



**Jan Steenkamp**  
Chief Executive: ARM Strategic Services and Exploration



ARM Exploration is involved in identifying and assessing exploration and mineral business opportunities in sub-Saharan Africa.

**SCORECARD**

**EXPLORATION AND NEW BUSINESS**

F2016 OBJECTIVES	F2016 PERFORMANCE	F2017 OBJECTIVES
<b>Rovuma Resources Limitada</b>		
ARM proposed that Rovuma secure a third party investor to fund the next phase of work.  No agreement has been reached and no further work is presently being funded by ARM.	No further work was undertaken.	
<b>Business Intelligence</b>		
Detailed research of supply-side factors of certain commodities and their impact on demand and prices. Identification of non-core business commodities that may provide opportunities for ARM.	Presentations given and discussions held. Desktop studies and evaluations of targets identified completed. Database entry.	
<b>Mineral Resources Management (MRM)</b>		
Quality control and assurance of the quality of the resources database. Advanced modelling of resources and geostatistical evaluation and classification of reserves and resources of the operations and new business opportunities. Competent person sign-off for the resources and reserves declaration in the Integrated Annual Report.	Reviewed standard operating procedures pertaining to the value chain of resources. Checked and verified the reserve conversion factors and calculations.	Continue the review of the resources of individual operations and appoint an independent audit review.

**F2016 OBJECTIVES****F2016 PERFORMANCE****F2017 OBJECTIVES****New business opportunities**

New minerals investment opportunities pursued, focussing on PGMs, base metals especially copper and nickel sulphides and related by-products, as well as good quality manganese and coal opportunities. Hyperion Strategic Finance used for life of mine evaluations of the ARM operations and financial modelling and economic evaluations of expansion projects, organic growth projects and new potential investment opportunities.

ARM undertook detailed due diligence reviews and evaluations of numerous platinum group metals opportunities. Site visits were undertaken. A significant database was built describing projects and opportunities.

Continue to identify new business opportunities, undertake site visits and evaluations.

**PROJECT DEVELOPMENT****F2016 OBJECTIVES****F2016 PERFORMANCE****F2017 OBJECTIVES****Black Rock Mine Project**

Complete underground ventilation upgrade  
Commence with Nchwaniing II Shaft and winder upgrade.

Commence with product stacking, reclaiming and train loading system.

Commence with underground development and ore handling system at Nchwaniing II  
Commence with Nchwaniing II silo feed and satellite tips.

Complete Nchwaniing II plant refurbishment.

Gloria ventilation shaft completed.

Nchwaniing II Shaft upgrade 90% complete.

Nchwaniing II underground development on schedule.

Nchwaniing II Plant refurbishment 90% complete.

Complete Nchwaniing II Shaft and winder upgrade.

Complete construction of product stacking, reclaiming and train loading system.

Continue with underground development and ore handling system at Nchwaniing II.

Continue with Nchwaniing II silo feed and satellite tips.

Complete link-line construction.

**Sakura Ferroalloy Project**

Complete construction furnaces 1 and 2.

Commence commissioning of Furnace 1.

Ramp-up of Furnace 1 to full production.

Furnace 1 and 2 construction complete.

Commissioning of Furnace 1 complete.

Commissioning of Furnace 2.  
Ramp-up of Furnace 2 to full production.

Complete construction of briquetting plant (BREM plant).  
Complete handover of project to operations.

## STRATEGIC SERVICES &amp; EXPLORATION continued

## INFORMATION MANAGEMENT/TECHNOLOGY

F2016 OBJECTIVES	F2016 PERFORMANCE	F2017 OBJECTIVES
<b>Risk Management</b>		
Development of a governance framework measurement model. Ensure cybersecurity is a priority to limit the exposure of ARM and all system users.	Enhance and sustain the model and inputs on a continuous basis and align all mines and operations. Awareness, surveys and training of end users.	The process needs to be implemented and monitored within all ARM operations. Ongoing awareness, and training of end users.
<b>Value Delivery</b>		
Continuation of the HR initiatives for the Northern Cape operations.	Stabilise, and mature both systems and resources.	Complete all systems configurations, enhance where appropriate, and stabilise and mature all systems for the Human Resource functions in the Northern Cape operations.
<b>Resource Management</b>		
Redesign the Information Management Structure to minimise amount of resources required.	Reduce costs and eliminate external resources.	Eliminate external resources and ensure structure has only essential resources to run, maintain and support all systems within the ARM Group.

## REVIEW OF THE YEAR

The Strategic Services and Exploration Division is multidisciplinary and integrated comprising skilled and experienced people that support the various ARM operations and growth strategy.

The Strategic Services and Exploration Division comprises of the following units:

- > Exploration & New Business;
- > Projects Development;
- > Information Management/Information Technology;
- > Strategic Support; and
- > Technical Support.

Strategic Services and Exploration costs reduced by 54% to R23 million (F2015: R50 million). In the financial year under review, the division provided information technology, technical, strategic and project development support across the ARM operations and projects.

The division also evaluated a number of exploration and new business opportunities.



**Black Rock Mine**