternity leave

During the workshops, the participants indicated the minimum number of physiotherapists needed in each treatment area at any point in time.

The table below indicates the results of this:

Table 11: Number of physiotherapists required

Treatment Area	Number of Physiotherapists
ICU	2.5
Paediatric	1.5
Medical	1.5

Surgical	1.5
Orthopaedic	1.5
Neurology	2.5
OPD	0.25
Exercise rehabilitation	0.25

In the table above 0.5 or 0.25 implies half or quarter of a day is required of a physiotherapist and not a physiotherapy assistant. Similar requirements for the number of physiotherapy assistants in each treatment area on a daily basis are not available currently.

The above also indicates that at any point in time at least 11.5 physiotherapists are required to be present in the hospital. Approval of leave is therefore dependent on the number of physiotherapists that will be available in the hospital at any point in time. Leave allocation needs to be according to the requirements of each treatment area. Problems identified with the above were that in the medical area there are only 1.5 physiotherapists anyway and nobody really wants to work in that area. During the workshop, the agreement was that all the physiotherapists would be willing to work in the medical area on a rotation basis when one of the physiotherapists in that area was on leave. Physiotherapists also agreed that they would take turns when taking times off during the most popular leave periods such as over Christmas. Physiotherapists

involved in post-graduate studies unfortunately also have to take study leave at the end of the year. This was another problem that created much frustration.

It is therefore essential that leave be co-ordinated from a central point to ensure that there are enough physiotherapists in the hospital at any given point in time. It is also important to ensure that leave is allocated fairly to all staff members and that a few individuals do not always go on leave in December while others always have to work during that time. By monitoring the leave centrally, it would immediately become apparent when there is a problem with the number of physiotherapists in the department. The involved treatment area would be alerted to the need immediately and it might be possible to make alternative arrangements. Alternative arrangements would be to scale down on some treatments or by obtaining physiotherapists to help, from other hospitals in the vicinity, on a short-term relief basis if possible.

The head of the Physiotherapy Department motivated for the position of an Assistant Director of the Physiotherapy Department. The duties of the Assistant Director included the control of all leave for staff in the department. To assist the Physiotherapy Department with the planning of leave, a leave schedule was developed in Excel. When a physiotherapist applied for leave the Assistant Director enters an L in the spreadsheet at the relevant dates. Excel Formulas then calculated the number of Physiotherapists that are available in the hospital at that time and it also calculates the

number of days each used for leave. (See Appendix 2 for example of the leave schedule for January.)

5.4 BLOCKED PHONES

To address the problem of blocked telephones the University made their telephones available for emergency telephone calls for hospital staff. As the university's Physiotherapy Department is next to the hospital's Physiotherapy Department this was easily arranged. The department also applied for a public telephone from Telkom to be located in the staff room. This has proven to be a very lengthy exercise. Installation was still not completed eight months after applying.

5.5 LOW LEVEL OF MOTIVATION

An investigation of a few of the motivational theories could help to address low motivation and determine ways to improve motivation. It is important to understand the various theories because normally they need adjustment to suit the specific environment and usually a combination of theories may be required.

It is very important for any organisation to try to ensure that employees are motivated as motivated workers want to deliver high quality services and they are more likely to be productive. Unfortunately, there is no standard set of principles to apply to ensure that employees are motivated.

5.5.1 Motivational Content Theories

There are two categories of motivational theories; they are the content and the process theories. This section will first describe the content theories and thereafter discuss the process theories. The content theories focus on factors within the person and tries to determine the specific needs that motivate them. Some of the most commonly used content theories are Maslow's need hierarchy, Alderfer's ERG theory, Herzberg's two-factor theory and McClelland's learned needs theory (Gibson, Ivancevich, Donnelly, 1994) .

5.5.1.1 Maslow's need hierarchy

Maslow's need hierarchy defines five levels of basic needs that drive motivation (Gibson et al, 1994) .

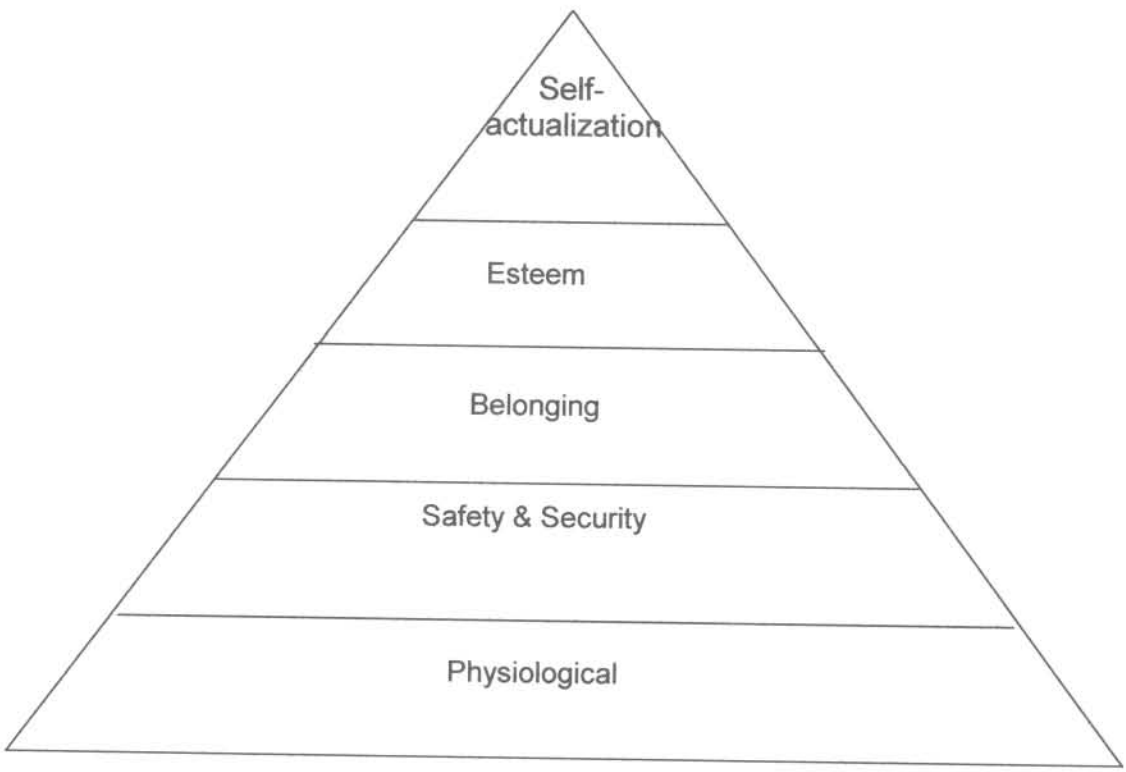

Figure 2: Maslow's Need Hierarchy

Physiological - the need for food drink shelter and the relief from pain

Safety and security – the need for security from threatening events and surroundings

Belonging, social and love – the need for friendship, interaction and love

Esteem – the need for self esteem and esteem from others

Self–actualisation – the need to fulfil oneself; by maximising the use of abilities, skills and potential.

In the Physiotherapy Department, one of the major concerns was the lack of time for further development. As one of the main reasons for physiotherapists to work in the state-funded hospital was to develop optimally, they could not meet their need for self-actualisation when there is capacity constraints. As time is a problem and individuals can not reach this goal, this affects their motivation.

5.5.1.2 Alderfer's ERG theory

Alderfer agrees with Maslow that needs is hierarchical but suggests that the need hierarchy only involves three sets of needs and they are (Gibson et al, 1994):

- Existence – the need for food, water, pay and working conditions
- Relatedness – the need for meaningful social and interpersonal relationships
- Growth – the need to make creative and productive contributions

In the Physiotherapy Department, there is a need for relatedness and a need for growth. Again, capacity constraints affect both of these, as there is not enough time to get to know colleagues or to learn, as they would like to. The capacity levels of the department would therefore affect these motivational issues.

5.5.1.3 Herzberg's two-factor theory

Herzberg's two-factor theory (Gibson et al, 1994), the two factors referred to here are the dissatisfiers-satisfiers also called the hygiene-motivators or extrinsic-intrinsic factors. Two conclusions he made from the initial study were that:

There is firstly a set of extrinsic conditions such as salary, job security, working conditions, status, company procedures, quality of supervision and quality of interpersonal relations. If these are present, they do not necessarily motivate employees but if they are absent, they result in dissatisfaction among employees. Because these ensure that employees are not dissatisfied, they are the dissatisfiers or hygiene factors.

Secondly, there is a set of intrinsic conditions such as achievement, recognition, responsibility, the opportunity for growth and the work itself. The absence of these conditions does not necessarily lead to dissatisfied employees but when they are present, they build strong levels of motivation. Therefore, these are satisfiers or motivators.

Extrinsic factors affecting the physiotherapists are salary, job security, working conditions, quality of supervision and quality of interpersonal relations. When looking at issues raised by the physiotherapists it is clear that these factors are not favourable in the Physiotherapy Department. Nearly all these factors are negatives for physiotherapists. Salary and working conditions were specific complaints raised by the

physiotherapists. Job security is high but capacity constraints affect the quality of supervision as well as quality of interpersonal relationships.

Intrinsic factors affecting the physiotherapists are achievement, recognition, responsibility, the opportunity for growth and the work itself. The physiotherapists have a large amount of responsibility and mostly they enjoy the work itself. Problems in this specific environment are recognition of effort as well as professional growth.

5.5.1.4 McClelland's learned needs theory

McClelland's learned needs theory (Gibson et al, 1994) is closely related with learning concepts. He believes that the development of many needs is due to the culture of a society. Three of these learned needs are the need for achievement, the need for affiliation and the need for power. McClelland proposes that when one of these learned needs are strong in a person, its effect is to motivate the person to use behaviour leading to its satisfaction. For example a worker with a high need for achievement would set challenging goals and use skills and abilities to achieve them (Gibson et al, 1994). McClelland also claims that the need for achievement can be learned and therefore the development is possible by providing training. This should improve motivation and the level of performance of the employees.

As discussed before the physiotherapists mostly have a high need for development and achievement. The circumstances are not very favourable for the physiotherapists to achieve the goals set out by them.

5.5.2 Motivational Process Theories

The process theories look at external factors that motivate individuals. There are four process motivation theories (Gibson et al, 1994). The major process theories are:

- reinforcement
- expectancy
- equity
- goal setting

5.5.2.1 The reinforcement theory

The reinforcement theory (Gibson et al, 1994) is based on the fact that consequences influence behaviour. Behaviour modification is individual learning by reinforcement. Organisational behaviour modification is the systematic reinforcement of desirable organisational behaviour and the non-reinforcement or punishment of undesirable organisational behaviour. Therefore, for instance financial rewards or personal recognition could reinforce positive behaviour. Punishment occurs when something positive is taken away and this weakens the behaviour.

5.5.2.2 The expectancy theory

Expectancy refers to the belief that a particular result will follow a particular action. The probability of the result is also an important consideration. The expectancy theory (Gibson et al, 1994) sees behaviour, as the result of what employees believe will happen in the future. Three major principles derived from the expectancy theories are:

- Performance is a function of motivation and ability;
- Motivation is a function of a person's preference for a particular outcome, resulting from the behaviour and the expectancy that a particular outcome will follow the particular behaviour;
- The person's preference for a particular outcome is a function of the total preference to rewards and punishments that the particular outcome is likely to produce. The level to which the particular outcome is instrumental to achieve a reward or punishment also influences the person's preference.

By using this theory, it is possible to develop motivational programs. First it needs to be determined what the rewards or punishments are that are important to employees. Then the managers should link the rewards or punishment to specific outcomes such as productivity or absenteeism. Actions as well as words should make the probability of a reward or punishment occurring after a specific outcome clear.

5.5.2.3 The equity theory

The equity theory (Gibson et al, 1994) assumes that employees compare their efforts and rewards with others in the similar work situations. If an individual therefore works for rewards in a company, they would like to know that treatment of all is equitably at work. Equity exists if an individual feels that the ratio between their effort and rewards are equivalent to the efforts and rewards of other employees.

The head of the Physiotherapy Department should be aware of this and put mechanisms in place to ensure equity. As it is not possible to reward individuals financially for their efforts, rewards should be changed in such a way that the individuals feel that the rewards are in line with the rewards of other employees in the same field, for the same amount of effort. Specifically learning or training opportunities would be a favourable way to reward physiotherapists in this environment as often that is the sole reason for wanting to work in a training hospital.

5.5.2.4 Conclusion

All three of the above theories clearly indicate a need for a recognition system in the Physiotherapy Department. The recognition systems must be clearly communicated to all and address the needs of the various individuals.

5.5.2.5 The goal-setting theory

The goal setting theory (Gibson et al, 1994) suggests that an individuals main goals and intentions are the primary determinants of behaviour. To establish a goal-setting program the management needs to determine whether the people, organisation and technology are suited for such a program. Then employees need to be prepared for such a program by increasing the interpersonal interactions, communication, training and action plans for the goal setting program. Managers and subordinates need to emphasise attributes of the goals they need to understand. Based on intermediate reviews adjustments can be made to establish goals. Final reviews will assist to check whether goals are set, modified and accomplished. The goal difficulty and acceptance are important aspects to consider when establishing this program.

The Physiotherapy Department should first try to change the environment, then establish a recognition system and then thereafter establish whether a goal setting program is appropriate.

5.5.3 The Managers Role

Managers do however have an impact on the motivation of employees and they should intervene to establish an atmosphere that encourages, supports and sustains improvement. Ability, competence and opportunity play a role in motivation. Managers ought to be sensitive to the variation of individuals' specific needs, abilities and goals. As role models, managers can influence employees. When employees note that valued

outcomes can be realised through performance, a major component of the motivation strategy has been successful. Goals that direct behaviour also form an important part of a motivational program. Also managers should try to provide jobs that offer equity, task challenge, diversity and a range of opportunities to satisfy individual needs.

Based on all the theory of motivation it comes as no surprise that the physiotherapists have a problem with motivation. To change this the head of the Physiotherapy Department needs to make as many of the negatives into positives or at least into acceptable standards to ensure higher levels of motivation. Although it may not be possible to address the salary issue, if all the other factors are more favourable it would have a definite influence on the motivation of the individuals. Firstly the working conditions need to be addressed then the capacity constraints have to be addressed and then learning and development opportunities need to be created.

Then it would be favourable to use the process theories to help motivate the physiotherapists. The recognition system established should take into account the specific needs and constraints within the Physiotherapy Department. A recognition system would reinforce positive behaviour. The whole department should be aware of the recognition when given to an individual. The recognition system should also include appropriate actions against individuals when they behave in a negative or unacceptable way. It may be appropriate to set up a questionnaire to determine what appropriate rewards or punishment would be in this environment. All employees in the department should know exactly what the result would be of good or poor performance.

5.6 OVERTIME WORK

The planning, scheduling and co-ordination of overtime work are currently a problem. A physiotherapist must be available for work after hours but may sometimes be called out to do non-critical work that could just as easily have waited for normal working hours. This causes enormous frustration, as there is no financial reward for work outside of the normal working hours.

A list needs to be compiled of the critical treatments that should be performed over weekends or after hours. The supervisors should meet with the medical staff of each treatment area and they should be clear on what the critical treatments are in that area that will respond to physiotherapy. A knowledgeable individual needs to assess the patients and contact physiotherapists according to critical needs.

5.7 LACK OF EQUIPMENT

Maintenance of equipment is inadequate in the Physiotherapy Department. This results in an unnecessary reduction of the equipment life cycle. The reduced life cycle of equipment could have significant consequences. Some of the equipment is essential for treatment. The effect of not being able to provide these treatments, due to unavailable equipment, has an effect on the quality of life of patients.

The department compiled a list of all the equipment in the department. The Physiotherapy Department has to develop a maintenance plan for their equipment. It would be optimal to adopt a preventative maintenance plan. The maintenance plan will help to ensure that there is no disruption of treatment due to malfunctioning equipment. A time-based maintenance plan will be optimal in the Physiotherapy Department. A further investigation should determine the optimal time intervals for this type of maintenance plan. Factors to consider in determining the time intervals are:

- The time intervals within which the equipment will work optimally,
- The cost of maintenance versus the cost of not maintaining equipment,
- Money available annually for maintenance as well as
- Equipment that is most critical.

The optimal time period for a piece of equipment to work can be determined in conjunction with the manufacturer.

The Assistant Director is responsible for the annual budget for the department and needs to incorporate a section for maintenance of equipment.

5.8 DIRTY ENVIRONMENT

To address the dirty environment the Physiotherapy Department was repainted. The head of the Physiotherapy Department called a meeting with the cleaning staff and made it very clear that it was unacceptable to have a dirty department. The head of the

department said that she would take appropriate action unless a change was apparent. Several incidents occurred involving a specific cleaning lady. The head of the department fired her and that seemed to have a positive impact on the group's performance. The department locked the toilets for a period with the arrangement that the keys were obtainable from a secretary. Due to internal politics this arrangement ended and within one day someone stole all the toilet seats and toilet paper and the place was dirty again.

5.9 TEAMBUILDING

Due to time constraints, there has not been time for teambuilding exercises. The department has however made an effort to hold a year-end function and ensuring that all the members could be present. A secretary decorated the staff room to change it into a less clinical environment. New curtains were donated to the staff room by one of the suppliers of medical equipment. The chairs were also arranged in a informal conversational manner. This seems to have attracted more staff to the staff room at lunch and tea breaks. The staff room is for the physiotherapists to use when they have a break. This is often the only contact the physiotherapists have with physiotherapists in other treatment areas.

It may be possible to do teambuilding exercises without incurring high costs. It may be beneficial to use students from other environments such as Industrial Psychology to do

the teambuilding exercises with the department. The Assistant Director could investigate such an option for the next year-end function.

5.10 COMMUNICATION

Issues discussed under this point are:

- Communication (14) and
- Implementing decisions taken (8)

This issue was another reason to motivate for the position of Assistant Director. A senior physiotherapist filled this position. Other duties included in this profile is to attend and participate in management meetings, co-ordinate and manage physiotherapy services. This individual will also be responsible to ensure that communication is open between physiotherapists and that decisions taken are communicated and implemented.