Introduction

SRA Information Technology Pty Ltd (SRA) is a researcher and developer of approvals and compliance software solutions to both industry and regulators within the Mining & Energy sectors.

SRA developed the successful Environmental Assessment and Regulatory System (EARS) for DMP in Western Australia which the industry has heralded as perhaps the best example of helpful tools and transparent processes in the WA resources sector. We provide similar services for DMITRE in South Australia providing Exploration and Tenement Management solutions which include approvals processing and we develop a range of solutions for EPA in South Australia, SEWPaC Federally and DME in Northern Territory.

SRA is also a successful supplier of environmental management software to corporate mining and energy companies both in Australia and globally. These solutions include modules specifically designed to manage and support development approvals and the resulting compliance obligations. Our client base includes entities such as BHP Billiton, Rio Tinto, Xstrata, Anglo-American and thus deals with a wide variety of commodities and various aspects of exploration, development, production and distribution in every Australian state and in Asia, North America, Europe and Africa.

Concerns expressed by our customers and industry contacts recently caused us to analyse project approvals processes to understand how technology might help. For more than a year, we have been discussing approvals processes with regulators in Australia and New Zealand as well as exploration, development and project operators of every imaginable size covering every major commodity. Those discussions reinforce the concerns that are discussed in the Issues Paper published for this review and there is real frustration on all sides driven by a complex set of problems.

It is worth stating that we are yet to find a resource company who is not prepared to comply with legitimate environmental, safety and community concerns and we are yet to find a regulator who seeks to prevent responsible development. What we do consistently find is frustration and a degree of what can unfortunately only be described as mistrust from both sides.

From an information perspective, SRA believes that there are three primary issues impacting the ability of any given jurisdiction to substantially improve project approvals processes;
- A legacy of relying upon unidirectional, "transactional" communication between proponents and regulators and between regulatory agencies
- The lack of a single common forum to share information
- The inability (or possibly reluctance) of different regulatory agencies across levels of government to share information and leverage each other's work

SRA offers this paper as an information technology specialist's insight into how approvals processes generally could potentially be improved to achieve better outcomes for industry, investors, community and environment.

Any significant change to project approvals processes will have broad implications impacting a wide variety of people and organisations and SRA respectfully submits that any effective change to major project approvals processes will need to deal with the above issues. We see technology as having a key role in facilitating such a change efficiently and effectively.

Transactional communication versus collaboration

SRA believes that the way regulators and proponents communicate information as they work towards achieving project approvals is based on an out-dated and inefficient communication model.

There is an underlying assumption that the criteria to evaluate and approve projects are formal and consistent for each project; or at least, for each similar project type. Permit guidelines specify reports, forms or data that need to be submitted for evaluation by various agencies in a series of stages. In general, these reports are created unilaterally and submitted expecting approval as per the guidelines.

In practice, every single project is different. Each project has different implications which will require different focus and emphasis. Even though much of the data submitted may be similar for various approval submissions, it's unlikely that any two projects will ever be subject to the same approval conditions or that any two projects will ever be rejected for the same set of reasons. This implies that the important outcomes (approval conditions) are largely unknown at the start of the process.

In this situation, information provided unilaterally will very probably not meet the expectations of other parties. In practice, the guidelines provided by regulators to describe the requirements for project approvals are non-specific and subject to interpretation. The information submitted in response is inevitably over-engineered in some areas and fundamentally lacking in others. In addition, the various perspectives of different approving agencies and assessment disciplines mean interpretations and emphasis within communicated information begin to vary ever more widely.

The resulting poor communication creates inefficiency through repetition and inappropriate emphasis. Industry has long proposed a risk management approach to project approvals to try and overcome some of this inefficiency. We contend however, that the underlying problem is the lack of a collaborative approach to defining how project approval can be achieved. Risk based assessment will provide a method but it will not accelerate project approvals dramatically if it is not based upon a collaborative communication model.

Project approval processes need to be collaborative and communication between all parties needs to be interactive rather than a series of transactional document exchanges. Regulator attempts to improve communication have resulted in initiatives such as "Lead Agency" and Case Managers in some jurisdictions to try and make interactions more effective. In practice, these interactions have made it easier for proponents to get answers about **the process** but they do not often change the way that approval conditions are arrived at or defined. Interaction is still transactional, usually sequential and often repetitive. There is therefore little change to the time taken or the satisfaction with outcomes of interested parties even when this type of assistance is provided.

SRA believes that efficient approvals processes will only emerge once there is collaboration between all effected agencies and the proponent **throughout the lifecycle** of the approvals process. This requires a method of communication and collaboration that supports all participants in that lifecycle. Ideally the objective of that lifecycle will be the definition of approval conditions and NOT approval/rejection itself because this will focus communication on issues that can be resolved collaboratively and transparently. If conditions cannot be met then clearly a project will not be approved but the conditions themselves will be mutually clear and understood at every stage.

We believe that this will help to resolve the concerns of both industry and regulators but it will require technology to implement it in a scalable and affordable fashion.

Shared information, leveraged processes

SRA submits that one of the major impediments to change for project approvals is the lack of any central point of understanding and control over the processes themselves. The sheer number of different parties involved means that no individual or agency has clarity over what is required to gain approval for even the most benign of projects.

Formal and informal reviews of the time and effort required for project approvals have been occurring for a number of years. Industry submissions have consistently referred to improvements such as risk based assessment, fixed timeframes, binding decisions, accountability and transparency but few have considered how they can actually be delivered holistically. We accept the reasons behind the proposals from both industry and regulators but feel that all will remain idealistic until a mechanism can be created to actually define and manage all of the underlying processes.

SRA believes that approvals processes would accelerate dramatically simply by facilitating a more effective exchange of ideas and information throughout a process whose singular purpose is to define mutually acceptable outcomes as required by law, community expectations and operational realities. **Objective** criteria must be visible and clear so that they may be satisfied quickly and **subjective** criteria must be managed through conversations that start as early as possible. This requires a "forum" that supports an exchange of information within a managed and auditable framework. Only then will a clear understanding emerge of how to deliver positive change in a way that will satisfy legal, social and industry expectations for major projects.

SRA understands that such a forum will not obviate the need for legal and process change on its own but effective change takes time because it involves people. The amount of time depends largely on having clarity of purpose and the level of motivation and empowerment of people to enact change. History will tell us that when radical change disrupts legal frameworks, precedent and multiple established government agencies all at once, it has little chance of success. We believe that a focus on collaboration will not only improve and accelerate communication but also provide a solution that can facilitate change in a positive, controlled fashion.

SRA envisages a software platform that allows people who own a process to refine and improve it within a common online framework. Repetitive, redundant and inefficient tasks will become obvious to all and can begin to be "designed out" and accelerators such as parallel processing can be created in a continuous improvement model. Simply implementing this across regulatory agencies will target, facilitate and even justify process improvements by making activity more transparent and more measurable. Extending the collaboration to proponents within the same forum has the potential to begin a paradigm shift in how approval conditions can be defined.

The solution we envisage is not trivial but neither is it necessarily disruptive any more than implementing any software solution is disruptive. As long as regulatory agencies, individual assessors, proponents and community groups are prepared to share information and collaborate we believe much can be achieved within the constraints of existing legislation in each jurisdiction.

Although its success does not depend upon it, we would hope this collaboration might also create empathy and a common understanding among industry, regulators and community groups of what constitutes desirable outcomes and positive change. This has the potential to drive a paradigm shift; progressively moving regulator focus from enforcement to consultation, moving proponent focus from minimising conditions to minimising harm and shifting community groups focus from development prevention to development optimisation.

The SRA online collaboration vision

The internet has long been used as a publishing medium but its ability to bring people's ideas and information together make it an ideal interactive medium as well. Ubiquitous internet connectivity means people are no longer bound by the need for physical proximity or even simultaneous presence in order to communicate.

The social media revolution demonstrates interactive communication and collaboration on a vast, somewhat unregulated scale but this can be customised to suit more formal business needs as well. People communicate formally and informally from anywhere, anytime using online software solutions. Communications can be controlled so that they are accessible by many or only a nominated few. They can securely capture and share highly structured data or leverage unstructured information and visual media. These features combined with software's ability to define and manage processes make an online solution ideally suited to managing project approvals processes.

The long held arguments that contributors to approvals processes do not necessarily have internet capability or that the law prevents online communication are long out of date and internet based software represents the logical point of control and delivery method for the types of change being proposed for project Approvals. In fact, given the sheer breadth of expertise and the potential number of contributors, it is difficult to imagine how effective change could be implemented without a common forum that at least brings the various regulatory agencies together.

SRA proposes a software framework that supports registered users only. It will allow Approvals submissions and assessments processes to be defined by regulators as repeatable activities with defined contributors, participants, roles and responsibilities. These processes will include decision points and tasks designed to consider legal, community and operator needs within a single forum that ensures all parties have access to the same advice, rule, precedent and law throughout.

It is very easy for agencies to link their own processes with other agencies, share responsibilities in a common process and invite input from other authorised users of the system. Modelling and mapping processes need not be undertaken on the kind of scale that would delay implementation in fact, fundamentally, the platform would support existing agencies performing existing processes with little or no change. The difference is that the platform represents a single location for defining the processes, responsibilities, decision points and accountabilities across all impacted agencies.

Once in place, proponents will initially register as users of the system so that they can then prepare and collate proposals online using the framework. They would have a single portal which is controlled by a primary regulator and includes all relevant supporting information, guides, examples and expectations. The power of the solution comes from the ability of different players in the approvals life-cycle to define their own processes and have them managed within an overall hierarchy of processes.

The regulator can define workflows and decision points that allow a sequence of tasks to be managed and they can also control the degree of transparency offered to other interested parties during the process. Processes can manage the creation of project proposals and formal documentation can be lodged within an automated process. Regulators can define processes for proponents to use or they can even allow proponents to define their own processes which also allow proponents to determine the degree of transparency they offer to the regulator.

This is not a theoretical solution for SRA. Many of these concepts are not even unique in that they have been leveraged in solutions from individual agencies in various States before. The difference

with our vision is that the concepts are to be employed across agencies and able to engage both proponents and community in the processes as they mature.

SRA has consulted with Minerals and Energy regulators in Australia and New Zealand to turn this into a prototype that demonstrates the above capabilities and much more.   Indeed the solution is already much more mature and capable than described in the summary above. New Zealand Petroleum & Minerals are planning to extend the concept to interactive collaboration to manage ongoing industry compliance and reporting; a concept that can simplify the approval itself by also managing the project life-cycle through development, operation and closure in an equally predictable fashion.   We thus feel that our vision has been validated and it remains only for the degree of collaboration and transparency to be determined and implemented to drive positive change.

The potential for a compliance eco-system

SRA's ultimate vision extends still further. We envisage that a standard data format could simplify the exchange of approvals and compliance data, link it back to source legislation and precedent and provide a platform that would encourage software developers to progressively create tools to accelerate and simplify tasks.

This is where the solution begins to become an eco-system that supports regional variations within a common framework that supports global operators. Ideally such a standard would be consistent globally but Australia has an outstanding record of leadership in defining similar standards for industry and this should be seen as an opportunity to help resolve what is a global problem.
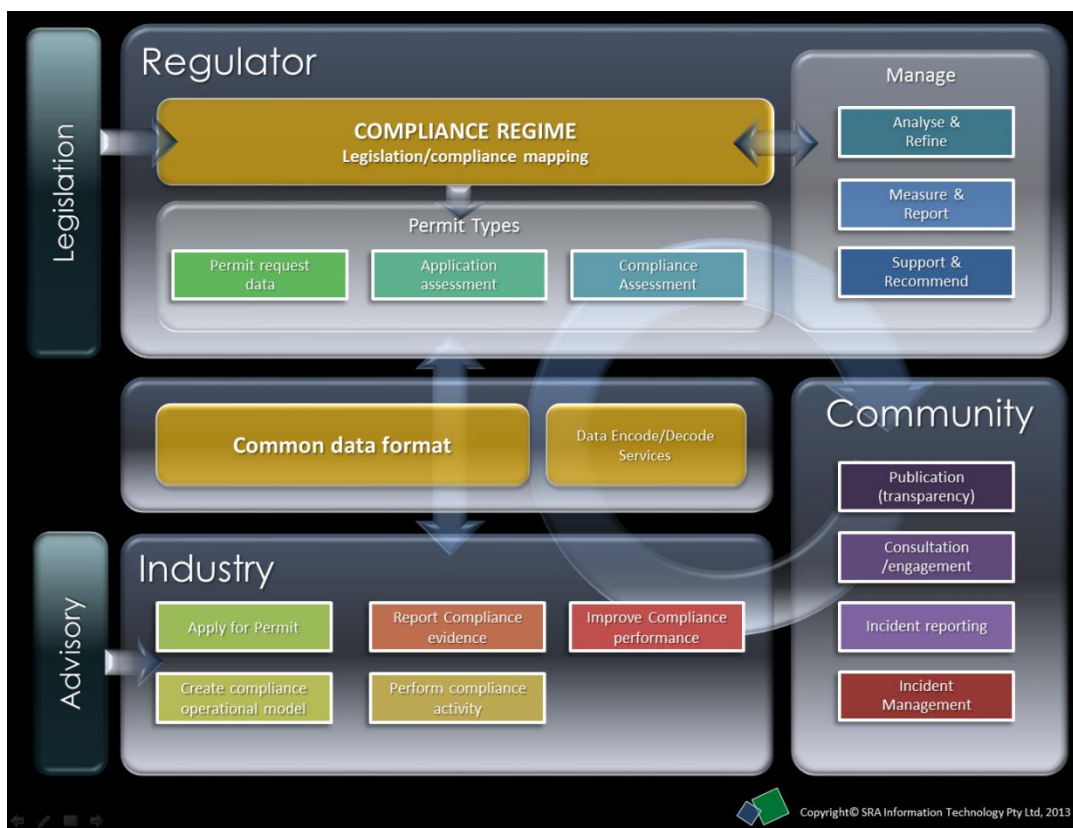

Figure 1 - Facilitating communication with a compliance data standard

Summary

SRA has witnessed first-hand the difficulties regulators, mining companies and energy companies experience in trying to accelerate major project approvals. We understand the cost of approvals delays for our customers in industry (we feel it too) but we also understand the environmental and community imperatives that must equally be protected.

Our vision assumes that there is the political will to change existing silo cultures into a cohesive, shared culture that is focused on outcomes but we believe that any solution that streamlines and accelerates project approvals will require that as a minimum. We believe our software driven vision is both an enabler of the cultural change and an enabler of continual improvement that will accelerate project approvals.

Regional experiments with siloed implementation of similar systems in Western Australia and elsewhere have shown us that change in major project approvals will require a pervasive, consistent communication forum that allows all parties to contribute in a managed but transparent interaction. It is the breadth of involvement of different parties in shared processes that becomes the critical success factor.

SRA acknowledges the complexity involved in optimising something as broad as major project approvals but we are confident that we have identified and validated at least some key elements that will be required and some of those elements are, at their core, simple and highly achievable.

SRA would like to thank the Commission for the opportunity to offer this submission. We would be delighted to expand upon the discussion herein and share our project approvals experiences in Australia, New Zealand and globally with the Commission.

Kevin Wohling
Manager, Compliance & Obligations Solutions
SRA Information Technology Pty Ltd
Kevin.wohling@sra.com.au