

FORUM PROGRAMME: 15–16 FEBRUARY 2016

| Day One | Day Two |
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| 07:00–08:00 Registration/Tea | 08:00–08:30 Opening Remarks: Day 1 Summary and Objectives for Day 2 Declan Vogt, <i>Director, Centre for Mechanised Mining Systems at the University of the Witwatersrand</i> |
| 08:00–08:30 Opening Remarks: Welcome and objectives of forum Heather Ednie, <i>Managing Director, GMSG</i> | 08:30–10:00 Collision Avoidance: Collision avoidance is a focus area across the global mining sector as operators struggle to determine a system and approach that will deliver the results intended. Meanwhile, regulators are enforcing the use of such systems in a number of jurisdictions—regardless of their current effectiveness. This presentation will provide an understanding of the leading efforts to advance this technology and its implementation, including an open discussion about further requirements. Thys Greyvesteyn, <i>Anglo American, EMESRT</i> |
| 08:30–10:00 Vision for Future Mining Panel: From automation to integrated operations and a new vision of sustainable practice, industry thought leaders and their organizations will share visions of the future and engage in lively discussion about the evolution required. Moderator: Declan Vogt - Panelists (4): Helius Guimaraes, <i>Rio Tinto</i> , Perry Zalevsky, <i>OS/soft</i> , Pierre Jordaán, <i>Sasol</i> | 10:00–10:30 Networking Coffee Break |
| 10:00–10:30 Networking Coffee Break (30 min) | 10:30–11:30 Mobile Equipment Open Data Guideline: GMSG will publish version one of a Mobile Equipment Open Data Guideline, based on a series of collaborative workshops throughout 2015. The presentation will include the rationale for open data, the guiding principles of the guideline, the scope of included equipment, and the detailed guideline of data classifications, sub classes and specific data attributes. As well, work on version two will be underway in early 2016, focusing on the development of consensus between mining companies, OEMs and OTMs on open data requirements for autonomous equipment and interoperability. Perry Zalevsky, <i>OS/soft</i> |
| 10:30–11:00 Integrated Operations Case Study: Overview of an example of integrated operations at a major mine operation, including successes, challenges, considerations made, lessons learned, and next steps towards increased effectiveness. Clinton Macdonald, <i>Schneider Electric</i> | 11:30–12:30 OEMs and Operators Panel: the value proposition of interoperability: A panel discussion that will feature several of the key mobile equipment OEMs and mine operators who will outline their vision of the benefits and challenges associated with more open access to mobile equipment data and greater interoperability across the mine site. Moderator: Riaan van Wyk, <i>DetNet</i> , Panelists: Olav Kvist, <i>Atlas Copco</i> , Jeroen Snoeck, <i>Volvo</i> , <i>Barrick and Rio Tinto</i> |
| 11:00–12:30 Integrated Operations: requirements and collaboration: Mining sector leaders have realized industry-wide collaboration is required to facilitate the road to fully integrated operations (IO). Siloed attempts have realized great results, but required major investment. The development of guidelines, standards, and a unified vision will enable streamlining of efforts to realize the value promised by IO. GMSG's Integrated Operations working group is developing such guidelines, requiring industry-wide input and sharing in the process. Diego Zamorano, <i>Flow Partners</i> | 12:30–13:30 Networking Lunch |
| 12:30–13:30 Networking Lunch | 13:30–14:00 Mining Autonomy Developments at the ISO: Increasing activity at the ISO is developing around standards requirements for autonomous mining and interoperability. Both Technical Committee (TC) 82 - Mining, and TC 127 - Earth Moving Equipment, have projects underway or developing. This presentation will be an update on what activity is underway, and what is in the pipeline, with a focus on the need for wide mining stakeholder engagement to ensure the resulting standards meet mining requirements. Tim Skinner |
| 13:30–14:30 Underground Communications Infrastructure: GMSG is developing a set of documents providing visual and other reference materials which address the different types of services required within the mine lifecycle, and how these services relate to the underlying communications technology needed to support the functionality of those services for underground mining. The guidelines focus on the communications infrastructure (video, voice, and data) required now, and in the future, to support these mine services. Neil Other, <i>Newtrax</i> and Kevin Ramsay, <i>Ramjack</i> | 14:00–14:30 Guiding Principles for Interoperability: Throughout the mining sector, momentum is rapidly growing for collaboration to enable interoperability across mine equipment, systems and processes. AMIRA International will be realizing the final report of one such project this March, focusing on the development of Guiding Principles for Interoperability as well as detailing the current related standards landscape, to identify industry-wide requirements to achieve the interoperability required for autonomy, safety, and productivity advances. This presentation will be a "sneak peak" at some of the outcomes of this project, and generate discussion about the next steps required. Joe Cucuzza, <i>CEO, AMIRA International</i> |
| 14:30–15:00 Mining API Guideline: onboard equipment systems integration: The mining industry is host to a vast amount of proprietary devices and technologies that are unable to communicate with other on-board and off-board technologies. As long as this communicative gap exists between the different devices, onboard data sharing will prove insufficient and ineffective, limiting overall operational efficiency. Development of an Application Program Interface (API) for mining would offer clear, measurable benefits to safety, productivity and operational efficiency. This presentation will include case study examples highlight the potential of such integration, and provide an overview of a draft Guideline for an API, designed to stimulate industry engagement. Tim Skinner, <i>SMART Systems</i> | 14:30–15:00 Achieving Full Autonomy in Control: Case Study: Overview of a successful approach to autonomy following the Hatch Integrated Control methodology, through examples including automation at a bulk material handling stockyard. Thomas Theron, <i>Hatch</i> |
| 15:00–15:30 Networking Coffee Break | 15:00–15:30 Networking Coffee Break |
| 15:30–16:30 Common Reference Framework: Without a commonly accepted framework providing a generic description of the mining business, every new initiative starts afresh with issues of explaining objectives and solutions to mining industry challenges. Stakeholders are as diverse as their mining company origins and the dictates of their specific discipline. Most will have a technical silo based view of the mining business, not necessarily wrong but potentially incomplete. Across the industry, the same words are used to mean different things and different words to mean the same thing. Any framework must at least address these and other matters of a common understanding of the mining business. This presentation will provide an introduction into the use of standard models—what they are, what they have been used for, and examples of their current uses. Mike Woodhall, <i>MineRP</i> and Sarina Viljoen, <i>The Open Group</i> | 15:30–16:30 Interoperability: The collaborative road to future mining: As mining innovation leaders focus on the requirements to achieve their vision of future mining, collaborative work across the sector will be required to develop the tools and consensus strategy to drive the needed innovation. This session will be a lead discussion about the barriers to overcome and the role collaborative efforts must fill towards meeting the vision of future mining. Diego Zamorano, <i>Flow Partners</i> |
| 16:30–17:00 Future Directions: regional requirements and opportunities based on Day One topics | 16:30–17:00 Forum Wrap-up: Actions, Next Steps, Summary Declan Vogt |