Implementing Safety Management Systems: Stakeholder Alignment

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Abstract

Considerable investment is being made throughout the country into the development of Safety Management Systems (SMS). Very few, if any of these systems have been fully implemented and we are developing the documents and process. The full effect of these systems will not be realised until they are implemented. Implementing a SMS involves documented systems and processes etc. It also involves a number of stakeholders with different roles, from a number of organisations.

This paper explores how we might change the culture of the stakeholder organisations to achieve alignment to the purpose or aim of the SMS. It draws on the knowledge available from texts that address change management in organisations.

An example of how Safety Intervention Plans might be developed and implemented using the principles for purposeful alignment is discussed in the paper.

The conclusion is that successful implementation of an SMS requires considerable time and effort beyond the production of the document. Alignment of stakeholders to the purpose of the SMS will optimise the effectiveness of the SMS and it will result in a change in the culture of the organisations involved.

Implementing Safety Management Systems

Introduction

Safety Management Systems (SMS's) are being developed and implemented throughout New Zealand. SMS's are a means to achieve a systematic approach to improving road safety. They generally include a strategy, system and means of delivery, and review. The aims of the SMS's generally include words that indicate that best practice is to be used to provide a safe road network.

At present very few if any SMS's have been fully implemented and the documents and process are being developed in an iterative process. The aims of the people developing the SMS's are laudable and they are producing technically sound documents. The full effect of the SMS's will not be realised until they are implemented. This implementation process includes documented systems and processes etc. If, however, we are to optimise the benefits of the SMS's that are being developed, we need to recognise that implementation of SMS's is not limited to the systems and processes, the utilisation of appropriately trained and experienced people, or the actions of the technical boffins within Road Controlling Authorities and Consultants.

Successful implementation of SMS's relies on input from all stakeholders. To achieve the outputs desired from SMS's we need to make all stakeholders aware of the SMS before they can be expected to participate in any way in the SMS. There is a need for a change in the culture or the alignment of stakeholders before the outputs desired can be fully achieved. It is the authors opinion that there are few if any Councils that have achieved this change in culture in the stakeholders directly involved in the implementation of SMS's, let alone all stakeholders. Too often, SMS awareness is limited to one or two people within the Council or Consultants and the desired outcomes are unlikely to be achieved within a reasonable timeframe.

This paper is focused on how we may achieve a change in the culture

Who are the Stakeholders?

The stakeholders for any SMS are all the road users on the road network however some stakeholders will be more directly involved in the implementation of the SMS than others. The direct stakeholders are the Council politicians and staff, consultants and contractors. Other stakeholders include organisations such as LTSA, Transfund, Police, and motorist's organisations such as AA and RTA, as well as all the other road users including businesses, organisations, schools and the general public.

The direct stakeholders are the people who are directly involved in the management, maintenance and construction of the road network. There are a number of the other stakeholders who have a close involvement in the management of the road network. All stakeholders are road users and will benefit from a safer road network.

Stakeholder Roles

As stated earlier, the direct stakeholders are the people and organisations who are directly responsible for the management, maintenance and improvements to the road network. Politicians are individuals of influence within the communities that they serve, as well as being responsible for the allocation of funding between competing sectors and projects within council. They have contact with a large network of individuals and organisations in both formal and informal situations. Councillors, in effect, have to decide whether SMS implementation and subsequent road improvements should be funded ahead of other competing demands such as water supply or sewage upgrades.

Council staff and consultants are responsible for identifying, making recommendations for funding and ensuring the implementation of maintenance and construction work on the road is dealt with appropriately and in a timely manner. Included in this role is a need to understand the political process and the ability to sell the SMS to politicians and other stakeholders. They also are involved in a range of other work both on and adjacent to the road that can influence the road environment. Contractors maintain and construct roads through contracts with Council.

If all of the direct stakeholders are fully aware of the SMS, they will be enabled to undertake their roles in a manner which will have a positive effect on road safety.

The other stakeholders have an important role to play in ensuring that the SMS is effective because they can make the road controlling authority aware of crash sites and safety issues on the road. To achieve this role, stakeholders need to be aware of the SMS and their role in road safety.

Stakeholder Alignment

It is unwise to assume that road safety is a strong driver for all stakeholders. While it is likely that if you asked stakeholders, they would agree that road safety is important to themselves and the organisations that they represent, a closer examination of behaviours and actions may indicate that this is not demonstrated by their actions. If we are to achieve the purpose of any SMS it is important that stakeholder alignment is achieved. While stakeholders do not all belong to the one organisation, we can apply some of the principles from management to align the cultures of the organisations involved in implementing SMS's, particularly the culture of the direct stakeholder organisations.

There are a number of references that consider change management in organisations and they tend to express the same basic philosophy in a number of similar ways. In one of these references, Molden and Symes have developed eight principles for purposeful alignment and this text has been quoted in order to highlight the key issues. The eight principles are::

- 1. "Success starts with clarity of purpose.
- 2. Alignment transforms energy into effectiveness.
- 3. Respect is the beginning of understanding.
- 4. Curiosity is the beginning of all difference.
- 5. Flexibility is the beginning of freedom.

- 6. Education is the key to releasing potential.
- 7. None of us is as smart as all of us.
- 8. Be thorough and unrelenting with issues."¹

To enable a better understanding of the 8 principles of purposeful alignment it is worth discussing them in the context of SMS's.

1. Success starts with clarity of purpose

Every SMS should have a statement of purpose, or an aim. The purpose or aim is likely to be a statement of action related to improving road safety. While the aim may be clear to the team that wrote the SMS, it needs to be recognised, correctly interpreted and adopted by stakeholders. A common purpose needs to be facilitated. Each direct stakeholder organisation needs to be assisted to paint a picture of how it is going to pursue the purpose of the SMS. Individuals within each direct stakeholder organisation need to connect with the purpose by identifying "What's in it for me?" Opportunities for individuals to earn "brownie points" need to be identified.

2. Alignment transforms energy into effectiveness

Alignment with the purpose of the SMS will help stakeholders to identify why they are involved in the SMS, and their role or function towards achievement of that purpose. It can provide a powerful reason why individuals and organisations are in road safety work, how the work is done and recognition of the skills required achieving the desired outcomes. Politicians are more likely to recognise the need for the SMS and approve funding.

An aligned group will achieve much more than a group of misaligned individuals and groups working towards their own ends.

3. Respect is the beginning of understanding

Respect within and between stakeholder organisations is essential if true alignment is to be achieved. Respecting others ideas, healthy debate, understanding the past and respecting the issues that people hold, learning and moving forward will assist in the process of achieving alignment. There is no one organisation or person that is the holder of all the wisdom, knowledge and experience on a particular aspect of road management or construction and we need to accept this and develop trust.

4. Curiosity is the beginning of all difference

Curiosity is required to learn, understand and respect others within our own organisation and other stakeholder organisations. Individuals must be free to ask questions of others so that they may learn understand and respect the work and ability of others. We should not expect individuals to accept all new ideas without questions and we should welcome new ideas.

¹pp 231 & 232 Molden & Symes

5. Flexibility is the beginning of freedom

Flexibility gives us the freedom to choose our response in any situation as opposed to having a closed mind, limiting beliefs or being limited by necessity or need. Avoid falling into the trap of holding personal judgements about other people and thus limiting flexibility. Recognise the value of ideas expressed by individuals at all levels of organisations whether it originated with the CEO, the experienced grader driver or the new apprentice.

Ideas that have the support of many are more likely to succeed rather than trying to get people to buy into a personal agenda.

We often set ourselves artificially tight timeframes and we may need to remind ourselves that patience is a virtue and the best things come to those who wait. There are times when tight timeframes will constrain the success of the outcome and it is better to take a little longer and be successful. Achieving alignment and changing culture takes time, particularly where more than one organisation is involved.

6. Education is the key to releasing potential

Education in this context is all about meeting the desire of individuals to learn and understand, and kick starting self empowerment so that the stakeholder team can be left in control. If individuals know why they are being asked to do things in a particular way, they are more likely to do it willingly eg edge marker post placement. There is a need to recognise and work to overcome the "dinosaur syndrome" eg I've been doing the job for twenty years and I know how to ...

It goes without saying that there is a need for appropriately trained and experienced staff to be involved in SMS implementation. There is an ongoing need to increase the number and quality of people involved in the industry.

7. None of us is as smart as all of us

When we are trying to achieve alignment, we have to recognise that each of the stakeholder organisations must be free to manage and direct themselves. When this is recognised, the individual stakeholders will excel in their performance towards achieving the purpose of the SMS. Each stakeholder will have their own methods for developing teamwork within their own teams. The desired outcome is a number of teams within different organisations working towards the same end.

8. *Be thorough and unrelenting with issues*

We may be able to achieve stakeholder alignment with the principles, however, unless the stakeholders are committed to action the purpose of SMS's is not likely to be achieved. While different ways of doing work may be accepted, however an issue that questions an individuals capability, values, beliefs or identity may meet resistance. Issues that are meeting resistance with individuals must be confronted and resolved in the short term. Do not accept the "*I've been maintaining roads for 20 years and I know what I am doing.*" type of statement.

Identification of issues requires an awareness of difficult issues, unclear purposes, problems and conflicts of values and beliefs. The focus needs to be on the outcomes and big issues need to be faced courageously and in a committed manner.

Example: Contractors Safety Intervention Plan (SIP)

Maintenance contractors have a direct role in physically implementing SMS's. Many SMS's include the requirement to prepare a SIP. SIP's aim to optimise contractors contributions to the provision of a consistent, safe road environment. The content of SIP's vary from outlining the safety culture which is to be developed, providing information on what contributes to a safe road environment and the factors that contribute to crashes, and the actions required by Contractors to a series of photographs that define what is conforming, marginal and nonconforming for the maintenance activities that have an effect on safety.

Contract Relationships

Under traditional contracts the role of the contractor, consultant and client are clearly defined and this leads to a very structured relationship. The relationship that exists within a hybrid or PSMC contract arrangement is less structured. SIP's have been written under all three contract variants.

In a number of instances the consultant has written the initial document with little or no input from the contractor and the contractor is responsible for the implementation. Contractors have rewritten a number of SIP's over time. Many of the SIP's consist of photographic elaborations of the contact specification for road maintenance ie photographs labelled "conforms", "marginal" or "unacceptable" for each aspect of maintenance. It is not clear whether many of these documents are effective tools for achieving the purpose of the SMS: they may be produced and relegated to the bookcase. Given the discussion earlier in this paper about the eight principles for purposeful alignment, we need to reconsider whether this is the appropriate approach to take when we are starting to implement a particular SMS.

Incorporating the Eight Principles for Purposeful Alignment into Our Thinking

The first step would be to ensure that the contractors have clarity of purpose for both the SMS and the SIP. This is unlikely to be achieved by merely sending a copy of the SMS to the contractor and requiring them to comply with it. A more successful approach is likely to be a number of meetings and workshops to introduce the SMS, its purpose and philosophy in order to progressively move towards alignment. This is likely to take more time if more than one contractor is involved as each contractor has it's own culture. If there is a desire to develop one SIP for all of the maintenance contractors working within a district, there will also be a need to overcome the history and any traditional rivalries between competitors.

In order to achieve alignment with the purpose of the SMS it is necessary for contractors to have access to education that will allow them to understand the safety reasons why they are being paid to maintain the road and the reasons behind particular requirements eg edge marker spacing and placement is specified so that drivers have continuous delineation at night. How the education is delivered to staff will depend on Contractor choice. Many Contractors have established and effective training programs that could be added to. All staff need to understand the overall philosophy behind the provision of a safe road environment. They need to understand that a safe road environment is one which warns, informs, repeats and forgives a driver that makes a mistake.

Staff also need to know that when crashes occur a chain of events that together resulted in a crash occurring has preceded them. A road factor may have been one link in the chain of events: breaking the chain by removing the road factor is likely to avoid crashes occurring at best, but also influence severity at the same location in the future. The road factor may be as simple as repositioning edge marker posts, installing chevron curve markers or improving skid resistance, and many of these are within the scope of road maintenance.

The definition of road environment is an important concept for road maintenance as it includes everything that has an effect on a driver when they are travelling along a road. This will enable an awareness of the effect of obstacles within the clear zone on vehicles that leave the road, and the need to avoid, remove or shield the object.

Once contractors have an understanding of the safety reasons why they are being asked to perform a particular task, respect is likely to develop further. Refined methodologies are likely to be developed that will enhance safety as well as being advantageous to contractors.

The advantage to contractors is that an increased understanding of the safety reasons for maintenance tasks is likely to result in contractors identifying and fixing deficiencies and fewer problems being identified during inspections and audits. It is also likely to reduce the number of times that the contractors will have to deal with the human aftermath of crashes in their day to day work.

A requirement for contractors to report signs of crashes and near misses can be seen positively as subsequent additional tasks and construction work may arise over time.

Development of the SIP will require some flexibility of approach. In order for contractors to have ownership of the document it is suggested that facilitated workshopping is a path that has been used effectively when developing SIP's. It is likely that contractors will expand on the base document and implement it with their staff in the manner most appropriate to their own organisation.

Conclusions

Successful implementation of a SMS requires a lot of effort beyond the production of the written document. There is a particular need to achieve alignment of the direct stakeholders to the purpose of the SMS. Without their alignment, the outcomes are less likely to be achieved. There are a number of other stakeholders who, once aligned, will contribute to achieving the purpose or aim of the SMS.

Alignment of the stakeholders to the purpose of the SMS is not going to occur without a conscious effort by the Council, in particular. There is a need to align the stakeholders both within and outside the Council. The initial step is aligning the stakeholders directly involved in the SMS ie the politicians, staff, consultants and contractors followed by the other stakeholders. Alignment to the purpose of the SMS will result in a change in the culture of the

organisations involved. Stakeholders that are aligned to the purpose of the SMS will have a wider understanding of how their actions can reduce the number and severity of crashes.

We need experienced, trained and enthusiastic people involved in the implementation of SMS's. At the end of the day enthusiasm is not enough and SMS outcomes will only be achieved if there is adequate funding. We need to become smart sellers of SMS's who understand the political process so that we can obtain the funding and commit resources to implement SMS's and achieve the desired outcomes.

Reference

Molden D and Symes J, 1999. Realigning for Change. Financial Times Pitman Publishing, London.