The mining industry has a vision of Zero Harm with clearly defined milestones. Unfortunately, industry is not achieving these targets and so leaders are looking for practical tools to help get mines on track. The Minesafe conference therefore chose Driving Excellence through compliance as the theme.

Most accidents in the mining industry are attributed to inappropriate human behaviour and non-conformance to procedure. Effective root cause analysis of accidents revealed that the “conformance challenge” is primarily an organisational one and not only an individual worker one.

“As long as managers believe that their workers are the problem, they will either discard the prerequisites for conformance or make half-hearted attempts to achieving them.”

Failure to recognise and address the prerequisites for conformance, will perpetuate the failure to complete tasks correctly and ultimately, yield the same poor results.

Achieving conformance requires an enabling operating environment. It is management’s responsibility to establish such an environment. It is only within this environment that workers can be expected to conform to safe operating procedures and standards.

“...prerequisites for achieving operational discipline and conformance

The ten prerequisites are practical elements of any mine’s enabling operating environment. It is evident that conformance is predominantly a management challenge and responsibility. Workers’ responsibility plays a smaller, yet challenging role and can only be achieved once the enabling environment is in place and fully functional.

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Conformance is the result of operational discipline, a key element of operation excellence. Du Pont defines operational discipline as, “the deeply rooted dedication and commitment by every member of an organisation to carry out each task the right way, every time.”

The mining industry will not achieve Zero Harm, or the milestones, without sustained operational discipline/conformance to safe operating procedures.
THE TEN PREREQUISITES
FOR A CONFORMANCE ENABLING OPERATING ENVIRONMENT:

ONE
Practical safe operating procedures and standards

TWO
Only competent team members to execute work

THREE
Availability of materials

FOUR
Availability of functional tools and equipment

FIVE
No direct and indirect conflicting demands and messages

SIX
Supervisors must be exceptional examples of conformance

SEVEN
Workers must fully understand the workplace and the tasks to be done

EIGHT
Workers must fully understand expected behaviour and consequences

NINE
Management must measure and act

TEN
Practical leadership

The first step to a conformance enabling environment is that every task, step and process needs to be defined and designed to be safe. Safe operating procedures, as a minimum, must include:

• the task and sequence in which the tasks and steps must be executed
• the specific harm associated with the tasks and steps
• the specific controls that prevent or mitigate against a specific harm
• the number of employees of different job roles (team complement)
• the competence requirements of job roles
• special and general tools needed
• special and general materials needed
• all physical verifications required, prior to and after, executing the work, including minimum requirements for a team to proceed

Safe operating procedures must be physically verified and validated to be practically executable by competent team members with the needed materials and tools.

Team member’s involvement in procedure verification: Team members must
- be present during verification
- provide input
- be satisfied with the practicality of the procedure

The Mine Health and Safety Act requires mines to establish a safe operating environment, yet very few mines have independently and practically verified procedures that address the minimum requirements defined above. Despite procedures being reviewed on a regular basis, they are often not practical and it is only discovered when incidents and accidents occur.

Conformance is unlikely when the required materials to complete the task are not available when needed. The probability of teams taking risks or trying to “make a plan” is very high in these instances, especially when production output is financially insurmountable.

Managers must ensure that all materials needed at a specific place of work are available well in advance

Management must not transfer the responsibility to the team to make the decisions to work or not and only when arriving at the workplace.

The correct and fully functional (special and general) tools are essential for enabling conformance to safe operating procedures.

Management must ensure that maintenance and asset management systems include the requirements and specifications of special tools and equipment that must be maintained to ensure safe operation.

Management will provide direction and establish the unwritten rules and norms of the workplace. Supervisors conduct the real acid test for management’s true priorities and the organisation’s true values. Supervisors have to lead by example without exception.

Team leaders’ and supervisors’ conduct is key to achieving conformance. Leaders and supervisors influence their team’s culture by establishing the unwritten rules and norms of the workplace.

Understanding the risks and hazards associated with a task will require reshaping existing training, communication and organisational systems. Establishing the unwritten rules and norms of the workplace requires the team members with the rationale (by executing tasks in a specific way).

Workers must execute work in a specific way.

The Mine Health and Safety Act requires managers to make sure that everybody is aware of the risks in the workplace and the consequences of not following the safe operating procedures. Independent verification and monitoring remains critical to sustain the enabling environment.