4 October 2018

DEFINITIVE FEASIBILITY STUDY CONFIRMS ROBUST, LONG-LIFE, LOW COST PROJECT

- **Definitive Feasibility Study[1] supports an initial 11-year project producing ~ 100,000 oz per year delivering strong margins:**
    - **Post tax NPV$_{5\%}$ of US$152 million, with a 20.3% IRR using a gold price of US$1,250 per ounce (on a 100% ungeared project basis)**
    - **Initial capital cost of US$146 million, pre-production mining expenditure of US$16 million, and project sustaining capital of US$29 million**
    - **C1 cash cost of US$643 per ounce with an All-In Sustaining Cost (AISC) of US$758 per ounce[2]**
- **Potential for improvement in project economics in the near-term as further infill drilling is completed and extensions to current deposits are drill tested[3]**
- **Focus now on securing a strategic partner and arranging financing for the development of the project**
- **Exploration continues to identify new targets and is testing known prospects which have had minimal historical assessment**

Asia-Pacific gold development company Nusantara Resources Limited ('Nusantara', ASX: NUS), is pleased to announce the completion of the Definitive Feasibility Study (DFS) for its 100% owned Awak Mas Gold Project (the 'Project') located in South Sulawesi, Indonesia.

The Project is one of a few undeveloped gold projects within the Asia-Pacific and now has a completed DFS with all approvals in place for development. The project is supported by good infrastructure (Figure 1), with access to low cost grid power, port facilities 45 km from the project, and multiple daily flights from the city of Makassar. The island of Sulawesi, Indonesia, has a long history of mining and provides ready access to experienced contractors, services and work force for the construction and operation of the mine. The site operation will be supported by a logistics centre on the coast in Belopa and a support centre in the city of Makassar.

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[1] The DFS has been prepared with an accuracy range of ±15% and the findings, estimates and forecasts should be considered in this context. The DFS has been completed in compliance with Clause 40 of the guidelines of the JORC Code (2012 Edition). Project approval and development is subject to market conditions, project financing, Board approval and regulatory conditions.

[2] C1 Cash costs are operating costs including mining, processing, G & A. AISC includes C1 costs, royalties, PT Masmindo Dwi Area corporate overheads, Community Social Responsibility investment, land and building taxes and sustaining capex.

[3] This scenario financial analysis is based on incomplete and inaccurate information assuming a project scenario of a three-year increase in mine life and 7% lift in grade of known Mineral Resources (refer *Appendix: Definitive Feasibility Study Summary*). Further resource drilling and technical studies are required in accordance with the guidelines of the JORC Code (2012 Edition) and it is uncertain if further drilling and studies will result in any material change in the Mineral Resource and Ore Reserves and therefore inclusion in the Mine Plan.

The Project has an Ore Reserve of 1.1 million ounces[4] within a 2.0 million-ounce Mineral Resource[5]. The mining operation will include two open pit mines (Figures 2 and 3) with an initial 11-year life, and a low project strip ratio of 3.5. The 2.5 Mtpa processing plant will target annual gold production of around 100,000 ounces, using a Whole of Ore Leach flowsheet, delivering project average recoveries of 91%[6].

PT Masmindo Dwi Area (Masmindo), a wholly-owned subsidiary, is the holder of a 7th Generation Contract of Work and has sole rights to explore for, and exploit, any mineral deposits within the project area until 2050, with options for extension.

The DFS has identified the potential for an uplift in grade for the Awak Mas and Salu Bulo deposits as further drilling is undertaken to lift the reserve category to Measured status in the initial mining areas. Any grade uplift has a material impact on project economics. In addition, known extensions to the Awak Mas and Salu Bulo deposits (Figure 4) and inclusion of the Tarra deposit into the mine plan have the potential to extend the mine life. Scenario financial analysis of these near-term opportunities shows a 7% grade uplift (based on detailed analysis of the mineral resource model using conditional simulation) and an additional three years of mine life (from known mineralisation extensions at Awak Mas and Salu Bulo and inclusion of the Tarra deposit into the mine plan) could significantly enhance project economics, resulting in a Project NPV_5 in the vicinity of US$250 million, and an IRR of approximately than 25%[7].

"The Awak Mas Gold Project Definitive Feasibility Study has confirmed that the project is technically feasible, financially robust, with significant opportunities to increase project value through optimising the current mineral resources and through further exploration. The completion of the DFS is a significant milestone for the Company, with work now progressing on securing financing for project development and continuing exploration.", commented Nusantara's Managing Director and CEO, Mike Spreadborough. *"The Awak Mas Gold Project, through the experience and dedication of the Nusantara team, now has the potential to be developed into Indonesia's and Asia-Pacific's next gold mine, providing benefits to shareholders, the community and other stakeholders."*

The *Appendix: Awak Mas Gold Project: Definitive Feasibility Study Summary* provides a summary of the DFS technical and financial outcomes and attached is the JORC Code, 2012 edition, Table 1.

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[4] ASX Announcement: 13 September 2018, Ore Reserve increased by 11% to 1.1 Moz Gold

[5] Refer to ASX Announcement: 8 May 2018, Mineral Resource Estimate Update

[6] Metallurgical test work completed for the DFS is detailed in the attached *Appendix: Definitive Feasibility Study Summary* and considered to be at PFS level with further test work planned.

[7] This scenario financial analysis is based on incomplete and inaccurate information assuming a project scenario of a three-year increase in mine life and 7% lift in grade of known Mineral Resources (refer *Appendix: Definitive Feasibility Study Summary*). Further resource drilling and technical studies are required in accordance with the guidelines of the JORC Code (2012 Edition) and it is uncertain if further drilling and studies will result in any material change in the Mineral Resource and Ore Reserves and therefore inclusion in the Mine Plan.

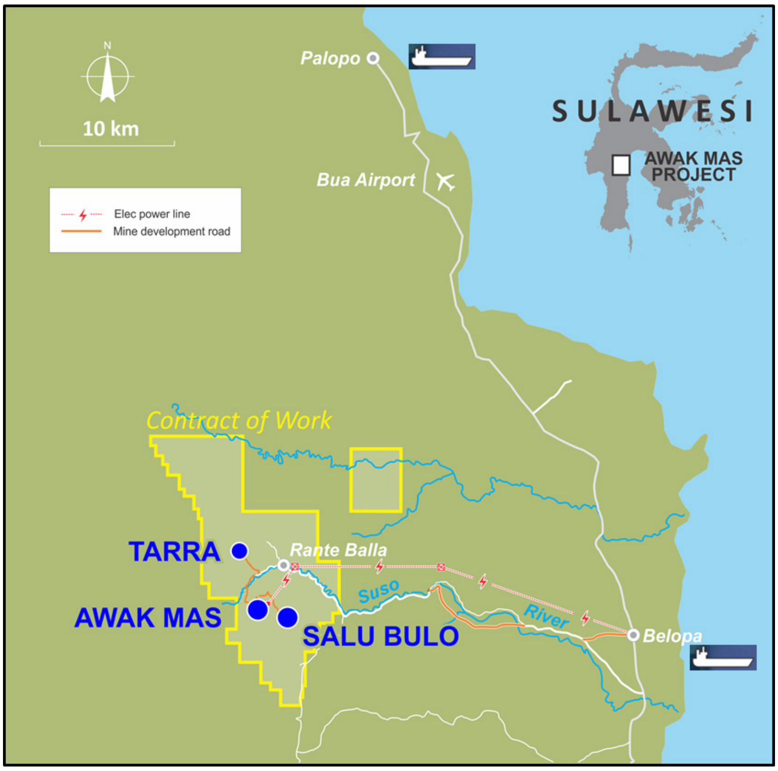

Figure 1: The location of the Awak Mas Gold Project, South Sulawesi, Indonesia

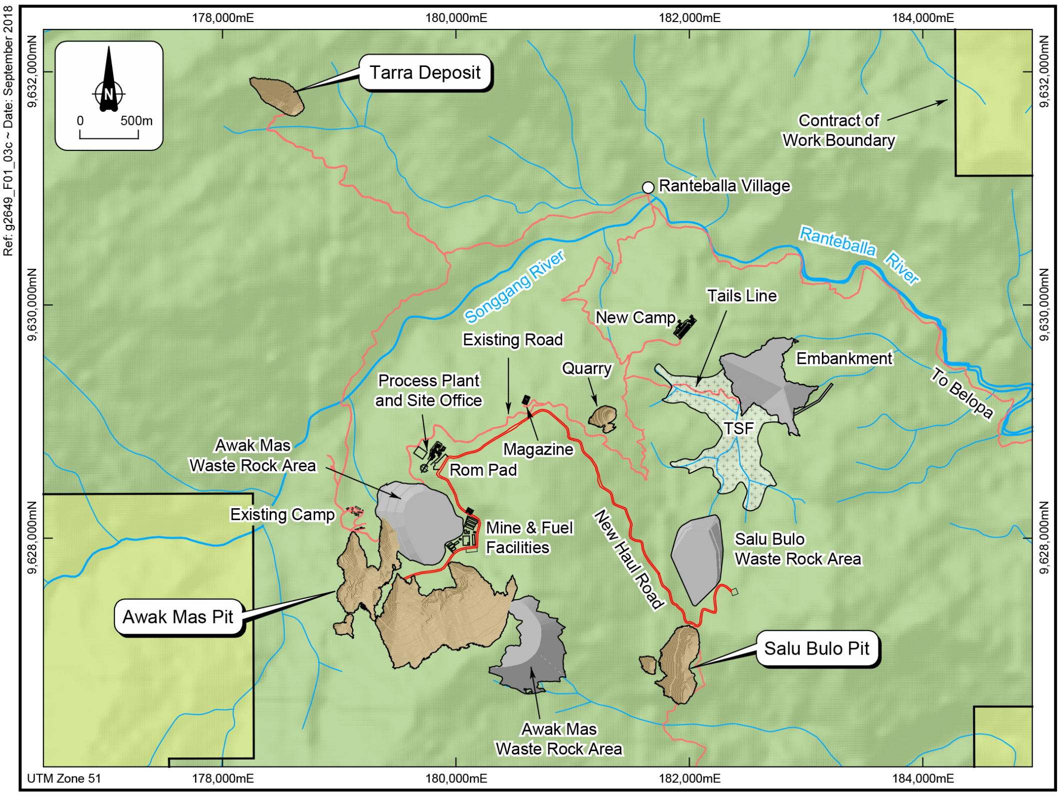

Figure 2: Awak Mas Gold Project Site Layout (north top of figure)

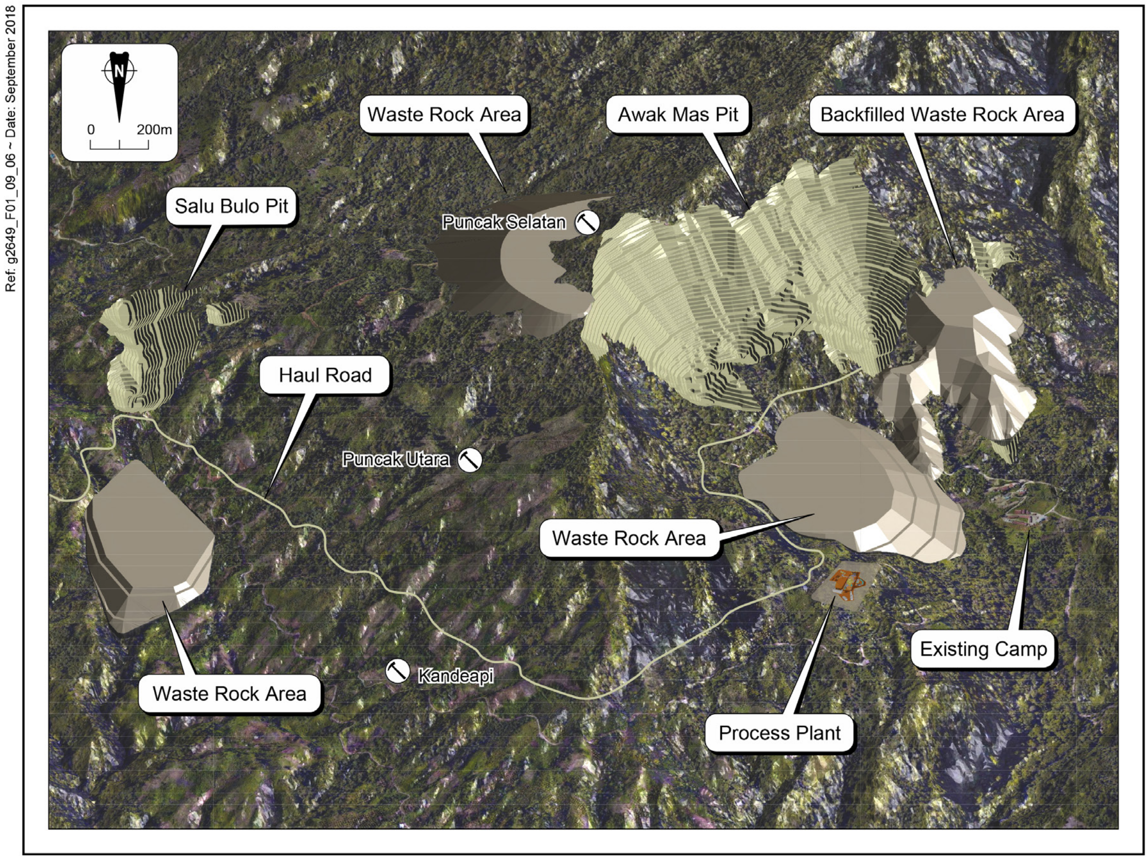

Figure 3: Awak Mas and Salu Deposits (south top of figure)

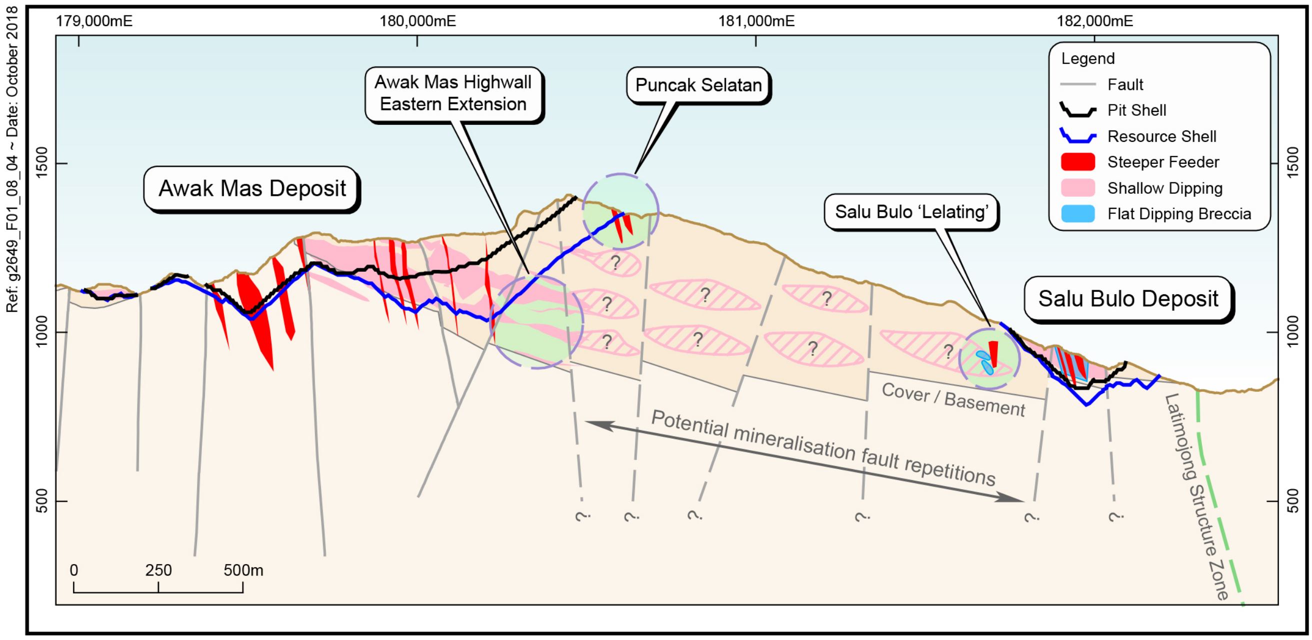

Figure 4: Mine Corridor Section between Awak Mas and Salu Deposits (looking north)

NUSANTARA
RESOURCES LIMITED

AWAK MAS GOLD PROJECT
Definitive Feasibility Study Summary

OCTOBER 2018

APPENDIX TO ASX ANNOUNCEMENT 4 OCTOBER 2018: DEFINITIVE FEASIBILITY STUDY CONFIRMS ROBUST, LONG-LIFE, LOW COST PROJECT

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BACKGROUND

The Awak Mas Gold Project, located in South Sulawesi, Indonesia was discovered in 1988. Since that time a number of owners have undertaken gold exploration drilling and technical studies within the 14,390 ha Contact of Work (CoW). This work has led to the definition of Mineral Resources at the Awak Mas, Salu Bulo and Tarra deposits, collectively, the Awak Mas Gold Project ("the Project"), and completion of Pre-feasibility Studies (PFS). The project has been granted all its environmental permits and construction approvals for continued development[1].

In 2017, Nusantara Resources Limited (Nusantara, ASX: NUS) became owners of the Project from One Asia Resources through an ASX IPO[1].

The Project is 100%-owned through a 7th Generation CoW with the Government of Indonesia (GoI). The CoW has recently been amended by mutual agreement to align with the current law[2]. PT Masmindo Dwi Area (Masmindo), a wholly owned subsidiary of Nusantara, has sole rights to explore and exploit any mineral deposits within the project area until 2050. After this period, the operations under the CoW may be extended in the form of a special mining business license (IUPK) in accordance with prevailing laws and regulations, which currently allows for an extension of 10 years and a further possible extension of 10 years.

In the 10th year after commercial production, Masmindo is required to offer at least 51% of its share capital to willing Indonesian participants at fair market value according to international practice.

Nusantara has undertaken further mineral resource definition drilling, metallurgical evaluation, and mining studies to support the completion of a Definitive Feasibility Study (DFS) leading to an Ore Reserve estimate and completion of financial evaluation.

BASIS OF DEFINITIVE FEASIBILITY STUDY

In August 2017, Nusantara commenced a diamond drilling program to grow and increase the confidence in its May 2017 Awak Mas Gold Project Mineral Resource Estimate (MRE) of 38.4 Mt at 1.41 g/t Au for 1.74 Moz at 0.5 g/t Au cut-off, for a resultant 73% Indicated and 27% Inferred classification. This MRE was the result of a new geological model following re-logging, re-assaying and interpretation work completed by Nusantara's geologists and consultants on a selection of the extensive core library of over 1,000 diamond drill holes stored at site.

Drilling by Nusantara completed in 2017 and early 2018 resulted in a subsequent update of the MRE in May 2018 through the inclusion of 54 diamond drill holes at Awak Mas and 14 diamond drill holes at Salu Bulo for a total 45.3 Mt at 1.4 g/t Au for 2.00 million contained ounces with 89% reporting to the Indicated Resource category[3]. This MRE was used as the basis for the completion of the Ore Reserves and the DFS. The Tarra deposit, which is included in the overall MRE, requires further resource drilling to bring to an Indicated Mineral Resource and for this reason it was not included in the preparation of the DFS.

Nusantara has led the preparation of the DFS[4] with work undertaken by the following independent consultants:

- Mineral Resources Estimates — Cube Consulting;
- Ore Reserves, pit optimisation & mine planning, mining geotechnical — AMC Consultants;
- Metallurgical and Mineral Processing — Minnovo;
- Tailing Storage, infrastructure geotechnical engineering and hydrology studies — Golder Associates (PT Geotechnical & Environmental Services Indonesia);
- Engineering and lead consultant — PT Resindo;
- Environmental and social components — PT Lorax Indonesia; and
- Capital and operating costs — AMC Consultants, Minnovo and Resindo with mining costs verified by benchmarking against information provided by specialist mining contractors.

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[1] Nusantara's IPO Prospectus dated 15 June 2017 as lodged with the ASX on 1 August 2017

[2] ASX Announcement released 15 March 2018

[3] ASX Announcement released 8 May 2018

[4] The DFS has been prepared with an accuracy range of ±15% and the findings, estimates and forecasts should be considered in this context. The DFS has been completed in compliance with Clause 40 of the guidelines of the JORC Code (2012 Edition).Project approval and development is subject to market conditions, project financing, Board approval and regulatory conditions.

The aim of the DFS is to ensure the technical, engineering, risk, operational readiness and financial aspects of the Project are sufficiently advanced for an investment decision regarding the Project. The DFS is supported by an engineering cost study, which targets a +/- 15 % cost estimate.

LOCATION

The Project's location (Figure 1) near the east coast of southern Sulawesi provides very good access to the established infrastructure networks (Figure 2), offering greater support and fewer constraints than many comparative projects in the Asia-Pacific region.

The access point from the east coast to the Project is Belopa, the capital of the Luwu Regency (the Regency's population is ~ 350,000), located only 45 km by road from the Project.

Belopa has access to the other provincial centres including Makassar and Palopo City, via a highway, coastal shipping, and air services. Belopa is connected to Sulawesi's power supply grid and is the proposed connection point for the Project's power supply, via a 150kW transmission line, and communication facilities. A Memorandum of Understanding (MOU)[5] has been signed with the Indonesian power provider, Perusahaan Listrik Negara (PLN), for the construction of the power line from Belopa to site.

Makassar is the provincial capital for the South Sulawesi province with a population of more than two million people. It has domestic and international airports with connections to major South East Asian centres, significant port infrastructure and is the regional hub for eastern Indonesia. The city is also a centre for education with universities able to produce a supply of graduates relevant to the operation of a mining business.

Palopo City is the largest city in the immediate region, with a population of 150,000. It is 60 km north along the coast from Belopa by road. Palopo has port facilities for coastal shipping and is serviced by a regional airport at Bua, which is located between Belopa and Palopo. There are multiple daily flights between Bua and Makassar.

Figure 1: Awak Mas Gold Project Location, Sulawesi, Indonesia

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[5] ASX Announcement released 15 August 2017

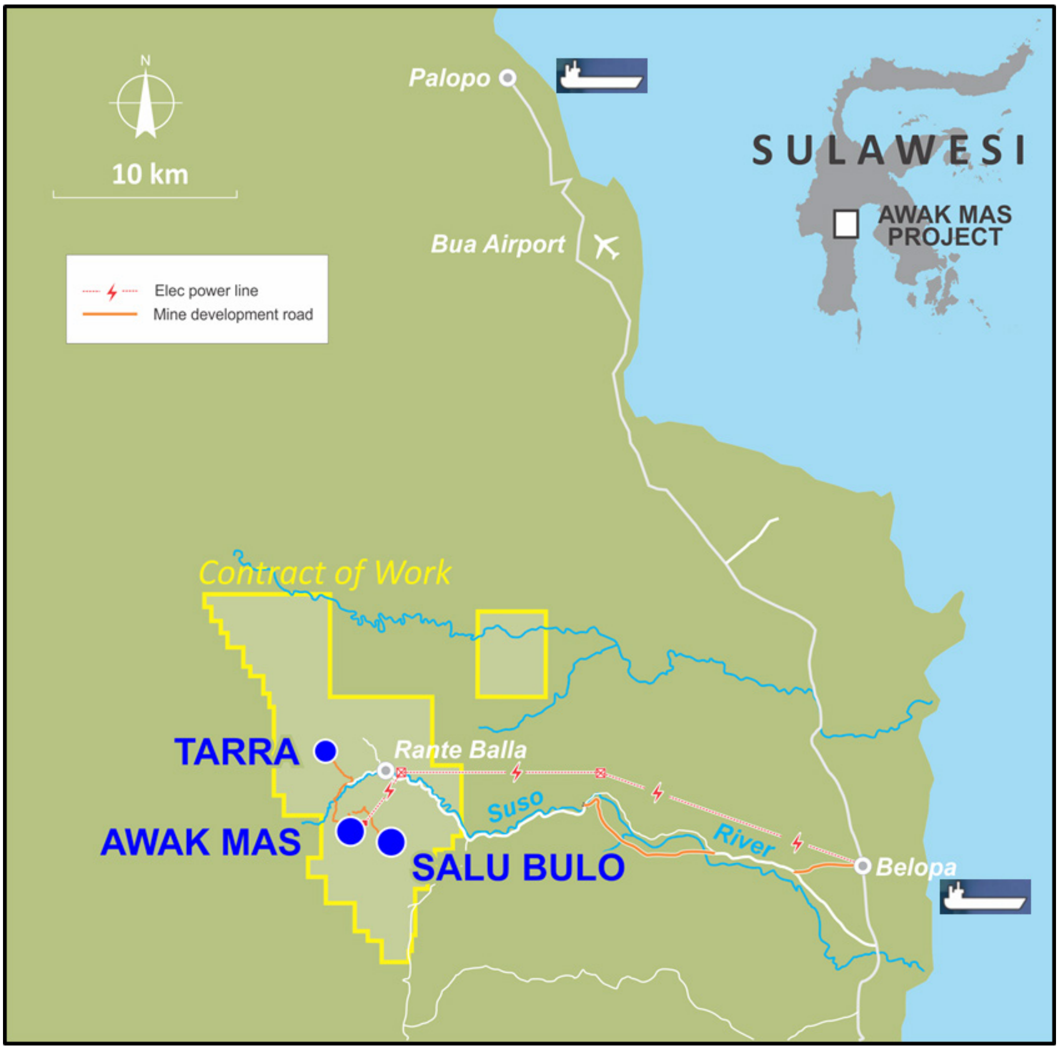

Figure 2: Awak Mas Gold Project Site access and with links with regional infrastructure

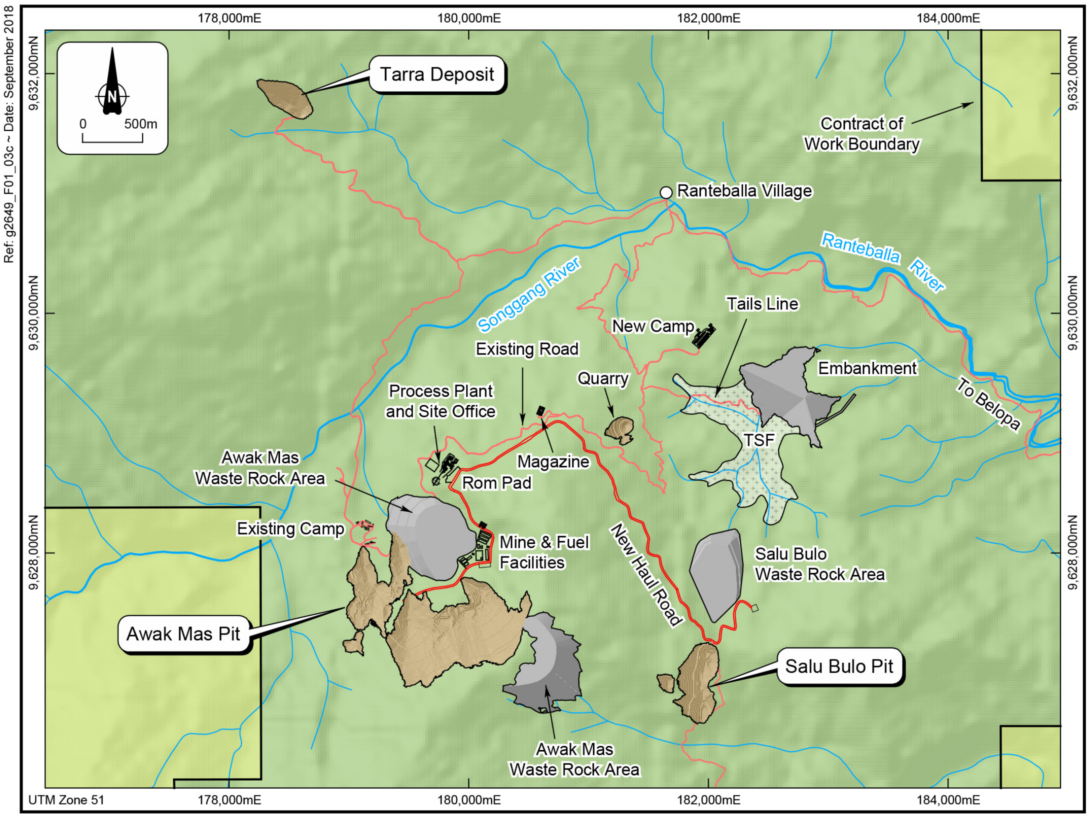

Figure 3: Awak Mas Gold Project Site Layout

The Belopa to Palopo infrastructure corridor includes a regional fuel distribution depot for PT Pertamina, Indonesia's state-owned oil and natural gas corporation. This depot would serve as the supply base for diesel fuel required by the Project.

The Project has a climate that is consistent with its equatorial location and position at an altitude of 900m to 1,400m above mean sea level:

- Temperatures, seasonal maximums of 25°C to 27°C, and minimums of 18°C to 20°C
- The highest relative humidity occurs in May (~ 98%) and is lowest in September (~88%)
- Rainfall, annual average 3,000 mm –the higher rain fall periods are March to April and November to December with August to September a low rainfall period with monthly averages of 120 mm.

The site layout was developed during the DFS and includes site haul roads, pit access roads, detailed pit stage development designs, waste dumps, topsoil stockpiles, mine workshops, tailings storage facility (TSF) and run of mine (RoM) ore pads (Figure 1).

TENURE

Masmindo, a wholly-owned subsidiary of Nusantara, holds the Project tenure under a 7th Generation CoW. The CoW is a legally binding agreement between the Government of Indonesia and Masmindo, as contractor, to carry out all mining activity periods, which include general survey, exploration, feasibility study, construction, exploitation and the marketing and sale of the relevant minerals in the area covered by the agreement.

The CoW covers an area of 14,390 hectares (Figure 3) and is currently in the operation and production stage, which allows for a construction period of three years and an operating period of 30 years.

No forestry permit is required for the Project. The key areas of the Project including processing and infrastructure areas are located on non-forestry land, Area Penggunaan Lain (APL), which is classified as land for other uses, including mining.

In March 2018, Masmindo signed an Amendment to the CoW[6] to more closely align the CoW to prevailing law and regulations. The Amended CoW reaffirms Masmindo as the legal holder of the CoW with the sole rights to explore and exploit any mineral deposit within the CoW area until 2050. After this period, it can be extended in two 10-year extensions, in the form of a special mining operations and production business license (IUPK_OP) in accordance with prevailing laws and regulations.

Significant changes to the CoW include adoption of prevailing rates for taxes, royalties, dead rent and the requirement to undertake divestment at fair market value according to internationally accepted standards to willing Indonesian participants of at least 51% in Masmindo in the 10th year of commercial production. Participation by any local Indonesian group prior to the 10th year of production would apply to the 51% divestment requirement.

Recent significant CoW approvals include:

AMDAL (Environmental Impact Assessment)	12 April 2017
Environmental Permit	12 April 2017
Government of Indonesia Feasibility Study (GOI FS)	17 May 2017
Construction Approval	20 June 2017
Operations & Production Phase	Granted 16 January 2018, effective 20 June 2017

There will be a requirement to submit amendments to the Government of Indonesia for the existing approved Feasibility Study and AMDAL due to some changes in project description since their approval. Masmindo is also required to submit 5 Year Reclamation and Mine Closure Plans.

In addition to the major permits noted above, several minor permits are required for the operations phase of the project; such as permits required for the TSF, explosives storage and use, water usage, hazardous waste etc.

GEOLOGY, MINERAL RESOURCES AND EXPLORATION

The Awak Mas, Salu Bulo and Tarra deposits are mineralised systems comprised of a sequence of intercalated meta-sediments and intrusive rocks. A high level, low sulphidation hydrothermal system has developed, which is overprinted by a strong sub-vertical fracture control which has channelled mineralising fluids.

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[6] ASX Announcement released 15 March 2018

The Project is an active growth project where recently completed diamond drilling by Nusantara has defined a 2.0 Moz Mineral Resource[7]. The Awak Mas deposit currently contains an Indicated and Inferred Mineral Resource of 39.5 Mt at 1.4 g/t Au for 1.72 Moz utilising a lower cut-off grade of 0.5 g/t Au (Table 1). The smaller satellite deposits of Salu Bulo (3.6 Mt at 1.6 g/t Au for 0.18 Moz) and Tarra (2.3 Mt at 1.3 g/t Au for 0.1 Moz) together contain additional Mineral Resources of 0.28 Moz of gold and are located 2.5 km east and 4.5 km to the north of the Awak Mas deposit respectively (Figure 4).

The Mineral Resources for the Awak Mas and Salu Bulo deposits are the basis for the preparation of the DFS Ore Reserve for the Project.

Awak Mas Deposit

The Awak Mas deposit is defined by a total of 787 diamond drill holes (~96,270 m) and 158 reverse circulation (~16,290 m) holes, of which Nusantara has completed 54 diamond drill holes (~9,356 m).

Host lithologies for mineralisation are the cover sequence of meta-sedimentary rocks and to a lesser degree the underlying basement sequence of diorites and biotite dominant schists. The Cover and Basement sequences are separated by an unconformable and sheared thrust contact.

A high level, low sulphidation hydrothermal system has developed at the Awak Mas deposit which is overprinted by a strong sub-vertical fracture control which has channelled the mineralising fluids. The mineralising fluids have exploited these pathways and migrated laterally along foliation parallel shallowly dipping favourable strata. In addition to the conformable style of mineralisation there is a late stage hydrothermal overprint that has also deposited gold in some of the major sub vertical structures. The multi-phase gold mineralisation is characterised by milled and crackle breccia, vuggy quartz infill, and stockwork quartz veining with distinct sub-vertical feeder structures.

The Awak Mas deposit consists of five broad geologically based mineralised areas (domains), which from west to east are Mapacing, Ongan, Lematik, Tanjung and Rante. These predominantly north-south to north-east striking zones lie adjacent

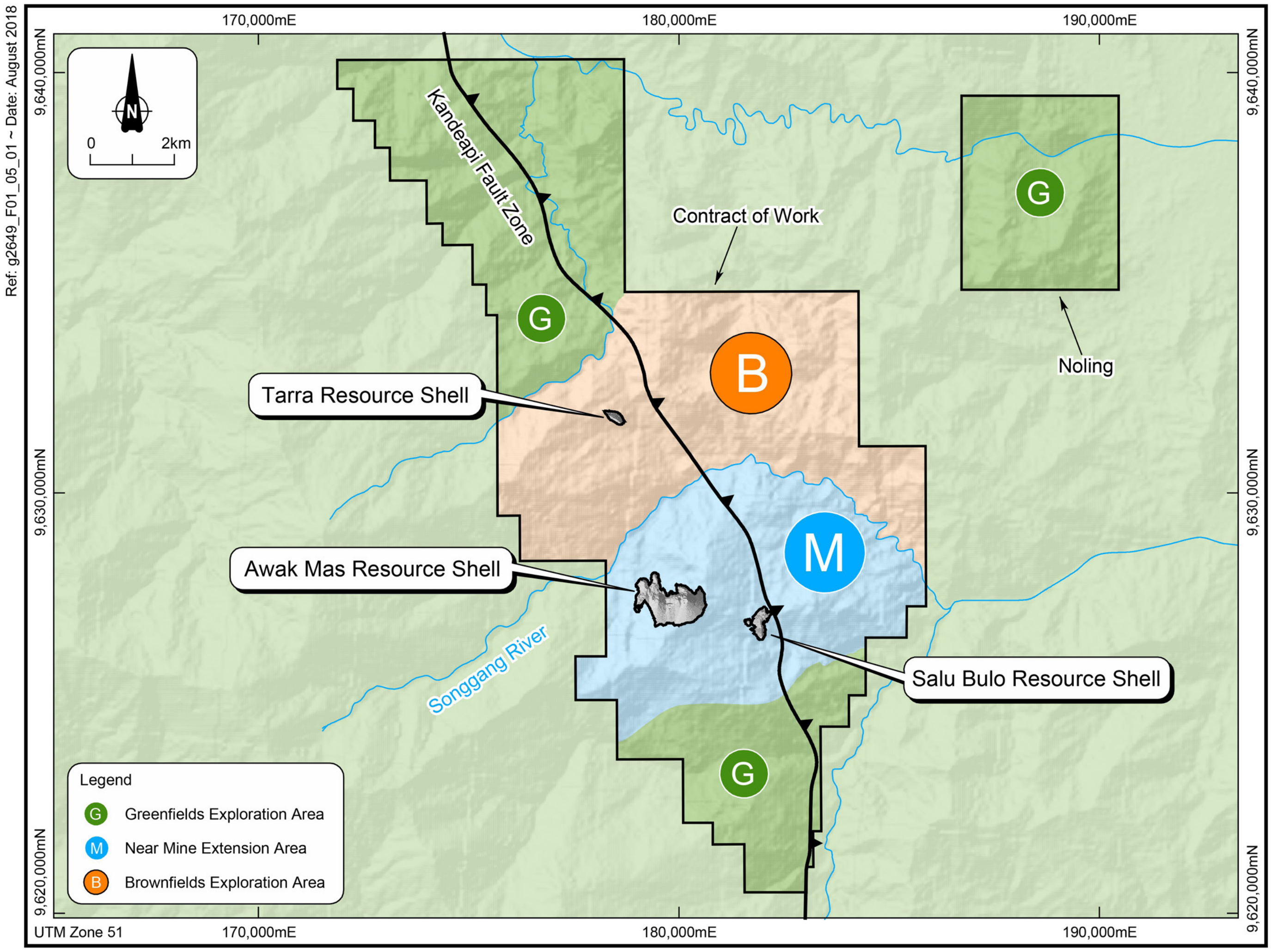

Figure 4: Awak Mas Gold Project Mineral Resources

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[7] ASX Announcement released 8 May 2017

to each other, cover an extent of 1,450 m east-west by 1,050 m north-south and extend to a maximum tested vertical depth of 400 m.

The complex interaction of multi-phased stockwork and breccia mineralisation associated with at least two dominant structural orientations (shallow thrusts and sub-vertical feeders) results in rapid local changes in the grade tenor and orientation at a scale of less than the current average drill hole spacing (25 m to 50 m).

The Awak Mas deposit MRE has been reported within a US$1,400 gold price optimisation shell (“Mineral Resource Shell”) as detailed below in Table 1. Approximately 94% of the MRE is classified as Indicated.

Salu Bulo Deposit

The satellite Salu Bulo gold deposit is located 2.5 km to the southeast of the main Awak Mas deposit and hosts a number of mineralised quartz vein breccia structures referred to as the Biwa, Bandoli and Lelating trends.

Several companies have conducted drilling in a number of campaigns since 1991 where a total of 146 diamond drill holes (~14,550 m) have now been completed.

The Nusantara drill program, completed in the period from November 2017 to March 2018, focused on the Lelating and Biwa domains with 14 diamond drill holes (~1,640 m).

The Salu Bulo deposit consists of three main north-south trending mineralised corridors, which from west to east are Lelating, Biwa North and Biwa South. Primary bedding dips between 25° to 85° towards the east and northeast, with the foliation developed parallel to bedding except near faults.

The mineralisation is hosted within a sequence of chloritic and intercalating hematitic meta-sedimentary rocks, with the two primary structural orientations being dominant sub-vertical north-south anastomosing structures, and foliation parallel low angle thrusts.

The ladder stockwork vein system developed at Salu Bulo deposit is analogous to that at Awak Mas deposit where there is inherent complexity of two mineralisation orientations, and short scale grade continuity at generally less than the drill hole spacing. (25 m to 50 m drill collar centres).

The multi-phase gold mineralisation is characterised by milled and crackle breccias, vuggy quartz infill, and stockwork quartz veining with distinct sub-vertical feeder structures. Gold mineralization typically occurs with minor disseminated pyrite (< 3%) within sub-vertical quartz veins, breccias, and stockwork zones.

The mineralised domains at Salu Bulo deposit are orientated north-south, and have an overall combined strike length of approximately 800 m.

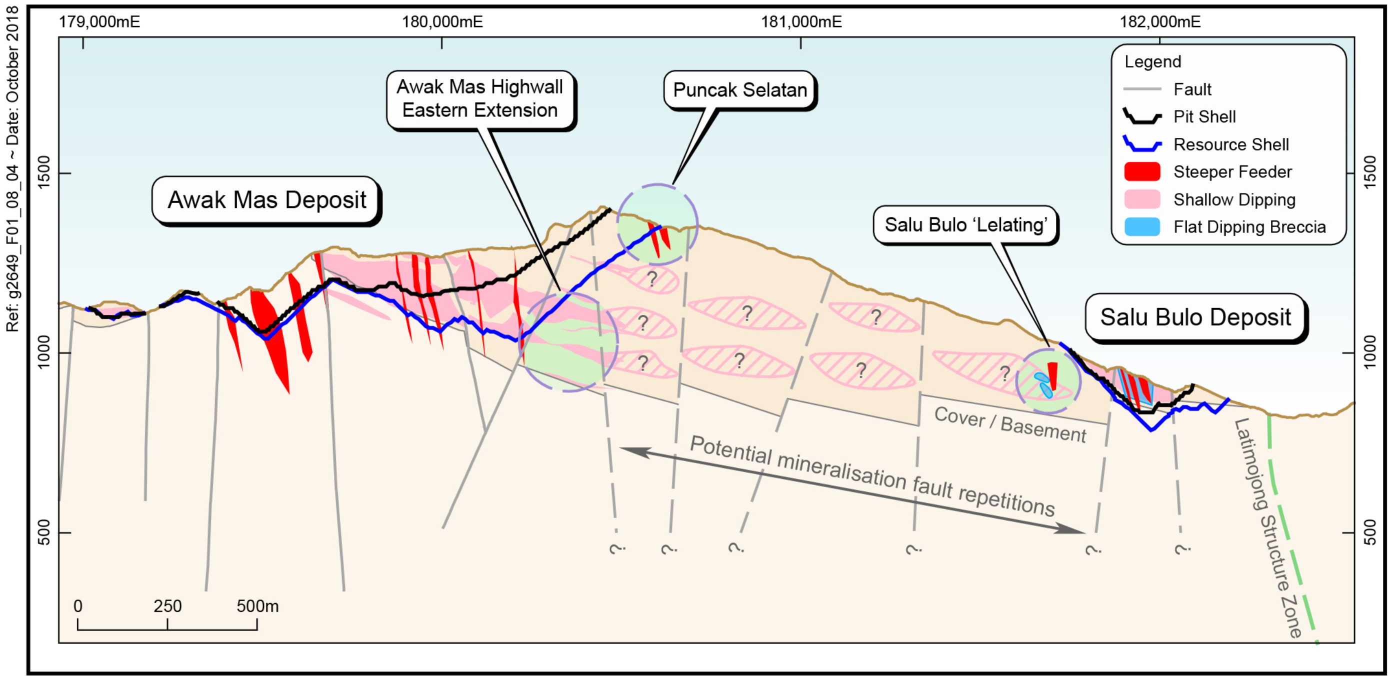

Figure 5: Awak Mas to Salu Bulo Section – Exploration model for future drill targeting

The Salu Bulo MRE has been reported at a 0.5 g/t Au cut-off grade within a US$1,400 gold price optimisation shell as detailed below in Table 1. Approximately 88% of the MRE is classified as Indicated.

Tarra Deposit

The Tarra deposit lies approximately 4.5 km north of the main Awak Mas deposit. The mineralisation style at Tarra is considered to be analogous to that at the Awak Mas deposit, but with a more dominant sub-vertical structural control.

The Tarra deposit consists of a single 10 m to 50 m wide, northwest-trending, sub-vertical structurally controlled mineralized zone in the hanging wall of the Tarra Basal Fault. The mineralised zone is tabular and has an overall strike length of approximately 480 m, dips 70° to the northeast and extends to 300 m below the surface with the top of the mineralisation capped by a cover of colluvium.

Gold mineralisation occurs in a 30 m silicified zone at the footwall of the fault and along quartz-pyrite filled fractures in the sandstone. Silica-albite-calcite-pyrite alteration is associated with veins, stockworks and zones of the silicified breccias.

The Tarra deposits represents a relatively untested opportunity for Mineral Resource growth for the Project.

Table 1: Project Mineral Resource estimates[8] (May 2018) by deposit at 0.5 g/t Au cut-off and constrained within a US$1400/oz optimisation shell.

Deposit	Classification	Tonnes (Mt)	Au Grade (g/t)	Contained Gold (Moz)
Awak Mas	Measured	-	-	-
	Indicated	36.4	1.4	1.62
	Inferred	3.1	1.0	0.10
	Sub-total	**39.5**	**1.4**	**1.72**
Salu Bulo	Measured	-	-	-
	Indicated	2.9	1.7	0.16
	Inferred	0.6	1.1	0.03
	Sub-total	**3.6**	**1.6**	**0.18**
Tarra	Measured	-	-	-
	Indicated	-	-	-
	Inferred	2.3	1.3	0.10
	Sub-total	**2.3**	**1.3**	**0.10**
TOTAL	**Measured**	**-**	**-**	**-**
	Indicated	**39.3**	**1.4**	**1.78**
	Inferred	**6.0**	**1.1**	**0.22**
	Total	**45.3**	**1.4**	**2.00**

Deposit Extensions and Near Mine Exploration Potential[9]

The success of the initial exploration program in the Awak Mas highwall area (Lengket domain) confirms the potential for further extensions of gold mineralisation in and surrounding the main Awak Mas deposit. The evolving geological model is demonstrating that extensional and structural repetition of the Awak Mas system is likely, with similar expectations for the Salu Bulo and Tarra systems.

Planned exploration drilling at Salu Bulo will focus on extending the near surface strike length at Lelating and on resource extensions to the north and south at Biwa. The main objective for exploration is growth of the Mineral Resources outside of the currently delineated mineralised domains.

An exploration model for drill targeting has been developed based on the potential for further fault repetitions of the Rante

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[8] ASX Announcement released 8 May 2018

[9] Any discussion in relation to potential exploration is conceptual; there has been insufficient exploration to define resources in addition to the current Mineral Resource Estimate reported in accordance with the guidelines of the JORC Code (2012 Edition) and it is uncertain if further exploration will result in the determination of additional Mineral Resources.

style mineralisation to the east of Awak Mas towards Salu Bulo. Figure 5 is a schematic east-west section along the Awak Mas to Salu Bulo corridor showing the potential to delineate further mineralisation within the under-explored Mine Corridor between the Awak Mas and Salu Bulo deposits.

Near mine exploration will aim to advance brownfields exploration focused on the Salu Kombong, Kandeapai, Puncak Utara and Puncak Selatan prospects (Figure 6).

The potential extensions at Awak Mas and Salu Bulo, and inclusion of the Tarra deposit presents an immediate opportunity of a possible three-year mine life extensions based on current knowledge. Further resource drilling and technical studies are required to confirm the inclusion of any mine life extension into the mine plan.

CoW Exploration Potential[7]

Nusantara's focus is to advance exploration from the near mine area to the remaining parts of the CoW. Encouraged by exploration success to date, target generation will concentrate on further developing the 'known' prospects (Figure 7) with real potential to expand into the largely untested areas outside of the two recognised corridors.

The historic exploration can be enhanced by application of the new geological model and use of the recently completed LiDAR topographic survey and high resolution orthophotography, both of which have opened up significant opportunity for further discovery within the highly prospective ground covered by the CoW.

Recently completed reprocessing of existing geophysics data has highlighted the significance of numerous magnetic signatures indicating the presence of intrusives which appear to be coincident with known mineralisation. This newly acquired data will be a valuable aid to ongoing exploration and assist with targeting areas of open and untested mineralisation potential.

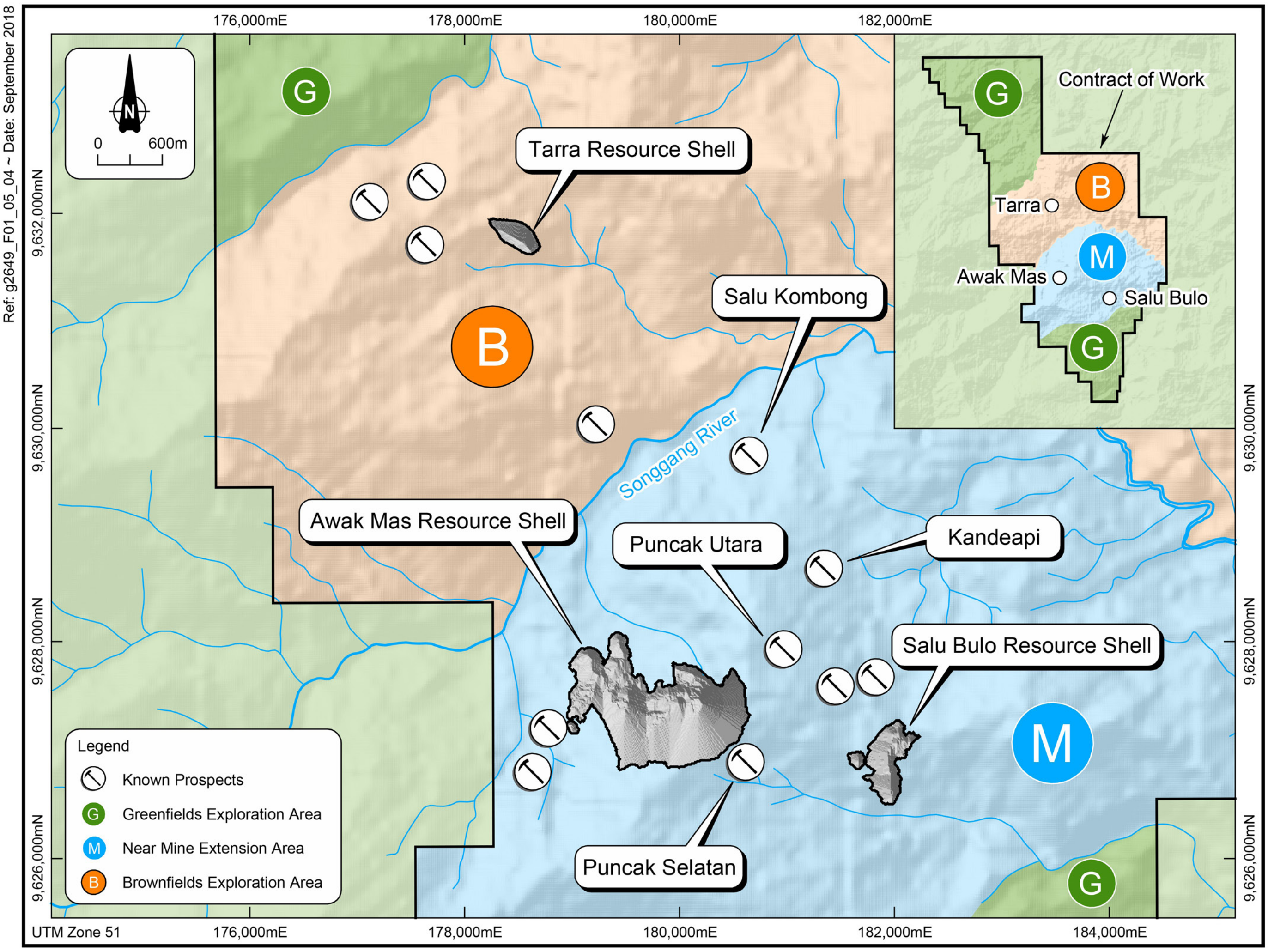

Figure 6: Initial Brownfields exploration focus on four areas; Salu Kombong, Puncak Utara, Kandeapai and Puncak Selatan.

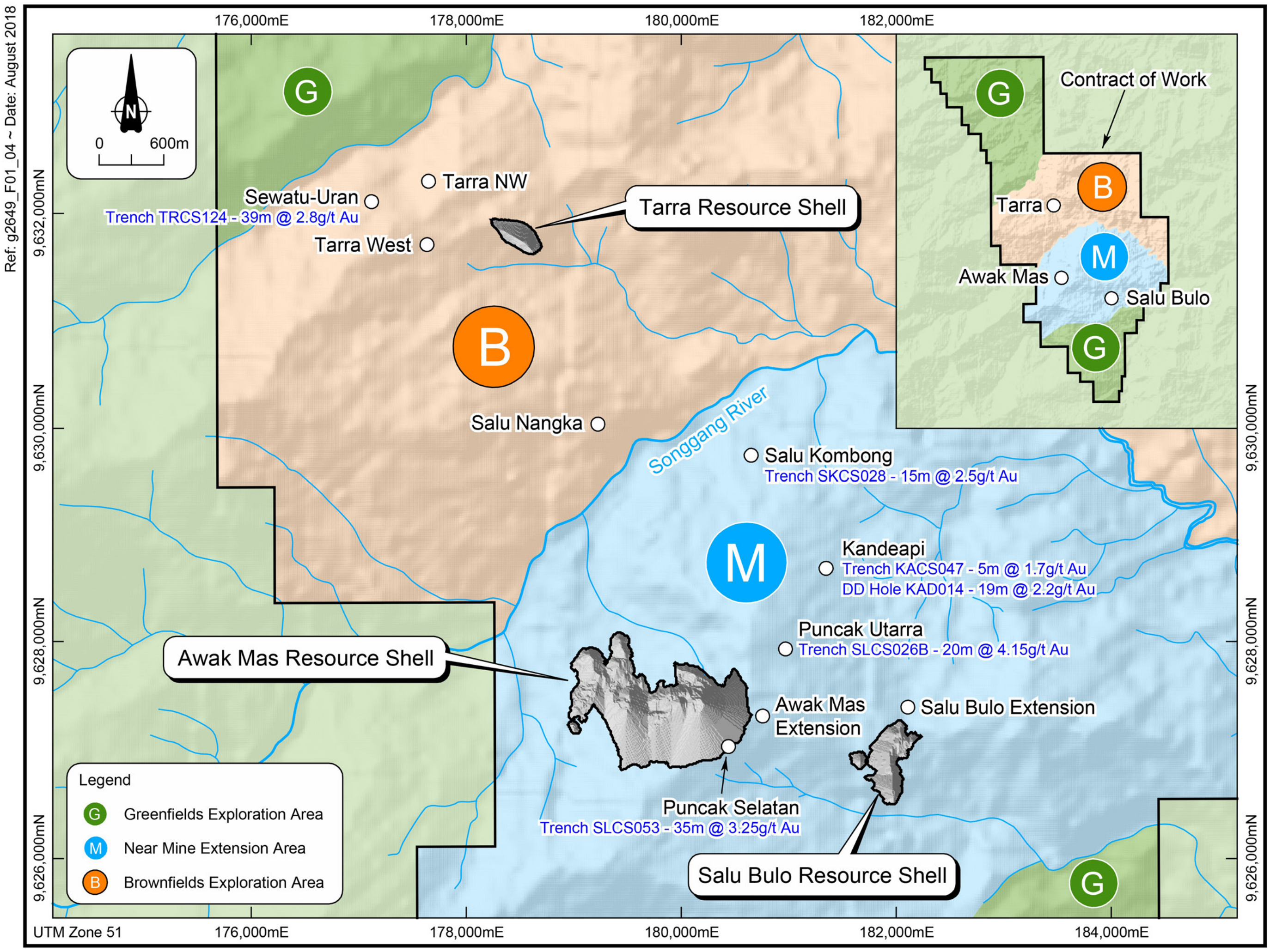

Figure 7: Over 16 high grade exploration targets recognised previously.

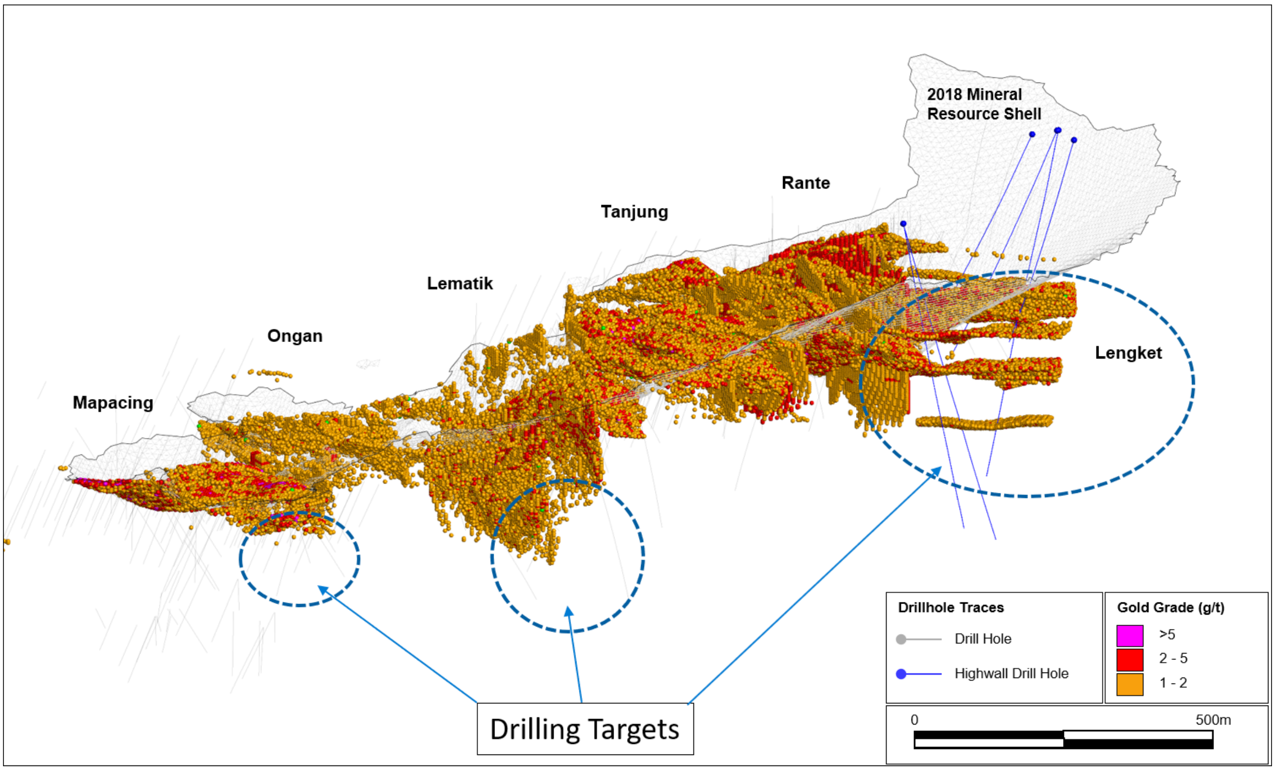

Figure 8: Awak Mas – Extensional drilling targets with blocks >1 g/t Au and Mineral Resource shell.

Opportunities exist at and around the Awak Mas deposit where regions of mineralisation are not 'closed off' by drilling. The key areas that present the best potential to extend the current resources and warrant future drilling are shown in Figure 8.

The targeted areas are based on the lack of drilling at depth and down-dip extensions, particularly in areas proximal to identified mineralised sub-vertical structures. The main targets are located at Ongan, Rante, Lematik and Mapacing domains.

Through recent drilling, Nusantara has increased the confidence in the understanding of the geological model for the Awak Mas deposit and has confirmed extensions to mineralisation to the east of the Rante domain. Based on the work completed, a conceptual exploration model for drill targeting has been developed to test for extensions of the Rante style mineralisation to the east towards the Salu Bulo deposit.

The highwall drill holes have confirmed that mineralisation extends across the identified Highwall Fault and indicates the potential for structural repetitions along the intervening Mine Corridor between Awak Mas and Salu Bulo.

Ref: g2649_F01_09_01 ~ Date: August 2018

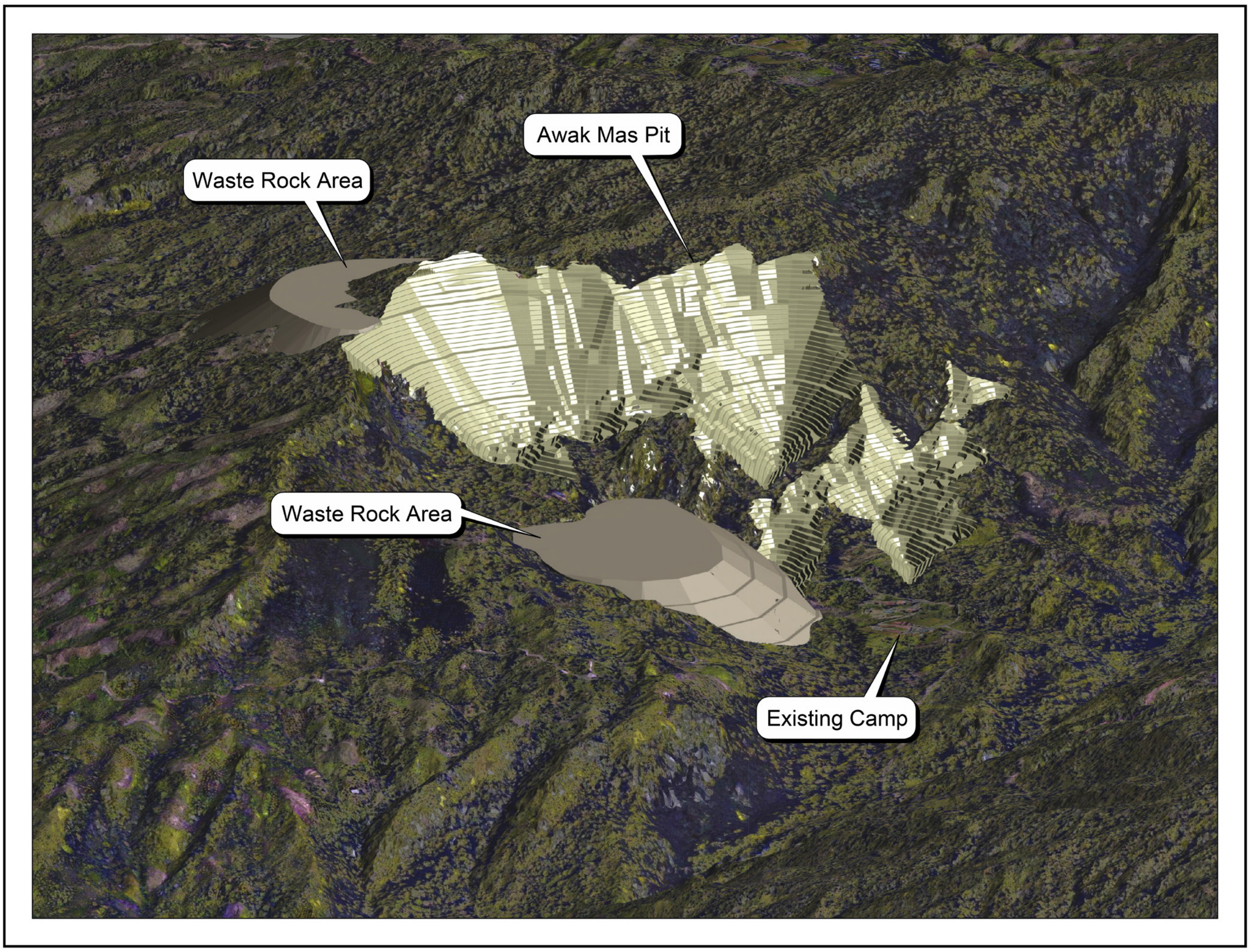

Figure 9: Awak Mas pit

Along with the Awak Mas resource and satellite prospects, numerous additional mineralised occurrences have been identified elsewhere within the Project CoW area.

Historical regional stream sediment sampling completed over the majority of the CoW has identified a broad area of anomalous gold geochemistry, which is approximately 5 km wide and extends over a 13 km length to the north and south of the Awak Mas deposit. The majority of the identified mineral resources and prospects lie within the southern 40% of this anomalous area. Little follow-up exploration has been undertaken within the remaining 60%. This area has high potential for additional mineralised occurrences to be identified with further systematic exploration. Similarly, additional exploration potential is considered to exist within other portions of the CoW.

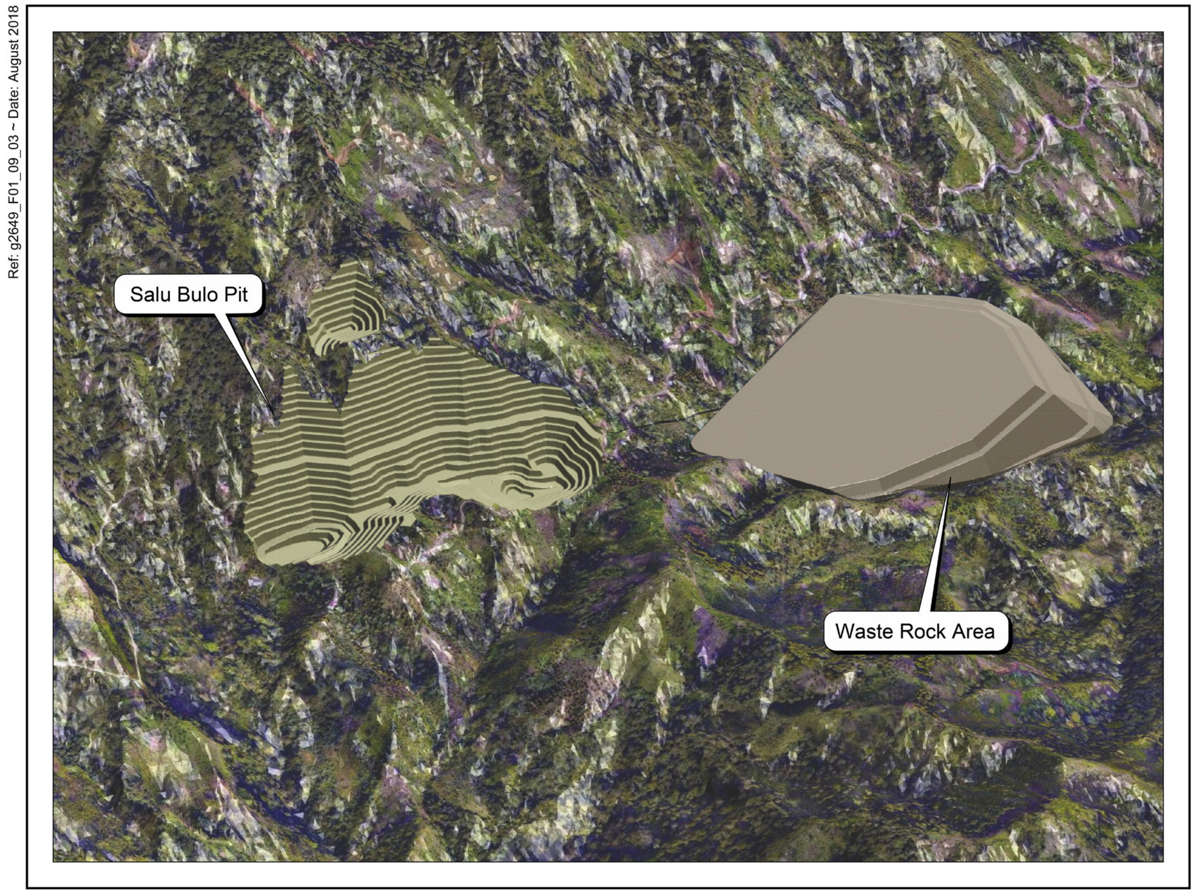

Figure 10: Salu Bulo Pit

MINING AND ORE RESERVES

AMC has completed pit optimisation, mine design and scheduling for the two deposits, Awak Mas (Figure 9) and Salu Bulo (Figure 10), based on the Indicated Mineral Resources. This work is presented in the Ore Reserves estimate[10], Table 2, and mine production schedule, Figure 11.

Table 2: Project Ore Reserves estimates (September 2018) by deposit

Deposit	Classification	Tonnes (Mt)	Au Grade (g/t)	Contained Gold (Moz)
Awak Mas	Proved	-	-	-
	Probable	24.1	1.28	0.99
	Sub-total	**24.1**	**1.28**	**0.99**
Salu Bulo	Proved	-	-	-
	Probable	2.8	1.67	0.15
	Sub-total	**2.8**	**1.67**	**0.15**
Total	Proved	**-**	**-**	**-**
	Probable	**26.9**	**1.32**	**1.14**
	Total	**26.9**	**1.32**	**1.14**

Reported at a 0.5 g/t cut-off grade

AMC initially developed a diluted mining model based on the latest Mineral Resource update[11]. The diluted mining model was used in Whittle pit optimisation software to develop optimum mining shells.

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[10] ASX Announcement released 13 September 2018

[11] ASX Announcement released 8 May 2018.

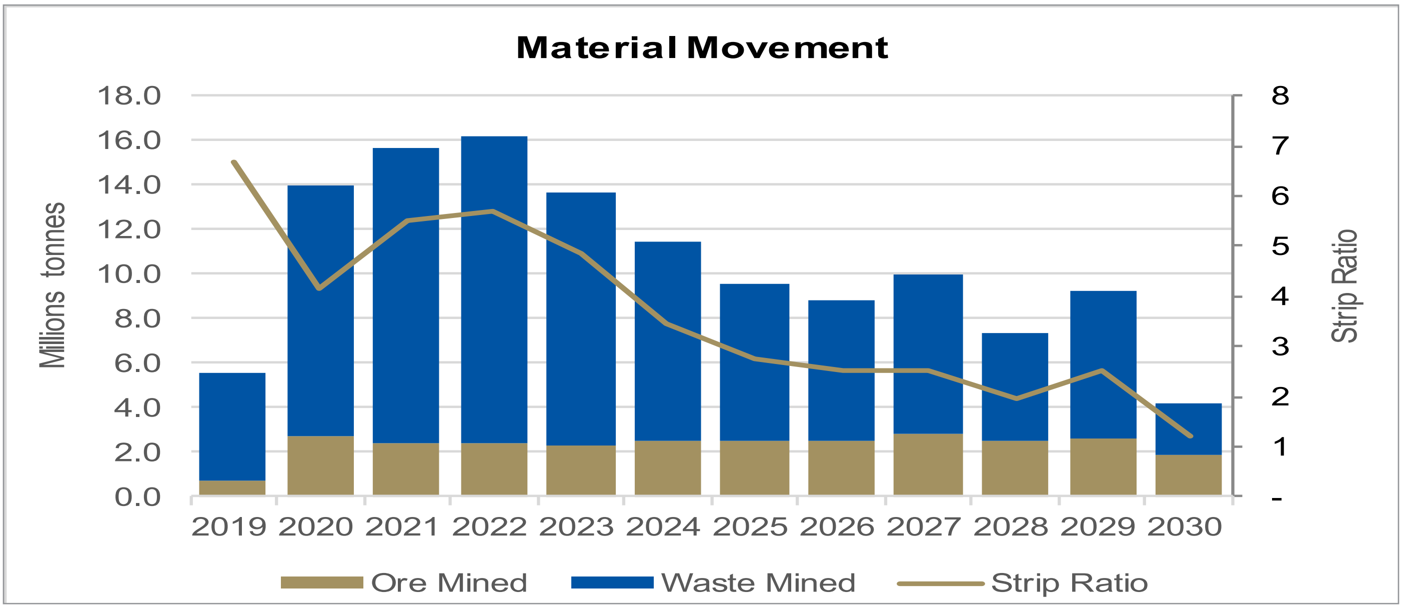

Figure 11: Project material movement schedule

The resource models were re-blocked to a 5m by x 5m by x 5m selective mining unit (SMU). The diluted Awak Mas model shows a 4% increase in tonnes and a 5% reduction in gold grade for a resultant 98% of contained gold (cut-off grade of 0.5 g/t Au).

The Salu Bulo resource model was re-blocked to a 5m by x 5m by x 5m SMU the diluted model presented no change in mineralised tonnes and a 1% reduction in gold grade for a resultant 99% of contained gold (cut-off grade of 0.5 g/t Au).

At Awak Mas and Salu Bulo, the schistose rocks of the Cover and Basement rocks have a well developed foliation, which is the most important structural feature influencing slope stability and therefore pit design.

Pit design batter scale and overall stability assessments were conducted using kinematic stability analysis, limit equilibrium and finite element methods. The factor of safety (FOS) values fall within or very close to the target FOS criteria, however, depressurisation of the pit walls to very low levels of saturation will be essential to achieve the required stability levels, especially for pit walls deeper than 250m. The performance of depressurization measures is to be monitored by piezometers installed at different levels in the highwall and other areas.

The following slope design parameters were adopted:

- Batters 10m high, 45° Batter Face Angle (BFA), with 5m wide berms in the weathered rock mass, a 33.7° inter-ramp slope angle.
- Batters 10m high, 60° BFA with 5m wide berms, a 43° inter-ramp slope angle.
- A geotechnical berm 15m wide to be included at 100m vertical intervals, nominally 1400 mRL, 1300 mRL and 1200 mRL.

These slope parameters will be applicable to all areas at Awak Mas and Salu Bulo pit developments.

The deployment of slope stability radar (SSR) and survey monitoring (prisms), to complement SSR monitoring, is planned for the early stage of high wall development.

Based on the historical hydrogeological test results and test work carried out for the DFS, a conceptual two aquifer model was developed for Awak Mas. In this model there is a shallow aquifer within the extremely weathered bedrock near surface; and a deeper aquifer associated with the partially weathered/fresh underlying rock mass. There is considerable variation in aquifer properties with each of these aquifers, depending on the rock type, local structural features, degree of fracturing and weathering.

The batter, inter-ramp and overall pit slopes are sensitive to groundwater pressure, and wall depressurization will be a requirement to achieve target slope stability levels. With the presence of a shallow and a deep aquifer, batter scale and overall scale depressurization will be required, including:

- Closely spaced shallow horizontal drain holes (HDH) to manage the influence of the shallow aquifer. HDH 30m long, 25m centres at 30m vertical intervals (every 3rd berm) in all areas.

- Deep HDH to depressurize the deep aquifer and place the phreatic surface back a certain distance behind the pit wall to increase the FOS to an acceptable level. HDH 150m to 200m long are to be installed from 1300 mRL and 1200 mRL geotechnical berms, and possibly below these as well, depending upon the performance and effectiveness of the drains. The HDH are to be laterally spaced 50m.
- In addition to the above, 200m long HDH are proposed on a fan, from the base of the Stage 1 of Awak Mas pit (approximately 1120 mRL after year 3), targeting the Rante and Lematik pit domains.

Rain fall catchment volumes dominate water inflows to the pit operations and pit drainage management.

Detailed practical pit designs were developed based on the shells with the recommended pit wall geometry.

A life of mine schedule was developed based on practical mining rates assuming conventional open pit mining methods (Figure 11). The approach assumes a mining contractor operation using 90 tonne excavators and 60 tonne articulated dump trucks. The mine plan and schedule allow for the projects steep terrain and tropical setting.

A detailed first principles cost model was developed to estimate contractor and owners operating and capital costs. The operating costs were benchmarked against local mining contractor provided budget quotes.

Haul profiles, truck cycle times and fuel consumption were estimated by developing haul routes from each bench to an ore or waste stockpile area.

Excavator, drill and support equipment productivities and operating costs reflect the location, material type and estimated fuel consumption, operator costs, repair and maintenance and ownership costs for each item. A replacement schedule for major mining equipment was also developed.

Over the life of the project the average cash cost of mining is $2.75/t of material mined or $7.02/bcm mined.

Awak Mas deposit's waste dumps were optimized to reduce truck haul distances. Geochemical investigations suggested the waste material is not potentially acid producing (PAF), however if minor volumes of material require encasement that would

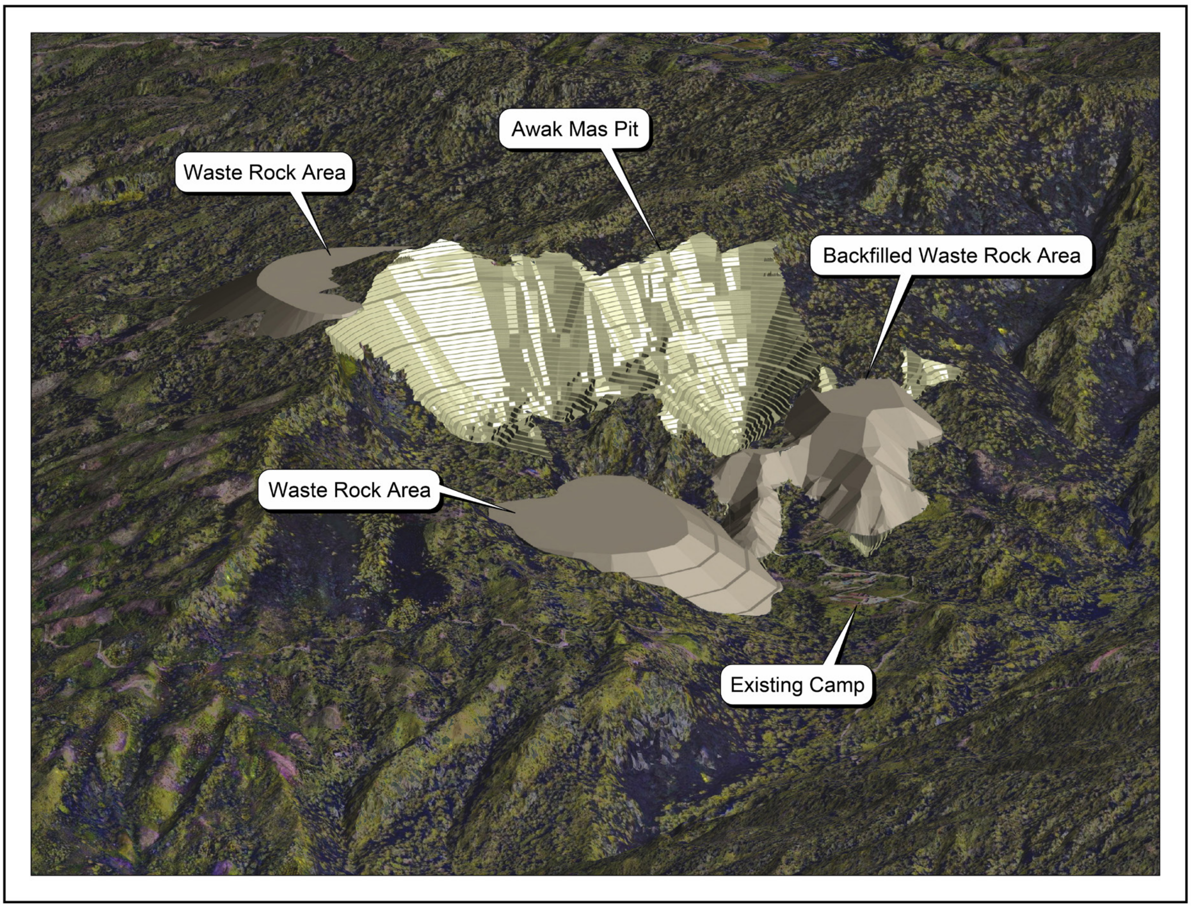

Figure 12: Awak Mas Pit Waste Rock Areas

be managed in the existing waste dumps. The Awak Mas deposit waste dump layout is presented in Figure 12.

Pit Design

Table 3 outlines the mine design for the Awak Mas and Salu Bulo pits.

The Awak Mas deposit open pit will be developed in stages to provide early access to ore supply and to manage waste and total material movements.

The Probable Ore Reserves for the Project are 26.9 Mt at 1.32 g/t Au for 1.14 Moz[12]. These Ore Reserves calculated at 0.5 g/t Au cut-off using a US$1250/oz gold price are for Awak Mas and Salu Bulo deposits:

- Awak Mas deposit — 24.1 Mt at 1.28 g/t Au for 0.99 Moz, Strip Ratio of 3.1
- Salu Bulo deposit — 2.8 Mt at 1.67 g/t Au for 0.15 Moz, Strip Ratio of 5.1

The 0.5 g/t Au cut-off grade reflects the low operating cost environment (low strip ratio, access to grid power, moderate bond index and good access to established infrastructure).

The Ore Reserve (Table 2) estimate demonstrates that the open pits (Figures 9 and 10) will support an ore processing rate of 2.5 Mtpa with a strip ratio of 3.5 over an eleven-year period. The mining operation is based on conventional drill and blast, excavator and truck equipment with all waste stored adjacent to the open pits. Later in the mine life, waste is also dumped in mined out pits, at Ongan and Mapacing. The final processing schedule developed for the Project included 1.1 Mt of Inferred mineral resource recovered contained within the open pit designs.

Table 3: Mine Design Criteria

Criteria	Units	Base Case	Source
Ore Throughput	Mtpa	2.5	Initial study optimisation
Mining method		Conventional truck and excavator	Assumed/typical
Drill and blast		5.0m benches with 102mm holes.	Assumed/typical
Major equipment		3 main loading excavators 23 dump trucks 3 blast hole drill rigs 3 front end loaders 5 dozers 2 graders Supporting equipment RC grade control drills	Site specific requirements
Physical Characteristics			
Ore Mined	Mt	28.0	Diluted block model report in the pit design
Waste mined	Mt	97.6	
Total material mined	Mt	125.6	
Strip ratio	t:t	3.5	
Maximum mining rate	Mtpa	16.0	Estimated
Mine life	years	11.5 including ramp up	Estimated
Operating costs			
Mine operating cost	$/t	2.79	Estimated

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[12] ASX Announcement released 13 September 2018

Mine development allows for a 10-month pre-production period comprising 4 months of access development and 6 months of combined development and pre-strip mining where access is developed to the Awak Mas pit via pioneered haul roads over the vertical extent of the project. Mining costs are estimated inclusive of the Masmindo technical and management team, ongoing access development and access road maintenance and assumes contract mining. Quarry rock to support mining operations is sourced from an identified quarry on the project site is proposed.

METALLURGY AND MINERAL PROCESSING

A flowsheet comprising gravity and leach, Whole of Ore Leach (WOL), was selected as the basis for further study and engineering (Figure 13). This followed a review of extensive historical comminution testwork, historical gravity and leach testwork and the DFS Phase 1 testwork program[13]. Prior to this work, the Project's process flowsheet was proposed as a gold flotation process with carbon in leach ('CIL') treatment of reground sulphide concentrate. This testwork program using the WOL flowsheet suggested improved gold recoveries ranging from 81% - 98% compared to recoveries in the range of 85% to 91% for flotation and CIL flowsheet. Based on the current mine plan and recovery estimates for each deposit from the current test work programs, the project has an average recovery of 91%.

The key process plant design criteria for the WOL flowsheet, derived from available and reviewed testwork, is summarised in Table 4.

The WOL process plant will have a capacity of 2.5 Mtpa, and designed to handle an average head grade of 1.40 g/t Au over the life of the Project. The process plant comprises of primary crushing, wet grinding in a SAG and ball milling circuit (SAB circuit), gravity gold recovery, cyanide carbon in leach gold recovery and elution, reagents, air and water services. Prior to disposal in the Tailings Storage Facility, CIL tailings would be thickened and undergo cyanide destruction. The process plant will produce a gold doré product.

The development of the process flow sheet considered the following factors:

- The ore has moderate competency, based on historic comminution test results.
- Gravity gold design recovery of 40% was determined from an evaluation of the historical testwork, for the selection primary grind size of 80% passing 75 µm.
- The inclusion of a mercury retort to remove mercury from the gold sludge prior to smelting, sized on an estimated overall mercury recovery of 41% based on an average of relevant testwork results reporting mercury extraction in leach. The removal of mercury improves the quality of the doré product.
- The adoption of a SO2/Air process as the method of cyanide destruction, with design discharge CNWAD level of 0.5 ppm.
- Principles of the "International Cyanide Management Code For The Manufacture, Transport and Use of Cyanide in the Production of Gold" have been considered in the design of the process flowsheet.

The WOL process plant, includes direct feed of primary crushed ore to the milling circuit with an emergency stockpile. This arrangement is a more robust design for Awak Mas ore in the high rainfall environment, and has the benefit of improved operability, more efficient use of limited layout available and is less expensive that the Course Ore Stockpile option. From the grinding circuit onwards, the WOL flowsheet offers a simple and conventional process route that is proven in the gold industry and presents a low technical risk.

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[13] ASX Announcement released 10 October 2017

Table 4: Process Plant Design Criteria Summary

Criteria	Units	Base Case	Source
Ore Throughput	Mtpa	2.5	Initial study optimisation
Crushing Plant Utilisation	%	75.0	Assumed/Typical
Wet Plant Utilisation	%	91.3	Assumed/Typical
Head Grade	Au g/t	1.40	Feb 2018 US$1,200/oz pit shell Mineral Resource Estimate
	%Sulphur	0.84	Testwork
Physical Characteristics			
BWi	kWh/t	12.8	Testwork
RWi	kWh/t	17.9	Testwork
Ai	g	0.35	Testwork
JK A x b	-	60.8	Testwork
Gold Recovery			
Gravity	%	40.0	Testwork
CIL	%	85.2	Preliminary/PFS Level Testwork
Overall Gold Recovery	%	91	Preliminary/PFS Level Testwork
Primary Grind Size P_{80}	µm	75	Testwork
Leach and Adsorption			
CIL Feed Rate	t/h	313	Calculated
Residence Time	h	24	Testwork/Engineer
Cyanide Consumption	kg/t CIL Feed	0.40	Calculated/Testwork

Note: Validated upon completion of further metallurgical and physical properties testwork work program.

The metallurgical testwork completed during the DFS is considered to be of PFS order given availability of samples. Nusantara plans to complete further metallurgical and physical properties testwork aimed at exploring opportunities to increase recoveries through flowsheet or operating strategy changes such as grind size, residence time or reagent addition. The scope of this testwork includes:

- Confirmatory comminution testwork based on the first 3 years of the Mining Schedule.
- Confirmatory SMC, BWi, RWi and Ai tests on a Salu Bulo ore sample,
- Whole Ore Leach tests including:
  - Tests on all ore domains, including composite and variability testwork.
  - Optimisation tests focussing on leach time, grind size, cyanide dosage and dissolved oxygen concentration.
  - Oxygen uptake tests.
  - Carbon kinetic tests.
- Gravity concentration tests for all domains

TAILINGS STORAGE FACILITY

Golder completed a preliminary geotechnical investigation, tailings characterisation and Tailings Storage Facility (TSF) design for the PFS for the Project in 2013. Further geotechnical investigation and site specific seismic hazard study work was completed in 2017/18 to progress a feasibility design of the TSF for the DFS.

The hazard category for the TSF has been classified as Major, based on ANCOLD Guidelines, considering the Severity Level

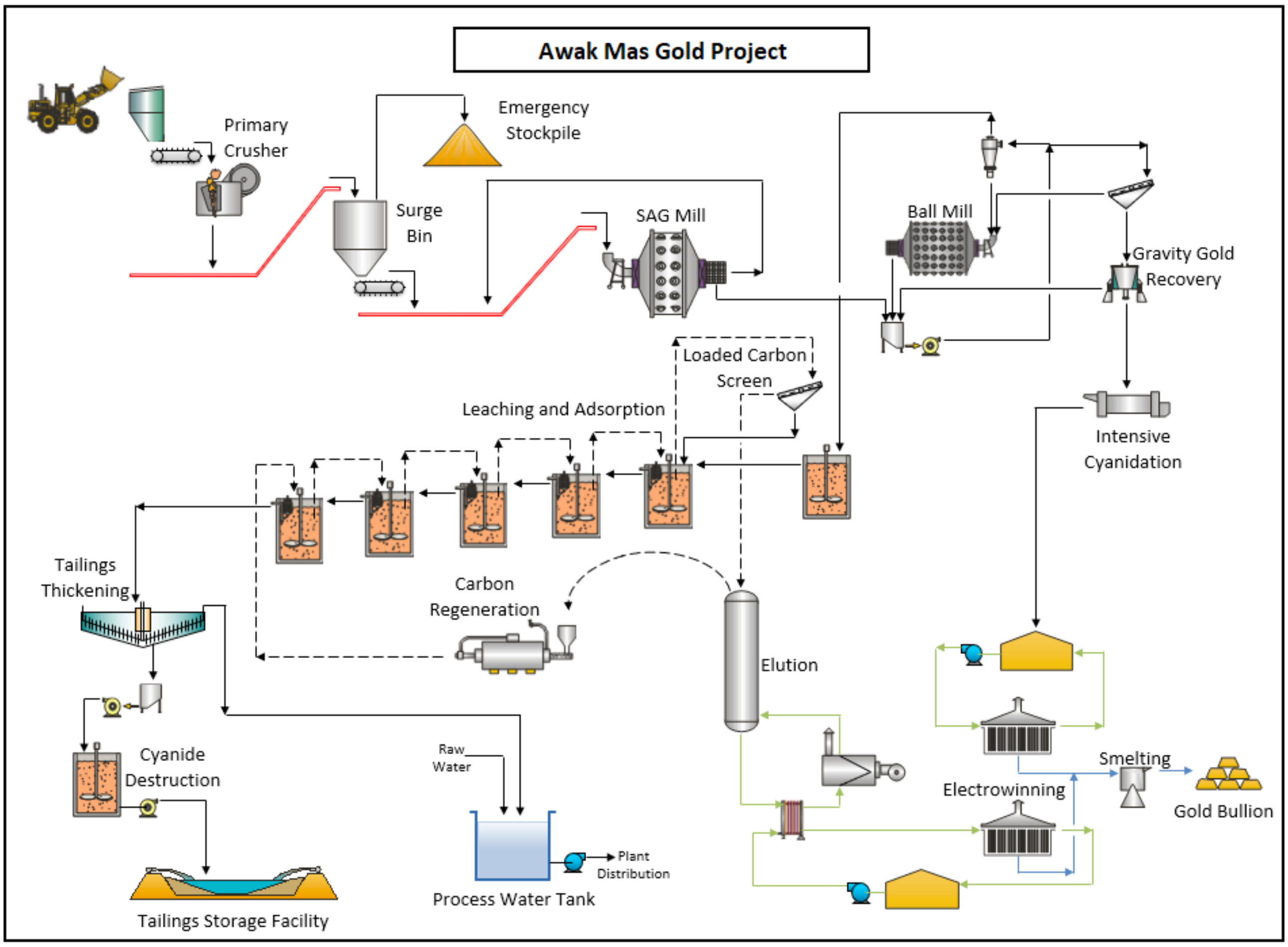

Figure 13: Process Flowsheet

of Impacts and the failure Consequence Category. Accordingly, the containment embankment of the TSF must be designed and constructed as a fully engineered structure, taking into consideration the foundation conditions, site seismicity, available construction materials, tailings characteristics and potential design rainfall events.

The Kandeapi Valley, approximately 3 km east of the proposed process plant site, is considered to be most suitable location for the TSF (Figure 3). The tailings will be pumped from the process plant via a slurry delivery pipeline for deposition into the TSF. The proposed TSF embankment is aligned east-west across the Kandeapi Valley.A conventional downstream embankment configuration has been selected as most appropriate for this seismic environment. The PFS/assume TSF embankment slopes were 1:2.5 (V:H) downstream and 1:3 (V:H) upstream, these have also been adopted in the DFS. The storage volumes for the TFS were recalculated using LiDAR topography acquired in late 2017. After the construction of the initial TSF embankment to start operations, the embankment will subsequently be raised in stages during the life of the operation.

A gravity decant structure will be used to capture water from the TSF and discharge supernatant water continuously from the TSF to a sediment dam downstream of the embankment. The water flows into the TSF will include:

- Tailing supernatant;
- Rainfall runoff from the TSF beach and decant pond; and
- Runoff from the hill slopes upstream of the TSF basin (except the runoff diverted by a cut –off drain).

The required storage capacity of the TSF for the 11-year planned life of mine (LOM) is as follows:

- Tailings tonnage 28 Mt
- Tailings volume 22 Mm^3.

Nusantara proposes to complete further engineering studies for the TFS. The scope of this work includes:

- Dynamic and dam break analysis;
- Tailings characteristics; and
- Embankment, spillways, diversion channel designs.

OPERATING STRATEGY

The advantages of the Project's location and the following principles guide the operating strategy for the Project:

- An operations focused mine site, which hosts only those functions that are directly part of the production process, the operational functions, or are needed for their safety, compliance and security; and
- The balance of the functions associated with the Site's operation, i.e. the 'support functions' will be located off-site, in Belopa, Core processing and storage area, primary logistics centre (main warehouse, road and sea transport receipt, consolidation of freight for despatch to Site receipt of back loaded freight from Site) and Resources Geology and Exploration field office.

Personnel associated with many of these support functions will access Site on a regular basis as required (on a day or multi day stay overs) in order to perform their roles.

Masmindo will base its business operations in Makassar, with a small corporate office in Jakarta focused on national level government relations.

This distributed operational approach is designed to:

- Minimise the number of people on site and maximise the use of appropriate supporting technology;
- Maximise the use of Indonesian employees overall; and
- Maximise employment and contracting benefits to the South Sulawesi Province.

The key production activities on site are mining and processing, with mining undertaken by a mining contactor and processing to be undertaken by Masmindo employees. All production planning will be by Masmindo employees.

In addition to the mining contract, work to outsource to contractors during operations includes:

- Catering and accommodation services;
- Transport and Logistics, including in particular Belopa to mine site freight;
- Key consumables supply, i.e.; Explosives supply, Diesel Fuel; and Processing Reagents, Wear Parts and Grinding Media;
- Personnel transport – Belopa to Minesite;
- Minesite Assay Laboratory Services;
- General Security Services – perimeter (likely to be a Regional contract); and
- Specialised Security Services – process plant gold areas (a National contract).

Site Infrastructure and Facilities

The site infrastructure planned will support both mine operations and the processing of ore, through the provision of power, water, logistics, administration and other necessary support services.

Site facilities will include Heavy & Light Vehicle equipment workshops & working stores, Mining Explosives Magazine, and Diesel Fuel Bulk Storage & dispensing system.

Road Access

A 4 to 5m road width was adopted for the DFS based on logistics and economic criteria: cost of upgrades and construction, and compensation. The road between Ranteballa and site is proposed as a compacted gravel road. This surface is preferred for traction over a bitumen seal. The road between Ranteballa and Belopa is mostly sealed and is the subject of ongoing upgrades work by local governments to cater for local communities and industry.

Power Supply

Currently the site comprises an exploration camp and was recently connected to the Sulawesi power grid by PLN (March 2018) using a 20kV distribution line, alleviating the use of the gensets previously utilised and were retained for backup. The PLN 20kV line is able to provide construction power up to a maximum capacity of 8MVA with a likely site use of 2MVA planned.

The primary operations power demand is of the order of 15MVA with the potential for further growth. PLN have signed an MOU with Masmindo to complete the construction of a 150kV line from their grid backbone substation in Belopa to the site. Masmindo is required to construct the 150kV receiving substation and compensate the land access for the transmission towers PLN would install to the site. The Masmindo will then convert to multiple circuits of 11kV for site distribution to the various facilities.

All plant and facilities areas have standby backup diesel gensets to provide power to critical services for the process plant, office complex and camp in the event of power failure. Firefighting hydrant systems are also fitted with backup diesel pumps.

Site Communication Facilities

PLN's commercial communications subsidiary will provide a broadband fibre optic connection to the site along the PLN transmission line.

Radio base stations will be placed at the camp, process plant and mine facilities areas to coordinate field operational groups and maintain communications with all mobile equipment operating throughout the site and providing an emergency response network across the operations.

A national telecommunications provider has committed to placement of a mobile tower at the site enabling personnel to make use of a public 4G network for personal communications and media access.

Water Supply

The project water requirements will be sourced from the Songgang River and pumped to the process plant, the main user, via a pipeline for distribution. This line will also supply the water requirements for the main operations office complex adjacent to the process plant. This raw water line with a buffer tank will also extend to a standpipe for water trucks to fill from, adjacent to the Haul Road. Water trucks will then distribute the water to other facilities across the site. In addition, water trucks will operate along roads for the control of dust. Hydrological estimates indicate that the local river system has sufficient excess flow to meet project requirements throughout the year, and will not impact on other users of the river.

In order to meet the appropriate environmental standards for the disposal of sewerage effluent from the facility a sewerage treatment plant has been incorporated into the design at the camp.

Site Accommodation

To accommodate the operational workforce, a camp has been included, which will be utilised during the construction phase and developed as part of the early works activities. The camp would provide accommodation to both Company and contractor personnel and remain under the control and management of the Company during both project construction and operational phases. A third party contractor will be engaged to undertake the messing for both the camp and workforce site wide as well as the camp cleaning and maintenance services.

Drainage and Sediment Management

The Surface Water Management Plan developed for the Project separates all impacted and non-impacted water from mine-impacted catchments (wherever practicable) by diverting the clean water around the disturbed mining areas. All impacted runoff from disturbed mining areas will be retained and conveyed to sediment ponds or sediment dams for treatment before being discharged to the environment. The retained water will also be utilised, where practical, for mine-related activities such as dust suppression and process water demands.

The surface water management infrastructure will comprise; open drains, sediment ponds/dams, and pumps.

All workshop areas are drained to local sumps, then fed to oil separators before water is transferred to sediment ponds for further control and treatment as necessary prior to release.

Belopa Facilities

The proposed offsite support facilities complex in Belopa comprises a main administration office, warehouse and core yard (including core process and storage buildings). The facilities is designed to accommodate the Company's administrative and logistics operations as well as providing an area for core analysis and storage over the life of the project. This office coordinates all freight to, and from, the site and arrivals at the Belopa Port or by truck from Palopo Port, Makassar Port or other sources. Power will be sourced from the PLN Belopa grid network.

ENVIRONMENTAL AND COMMUNITY

The environmental and social components of the DFS targets Good International Industry Practice (GIIP), compliance with all applicable Indonesian laws and regulations, as well referencing the requirements of the World Bank Group's (WBG) Equator Principles (EP) and the International Finance Corporation's (IFC) Environmental and Social Sustainability Performance Standards (PS).

Extensive environmental and social baseline studies have been conducted at the Project site from 2013 to 2017. The studies have established a seasonal database for key environmental components, which include meteorology, hydrology, terrestrial ecology, aquatic ecology, hydrogeology, surface water quality, stream/river sediment quality, soils, air quality and noise. Geochemical characterisation test work on ore/tailings and waste rock have been completed to assess the potential for acid rock drainage/metal leaching (ARD/ML) for mine wastes. In additional, the social setting for the project has been established through socio-economic, cultural heritage and public health baseline studies.

Baseline studies and stakeholder inputs have been considered in the environmental and social impact assessment (ESIA) for the Project. The approved-ESIA (AMDAL in Indonesian) determined the significant impacts of the projects and environmental and social management plans have been developed to eliminate, and where not possible, mitigate negative impacts and enhance positive impacts associated with the proposed mining and processing operations. Monitoring of key environmental components will be continued during the construction, operations and closure phases of the project as stipulated in the approved AMDAL/Environmental Permit for the project. In addition to extensive consultation with local communities as a part of the AMDAL process, the company is conducting on-going consultation and reporting back to local communities every 6 months in order to continue to solicit inputs as well as inform local communities regarding project development status. The monitoring data and stakeholder inputs will form the basis for assessment of the efficacy of environmental and social management plans and continual improvement in environmental and social management practices for the Awak Mas project.

All major approvals for the Project are in place. The Project location is classified as "land for other uses" and does not have a forestry use designation. Therefore, a Forestry (borrow-to-use) Permit is not required for the Project.

RISK ASSESSMENT

The DFS Risk Assessment process has identified a broad spectrum of hazards with a total of 40 risks identified of which eight have been ranked as Severe;

- Decrease in gold price during the operation of the project – financial instruments such as hedging will be considered as part of the overall project financing strategy to reduce financing risks. It should be noted that the project has a high gross margin and opportunities for significant value uplift, have been identified and modelled.

- Increased in Project CAPEX (>10%) beyond budget including contingency – the DFS has been completed with experienced and highly regarded consultants with experience in this type of operation and in Indonesian. The capital estimate includes appropriate allowances for owner's costs and contingency. The project costs includes allowances for procurement and cost control personnel and systems to manage the execution of the project on time and on budget.

- Delays to the Project Schedule (design, construction, commissioning) – the construction and mining schedules have been developed from first principles based on extensive project management and mining experiences on similar projects. The construction activities includes allowances for project management and project controls personnel and systems to manage the execution of the project on time and on budget.

- Changes in regulatory framework affecting the Project viability – PT Masmindo has good relations with all Government stakeholders at all levels and has experienced in-county external and government relations personnel. The Commissioners, Board and Management of PT Masmindo and the Board and Management of Nusantara are in regular contact with Indonesian experts to ensure a full understanding of the regulatory environment.

- Risk associated with related activities – these activities represent the single highest safety risks with procedures, road conditions and design, equipment standards, driver training and communication systems, necessary controls to mitigate this risk. These controls have been incorporated into the design and operation of the project.

- Inability to maintain mining rates to plant (2.5 Mtpa) – AMC together with experienced Indonesian mining contractors completed detailed engineering and scheduling studies to confirm the suitability of this mining rate supported with the appropriate mining equipment fleet and people resources.

- Delays to ramp up of mining to full production (2.5 Mtpa) - AMC and Resindo together with experienced Indonesian mining contractors completed detailed scheduling studies to confirm the suitability of this production ramp up supported with the appropriate equipment, people resources, and the use of experienced contractors. Prior to the commissioning of the processing plant, a ROM stockpile of 500,000 t of ore is developed.

- External influences affecting the Project viability – The Commissioners, Board and Management of PT Masmindo and the Board and Management of Nusantara have processes in place to maintain a wide understanding of external factors affecting the project such as gold price, and the financial, regulatory and political environment.

Many of the risks identified for the Project are common to most large mining projects at the DFS stage (Exceeding Capex, Schedule, External influences, etc.). For all 40 risks identified in the DFS risk register, Nusantara has existing controls or plans to implement the necessary controls to manage these risks during the development phases of the Project.

FINANCIAL ANALYSIS

The financial evaluation of the Project has been undertaken using discounted cash flow analysis modelling of projected cash flows (Model). All output is presented on a 100% project basis and the benefits of debt financing and hedging, have not been incorporated.

The Model is based on calendar years, commencing 30 September 2019. Outputs are provided in United States dollars (USD), unless otherwise stated the Net Present Value ("NPV") analysis uses a 5% discount rate.

Assumptions

The key assumptions applied in the Model are detailed in Table 5:

Table 5: Key Assumptions

	Assumption
Gold Price	$1,250 per ounce
IDR:USD	14,135
USD:AUD	0.74
Fuel price	$0.65/L*
Indonesian company income tax rate	25%
Government gold royalty	3.75%
Third party royalty	2.0%

* Fuel price includes value added tax (VAT), provision for fuel tank, and freight to site.

Input costs provided in the DFS are in today's dollars. Given the low inflation environment, no inflation has been applied to these costs.

Capital cost

The estimated project capital costs are summarised in Table 6:

Table 6: Upfront Capital Cost Estimate

Area	$M
Mining Facilities and Contractor Mobilisation	16.8
Processing Plant and Earthworks	49.6
Tailing Storage Facilities	13.0
Infrastructure and Services	13.9
Establishment of Site Support Functions	10.7
Project Execution	17.2
Owner's Cost	11.7
Subtotal Project Capital (excluding contingency)	132.9
Contingency	12.6
Upfront Capital Cost Estimate	145.5

Note: excluding pre-production, value added tax (VAT) and environmental and closure bonds.

Capital costs presented above exclude pre-production mining costs of $15.8M. Pre-production costs are included as a cash outflow for the purpose of the project evaluation.

In addition to the upfront capital, the Financial Model incorporates sustaining capital throughput the mine life of US$28.9M and mine closure costs of US$7.4M. Environmental bonds are treated as a progressive outflow throughout the project life, being returned in the final year where they offset mine closure outflows.

Operating Costs

Operating Costs presented in Tables 7, 8 and 9 exclude pre-production operating costs and Company tax.

Table 7: Operating costs per tonne milled, LOM

Description	$/t
Mining Cost	11.97
Processing Cost	9.00
General & Administration	3.33
Total Cash Cost at Mine Site	**24.30**

Table 8: C1 Cash costs per ounce, LOM

Description	$/oz
Mining Cost	315
Processing Costs	237
General & Administration	87
Total Cash Cost at Mine Site	**639**
Refining and Transport	4
C1 Cost	**643**

Table 9: All-In Sustaining Costs (AISC), LOM

Description	$/oz
C1 Cash Cost	643
Royalties	72
Sustaining Capex	27
Jakarta Corporate, Community Social responsibility, and Land Tax (gross profit Based)	16
Total All in Sustaining Cash Cost	758

Financial Evaluation

This analysis is conducted in real terms and on a 100% equity basis, excluding the benefits debt leverage can provide. The analysis is based on the DFS base case. Recognition of potential upside is considered separately in the next section.

The objective of this analysis is to demonstrate the economic viability of the Project, provide support to the Strategic Partner process, support advancing debt discussions, and to enable the Board and shareholders to plan investment in the project towards its development of this long life low cost gold project.

Table 10: Physicals, LOM

Description	Units	
Initial Life of Mine (LOM)	Years	11.25
Mine grade	g/t	1.34
Strip ratio (LOM average excluding pre-strip)	Waste : Ore	3.4
Gold produced (LOM)	Ounces	1,066,335
Gold produced (Annual average per year)	Ounces	94,785
Gold Recovery (LOM average)	%	90.9
Annual throughput	tpa	2,500,000

Table 11: Financial outcomes, LOM

Financials	Units	
Revenue LOM	$ M	1,333
Upfront Capital	$ M	146
Mining cost per tonne moved	$ / t	2.75
Processing cost per tonne processed	$ / t	9.00
Administration cost per tonne processed	$ / t	3.33
C1 Cash Cost	$ / ounce	643
AISC	$ / ounce	758
NPV (before tax; 5% discount rate)	$ M	210
NPV (after tax; 5% discount rate)	$ M	152
IRR (before tax)	%	24.4
IRR (after tax)	%	20.3
Payback (after tax)	Years	4
NPV (after tax)/Capex		1.0

Project cashflows over the project life are summarised in the chart below.

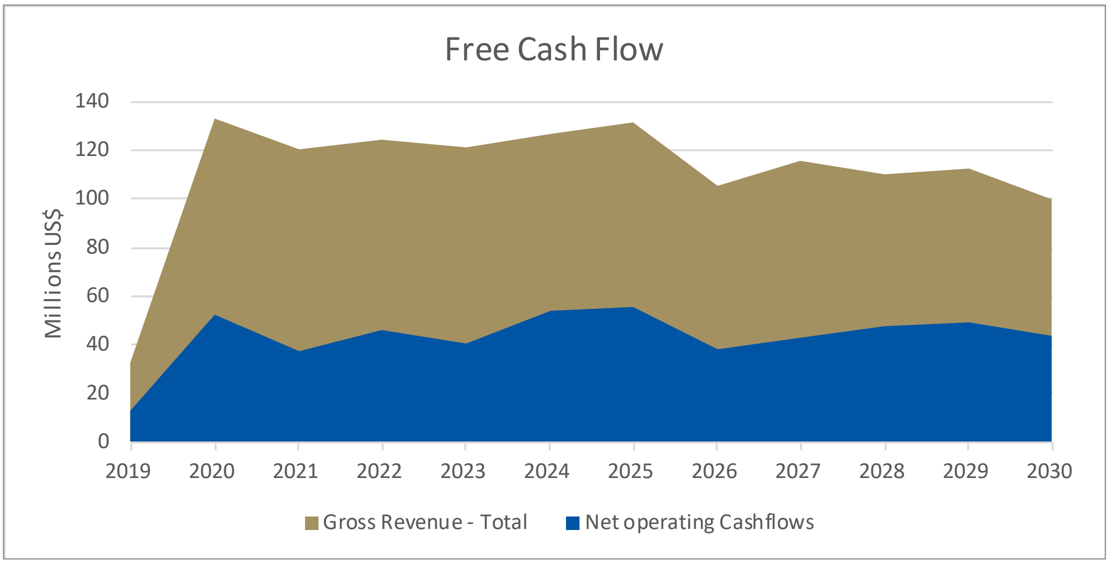

Figure 14: Project Cashflows

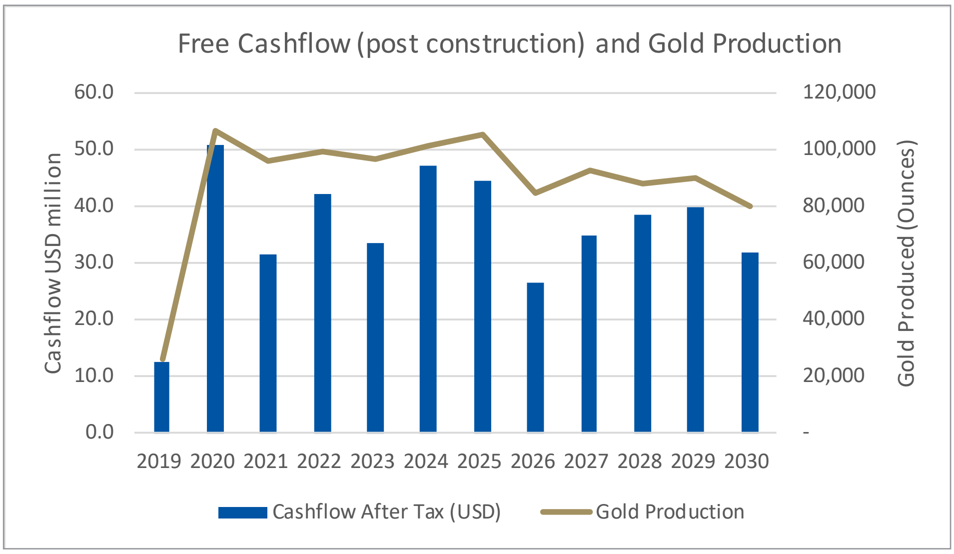

Figure 15: Free cashflow (post construction) and Gold Production

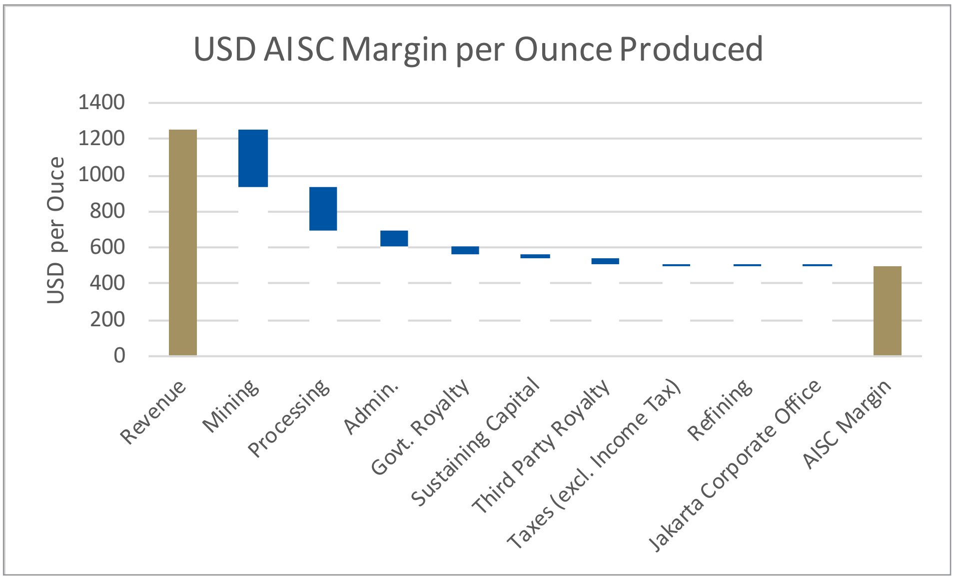

Figure 16: Cash (AISC) margin

Sensitivity Analysis

The results of the sensitivity analysis are presented in the Table 12 and Figures 17 and 18. The project returns are most sensitive to assumptions related to revenue such as the gold price and ore grade. The Project is less sensitive to changes in estimated operating costs, and less sensitive again to changes in upfront capital expenditure.

Table 12: Sensitivity

	NPV$_{5\%}$ After Tax ($M)		NPV change for % sensitivity change ($M)	% NPV change for % sensitivity change
	+%	-%		
Base	152		-	-
Recovery +/- 1%	159	144	7	5%
Capex +/- 10%	140	163	11	7%
Mining Opex +/- 15%	121	182	30	20%
Opex +/- 15%	94	209	57	38%
Grade +/- 10%	217	85	65	43%
Gold Price +/- 10%	217	85	65	43%

Notes:

1. Variation in price and grade produce the greatest change in project NPV, with a 10% change producing a 43% change in NPV.
2. The operating cost sensitivity includes all operating costs. It is the third largest driver of NPV change, with a 15% change producing a 38% change in NPV;
3. A change of 15% to Mining Costs produces a 20% change in NPV. Fuel costs represent approximately 15% of Mining Costs so fuel prices would have to increase six-fold to have the same impact on NPV. Project returns are relatively insensitive to fuel prices.
4. The NPV changes slower than changes in Construction Capital Expenditure. A 10% change in Capital Expenditure results in a change of 7% to NPV.
5. Changes to the assumed recovery are the smallest driver of change in NPV, with a 1% change in recovery producing a 5% change in NPV;

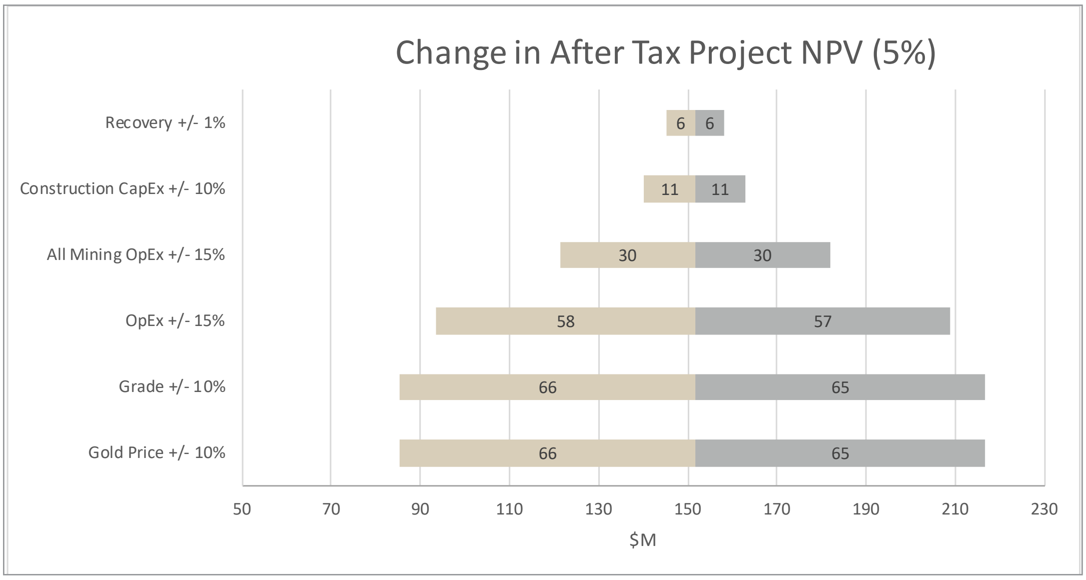

Figure 17: Project NPV sensitivity, US$ post-tax

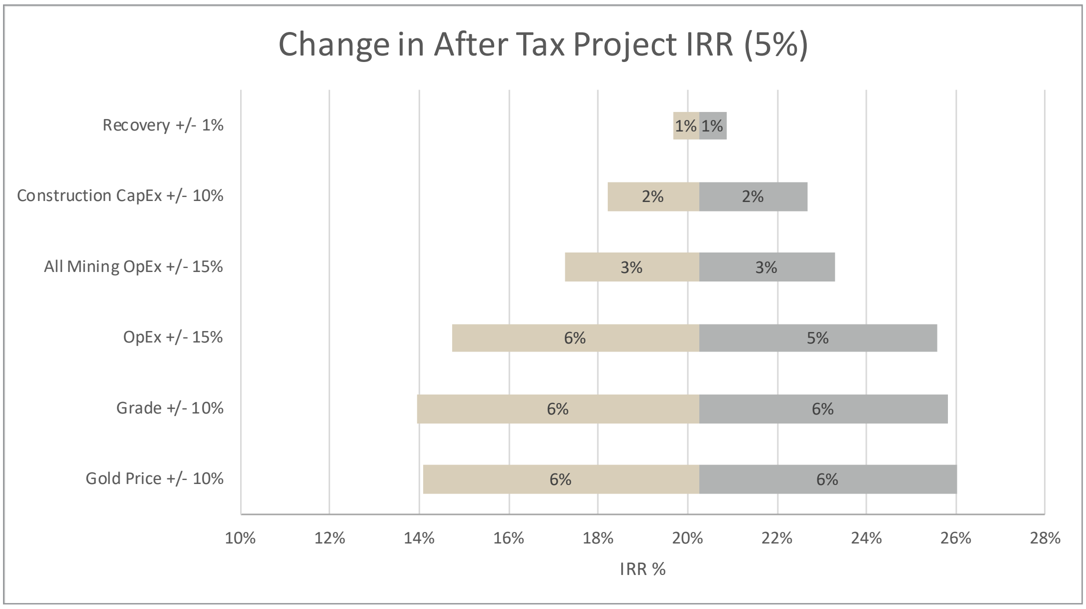

Figure 18: Project IRR sensitivity, post-tax

VALUE IMPROVEMENT SCENARIOS

The evaluation demonstrates a viable long life gold project, at DFS level cost definition, with notable potential for upside from any grade increase or project life extension (Figure 19).

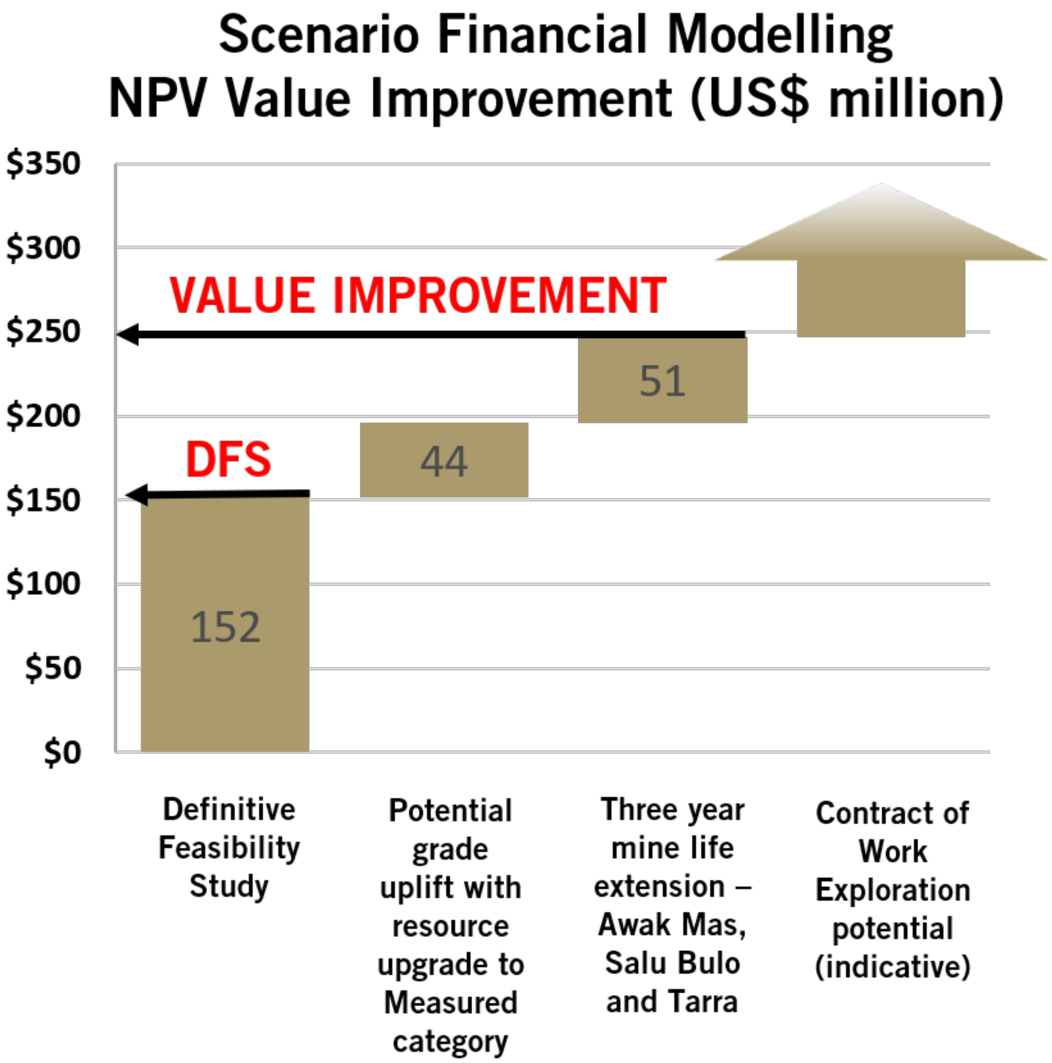

Figure 19: Scenario Financial Modelling

Grade uplift

An uplift in grade and hence contained metal can be expected from better definition of the observed and statistically demonstrated effect realised by the prevalence of higher grade sub-vertical veins/structures within the Awak Mas deposit. This potential is to be quantified through the execution of closer spaced drilling within selected sections of the early mining areas of the Awak Mas deposit where eventual mining will encounter a substantially greater percentage of higher grade vertical controlling veins/structures than could be modelled by the Resource spaced drilling program. This is expected to result in a higher grade LOM ore feed around 7% based on detailed analysis of the mineral resource model using conditional simulation.

Potential upside scenario financial modelling of a 7% uplift in ore feed grade results in a 29% improvement in post tax NPV to $196M and an improvement of 19% in post tax IRR to 24%.

Mine life extension

Exploration in both Near Mine and Brownfield areas by Masmindo to date has confirmed the potential for extensions to both Awak Mas and Salu Bulo deposits and with the inclusion of the Tarra deposit following more drilling has the potential to provide additional three years mine life to the operation.

Potential upside financial modelling of an extension of mine life by 3 years (300,000 ounces) results in a 34% improvement in post tax NPV to $203M and an improvement of 6% in post tax IRR to 22%.

Note: This financial scenario analysis is based on incomplete and inaccurate information assuming a project scenario of a three-year increase in mine life and 7% lift in grade of known Mineral Resources (refer Appendix). Further resource drilling and technical studies are required in accordance with the guidelines of the JORC Code (2012 Edition) and it is uncertain if further drilling and studies will result in any material change in the Mineral Resource and Ore Reserves and therefore inclusion in the Mine Plan.

PROJECT OPTIMISATION OPPORTUNITIES

The DFS has been completed on current understanding of the resource and the technical nature of the project. Through the work completed during the DFS, a number of opportunities for continuing to optimised the value of the project have been identified. These opportunities will be studied and assessed by Nusantara and as further work is completed and as changes in technology and operating practices occur, other opportunities will emerge which will be also studied as part of our continued focus to optimise the value of the Project.

These opportunities beyond the value improvement scenarios described above include:

- Cyanide Recycling — new technology has been developed that has the potential to recover the cyanide used in gold processing such that it can be reused in the process thereby reducing costs in preference to the current process of cyanide detoxication that neutralises the cyanide;
- Metallurgical Test work – further test work is planned post the DFS to explore opportunities to lift gold recovery and provide a more accurate assessment of recovery variability across the orebody;
- Power Supply — the Front End Engineering Design (FEED) will further explore the opportunities of reduced power demand and reducing the voltage of the supply to site, thereby reducing the cost of the main substation and ongoing operating costs;
- Water Recycling — opportunities for increased water cycling through the mine and processing will continued to be explored so as reduce the amount of fresh water intake from the Songgang River;
- Pit Geotechnical — as the mine is developed there will be on-going work involving advanced analysis and monitoring techniques to optimise the pit wall slopes leading to possible reduced mining costs as the pit walls are exposed;
- Ore Sorting — whilst a preliminary assessment in the DFS did not realise any benefits for using ore sorting technology, this technology is rapidly advancing and will continue to be evaluated to optimise project value;
- Capital Cost – post DFS, as the project moves into the development phase, work will continue to focus on optimising the project design such as for the plant and TSF to reduce costs including procurement, contracting strategies and competitive tendering process for all construction packages;
- Mining Pre-production – further detailed design and scheduling will be undertaken as additional drilling is completed to optimise the pre-production period and activities; and
- Mining Cost - a competitive dender will be completed working local, national and internationalc experienced mining contractors.
- Tailings Storage Facility (TSF) - the TSF represents a large capital cost component of the overall project. Further work will be undertaken to reduce the capital cost through engineering design reviews, material sourcing, the construction process and procurement and contracting strategies. In addition, whilst the DFS could not support the use of Dry Stacking, a further review of this process will be undertaken as technology advances.

COMPETENT PERSONS STATEMENTS

The information in this announcement that relates to the Ore Reserves of Nusantara Resources is summarised from publicly available reports as released to the ASX of the respective companies. The results are duly referenced in the text of this report and the source documents noted above.

Exploration and Resource Targets

Any discussion in relation to the potential quantity and grade of Exploration Targets is only conceptual in nature. While Nusantara Resources may report additional JORC compliant resources for the Awak Mas Gold Project, there has been insufficient exploration to define mineral resources in addition to the current JORC compliant Mineral Resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.

Exploration Results

The information in this report which relates to Exploration Results is based on, and fairly represents, information compiled by Mr Colin McMillan, (BSc) for Nusantara Resources. Mr McMillan is an employee of Nusantara Resources and is a Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 109791).

Mr McMillan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr McMillan consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Mineral Resources

The information in this report that relates to the Mineral Resource Estimation for the Awak Mas Gold Project is based on and fairly represents information compiled by Mr Adrian Shepherd, Senior Geologist, (BSc), MAusIMM CP, for Cube Consulting Pty Ltd. Mr Shepherd is an employee of Cube Consulting Pty Ltd and is a Chartered Professional geologist and a current Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 211818).

Mr Shepherd has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Shepherd consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Ore Reserves

The information in this report that relates to the Ore Reserves Estimation for the Awak Mas Gold Project is based on and fairly represents information compiled by Mr David Varcoe, Principal Mining Engineer, for AMC Consulting Pty Ltd. Mr Varcoe is an employee of AMC Consulting Pty Ltd and is a current Fellow of the Australian Institute of Mining and Metallurgy (AusIMM No: 105971).

Mr Varcoe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Varcoe consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Metallurgy

The information in this report that relates to metallurgy and metallurgical test work and findings for Awak Mas Gold Project is based, and fairly represents information compiled by Mr John Fleay, Manager Metallurgy, FAusIMM, for Minnovo Pty Ltd. Mr Fleay is an employee of Minnovo Pty Ltd and is a current Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 320872). Mr Fleay has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Fleay consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

New Information or Data

Nusantara Resources confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, which all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the competent Person’s findings are presented have not materially changed from the original market announcement.

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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling Techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	The Awak Mas Gold Project consists of three main deposits which have been drill sampled and for which Mineral Resource Estimates have been completed. **Awak Mas** Sampling has been carried out using mainly Diamond Drill (“**DDH**”) Core, and to a much lesser extent Reverse Circulation (“**RC**”) sampling. A total of 944 DDH drillholes was completed in a number of campaigns by several companies since 1991, with four main phases: • 2017-2018: Nusantara Resources Limited (“NUS”); • 2011-2012: One Asia Resources Limited; • 2006-2007: Vista Gold (Barbados) Corporation, and • 1991-1998: Battle Mountain Gold Company/Masmindo Mining Corporation Limited. **Salu Bulo** Sampling has been carried out using only Diamond Drill (“**DDH**”) Core. A total of 144 DDH drillholes have been completed in three campaigns by different companies since 1999: • 2017-2018: Nusantara Resources Limited; • 2011-2013: One Asia Resources Limited, and • 1999: Placer Dome Inc. **Tarra** Sampling has been carried out using only Diamond Drill (“**DDH**”) Core, and to a much lesser extent Reverse Circulation (“**RC**”) sampling.

Criteria	JORC Code explanation	Commentary
		A total of 69 DDH drillholes have been completed in three campaigns by different companies since 1997: • 2011-2013: One Asia Resources Limited; • 1999: Placer Dome Inc., and • 1997: Masmindo Mining Corporation Limited **Nusantara** has completed 68 diamond holes for 10,996.7m at Awak Mas and Salu Bulo as part of the Phase 1 drilling program. Drilling has consisted of both extensional and infill resource holes, metallurgical test-work holes and exploration holes. All drill core was generally sampled on 1m intervals, contingent on geology and core recovery • Core was collected directly from the core barrel into core boxes; • Core samples were split in half, with the top half of the core analysed and other half retained as reference core in the tray; • Minimum interval 0.4m and maximum 1m for mineralised material, and • Maximum 2m for the material that visually looked unmineralised. No specialised measurement tools, e.g. downhole gamma sondes, or handheld XRF instruments, etc. were employed.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	The majority of the sampling data is historical and was carried out under the relevant company's protocols and procedures to industry standard practice for the time. Specific details of the standard sampling protocols used by the various companies have been derived from the comprehensive resource reports available. During the period from 2017 to 2018, sampling was carried out under Nusantara's protocols and QAQC procedures as per industry best practice. Quality Assurance ("**QA**") and Quality Control ("**QC**") protocols included the monitoring and analysis of inserted certified reference material, blanks and duplicates samples which to ensure sample representivity. Samples were cut about 5cm off the core orientation line, and the half-core with the orientation line correctly placed back into the tray and retained. The remaining half-core was collected, ensuring that the same side was consistently sampled and representative.

Criteria	JORC Code explanation	Commentary
		Fractured and veined core, that was liable to "fall apart" when being cut, were wrapped in masking tape prior to cutting. The core to be retained was placed back in the tray with all the pieces held in place by the masking tape. Core with veins at a low angle to the core axis were cut perpendicular to the veins so that the vein was evenly distributed between the halves.
	Aspects of the determination of mineralization that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (eg submarine nodules) may warrant disclosure of detailed information.	All Nusantara drilling was diamond core (PQ3/HQ3/NQ3). Half core was sampled on nominal 1m intervals, the entire sample crushed to a nominal 2-3mm, and a 1kg sub-sample was pulverised to produce a 40g fire assay charge. Gold mineralization typically occurs with minor disseminated pyrite (<3%) within sub-vertical quartz veins, breccias, and stockwork zones.
Drilling Techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	**Nusantara** drilling has consisted of: • PQ3/HQ3/NQ3 core sizes, progressively decreased as the hole depth approached the limit of the rigs capability; • Wire-line triple/split tube diamond core drilling; • Core orientation – Coretell ORI-shot (Gen4) multi-shot core orientation tool. Hole depths varied from 30m to 575.5m total depth, with an average depth of 162m. Historic core drilling consisted of: • Dominantly HQ core sizes but has included BQZ, NQ2, HQ2, HQ3, PQZ and PQ3; • Orientation spear used for structural orientations, and • Depths varied from 11m to 450m, average depth of 121m. Historic RC drilling (1997) was completed: • Using a 5.25" face sampling hammer, limited holes used a 4.75" hammer, and • Depths varied from 23m to 202m, average drill depth of 100m.

Criteria	JORC Code explanation	Commentary
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Core recovery and drill meterage recorded by field geologists and trained core checkers at drill site, prior to transfer of the core to the core shed. Recovery % was recorded in the geotechnical records as equivalent to the length of core recovered, as a percentage of the drill run. Overall recoveries within the mineralized zones is generally greater than 85%. Less than 5% of the drill samples have recoveries of less than 40%.
	Measures taken to maximize sample recovery and ensure representative nature of the samples.	Wireline triple/split tube system and large diameter PQ/HQ core was utilised (subject to depth restrictions) to maximise recovery and ensure that the samples are representative of the material being sampled.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Analysis of core recovery to grade does indicates a trend of higher grade with increased core loss, but this is considered immaterial as more than 80% of the mineralised samples have good recoveries (>80%). Twin PQ3 diamond drilling at Awak Mas of a selected number of the low recovery shallow holes was completed by a previous owner (Masmindo Mining Corporation Limited, 1996). Analysis of the twin hole data by consultants McDonald Speijers concluded that core loss in the earlier holes has probably not resulted in any significant sample bias. Core recovery from Nusantara diamond core holes drilled is >95%. No sample bias associated with core loss is apparent.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Core has been geologically and geotechnically logged to a level of detail appropriate to support mineral resource estimation and mining studies. Lithology, mineralisation, alteration, foliation trend, fracturing, faulting, weathering, depth of soil and total oxidation were recorded. Orientation of fabrics and structural features were logged. Logging codes have been developed over time, and the historical codes translated to a standardised logging scheme developed by Nusantara. Nusantara site personnel were able to log and interpret the visually mineralised zones before the assays were available. These observations are used to update the mineralisation model as a valuable targeting tool for successive hole planning.

Criteria	JORC Code explanation	Commentary
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc) photography.	Logging has been conducted both qualitatively and quantitatively – full description of lithologies, alteration and comments are recorded, as well as percentage estimates on veining and sulphide amount. All historical diamond core was photographed on film at the time of drilling and hardcopy photos have been digitally scanned for reference. All Nusantara diamond core has been digitally photographed.
	The total length and percentage of the relevant intersections logged.	Total length of Nusantara drilling completed date is 10,996.7m (68 holes) of which 100% has been logged. Total length of historical drill data is 124,867m (1,091 holes).
Sub-Sampling Techniques and Sample Preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	All core was half-cut lengthwise using a diamond saw parallel to the orientation line. The half-core was sampled, generally on metre intervals, dependent on logged geological contacts. The remaining half-core was retained in the core trays and stored onsite undercover in locally built timber core shacks. Historical reports indicate that full core was sampled for holes AMD001-026.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Historical RC samples (nominal 20-25kg weight) were split through a Jones riffle splitter, and a 3-5kg sub-sample submitted as the primary sample for assay. For wet and moist RC samples that could not pass through the riffle splitter, the sample was collected in a drum, allowed to settled, decanted and bagged. Multiple spear samples directly from the bag were combined to form the primary sample split for assay. Wet RC drilling forms less than 2% of the total dataset.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	**Nusantara** commissioned a sample preparation facility onsite, allowing all samples to be crushed, pulverised and a 200g assay aliquot shipped to Geoservices laboratory (Jakarta) for final element analysis. The onsite facility has been established by Nusantara and Geoservices to closely replicate (where possible) the sample preparation process that was conducted at the Jakarta laboratory. Partial sample preparation completed onsite utilised a LM2 pulveriser rather than an LM5 pulveriser which had previously been used in Jakarta. The process involved;

Criteria	JORC Code explanation	Commentary
		• Samples were weighed and dried at 105°C; • Jaw and Boyd crushed to nominal 2-3mm; • 1kg sub-sample rotary split for final preparation; • Sub-sample pulverised by LM2 ring mill pulverisers to 95% passing 75microns for lab analysis, and • 200g pulp aliquot for analytical analysis. The resultant final 200g assay pulp was shipped to Geoservices (Jakarta) for gold and multi-element analysis. **One Asia** samples were prepared at PT Geoservices LTD using their “Total Sample Preparation Package”, where: • Samples were weighed, dried at 105°C; • Jaw crushed (to nominal 4mm) if required; • Whole sample is pulverized via LM5 ring mill pulverisers, and • Samples >3kg are split and pulverised in separate lots. Other historic RC and diamond drilling sample preparation was by Indo Assay Laboratory and consisted of: • Samples were oven dried and weighed; • Entire sample jaw crushed to -6mm prior to hammer milling to -1mm; • A 300g sample was split with the residual stored, and • Sub-sample pulverised to a nominal P90% -75um and homogenized. The quality of the wet RC drilling sampling is problematic and may be biased. RC drilling in wet ground conditions has been discontinued in favour of diamond coring. Historical Dry RC sampling procedures were satisfactory and consistent with normal practices. For all sample types, the nature, quality and appropriateness of the sample preparation technique is consistent with industry standard practices.

Criteria	JORC Code explanation	Commentary
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	For core sampling the same side is consistently sampled, half-core with the bottom of hole line is retained in the tray. Fractured and veined core, that was liable to "fall apart" when being cut, were wrapped in masking tape prior to cutting. The retained core was placed back in the tray with all the pieces held in place by the masking tape. Core with veins at a low angle to the core axis were cut perpendicular to the veins so that the vein was evenly distributed between the halves.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Coarse reject duplicate, coarse blanks, and both intra and umpire laboratory pulp duplicates were used to ensure the sampling is representative and un-bias. Control duplicate samples constitute 10%-15% of the total submitted samples. Nusantara did not collect diamond core duplicates due to the inherent variability that results from the sampling of a small volume of heterogeneous material and the differing sample support by using ¼ core duplicates. Historical core field duplicates show precision errors, mainly the result of the variability of the mineralisation and the change of sample support between the original half-core and the quarter core duplicate samples. For historical drilling programmes, duplicate sampling and check assaying was completed and no significant biases were identified.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	A sample size of 3-5 kg is considered appropriate and representative of the material being sampled given the width and continuity of the intersections and the grain size of the material being collected.
Quality of Assay Data and Laboratory Tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Gold analysis by **Nusantara** used a 40g charge fire assay method with an AAS finish. The primary assay laboratory used was PT. Geoservices in Jakarta. A secondary laboratory (SGS, Jakarta) was also used for lower priority samples selected on a hole by hole basis to help overcome bottlenecks at the site preparation facility and at the Geoservices laboratory. Additional element analysis included; • Aqua Regia digest plus ICP elements (GA102_ICP09); • Ag, As, Cu, Mg, Mo, Pb, Sb, and Zn. • Leco - Total Carbon and Total Sulphur (MET_LECO_01); • Cyanide Amenability on pulps (MET_CN7), and • Mercury from GAA02 digest (GAA02_CVAA).

Criteria	JORC Code explanation	Commentary
		For **One Asia**, gold analysis was carried out by PT Geoservices LTD GeoAssay Laboratory at Cikarang-Bekasi, Indonesia: • Au by 40g fire assay using method FAA40_AAS. Other historic gold analysis was carried out by Indo Assay Laboratory, Balikpapan, Indonesia (both RC and Core): ○ Au by 50g fire assay using AAS finish. **Placer Dome** geochemical analysis at Salu Bulo were carried out by Indo Assay Laboratory, Balikpapan, Indonesia: • 2m composites for all samples assayed for Au by 50g fire assay using GTA finish, and • 33-element ICP Suite – Aqua Regia Digestion (multi-element analysis for 5m composites). These analyses are total assay methods, which is an industry standard for gold analysis, and an appropriate assay method for this type of deposit.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	No geophysical tools were used or data analysed.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	**Nusantara** adopted the following Quality Control (‘**QC**”) sampling protocols and insertion rates for diamond drilling; • Certified Refence Material (5%) • Coarse Blank Material (2.5%) • Coarse Duplicate Samples (5-10%) • Blind pulp assay check duplicates, resubmitted to primary laboratory (2%) • Umpire pulp assay check duplicates (5%) Random primary laboratory inspections on a monthly to quarterly basis. Performance of the control samples are regularly monitored, with any disparities investigated and remedied, Monthly QAQC reporting and meetings are held on at least a monthly basis. Results to date demonstrate an acceptable level of accuracy and precision.

Criteria	JORC Code explanation	Commentary
		One Asia QC protocols included: • Insertion of standards and coarse blanks intro the sample stream at a rate of 1 per 20 to 30 samples, and • pulp and ¼ core duplicates (426 samples) were selected and periodically sent for check assay at their "umpire laboratory" PT Intertek Utama Services (Intertek). **Placer Dome** QC procedures included: • insertion standard samples as the last sample of every second holes; • 1 in 20 umpire pulp check assay samples (90 samples) were sent to Indo Assay Limited in Balikpapan for gold analysis checking purposes as inter-laboratory check samples, and • A total of 424 pulp duplicate assays were re-assayed by Intertek. Review of the available historical QAQC data and the Tetra Tech (2013) report, shows no indications that the deposit is affected (no bias identified) by abnormal sampling problems such as those related to unusually high proportions of coarse free gold. Acceptable levels of accuracy and precision have been established.
Verification of Sampling and Assaying	The verification of significant intersections by either independent or alternative company personnel.	For **Nusantara**, verification protocols involved: • Significant intersections were reviewed by the Chief and Senior Geologists following receipt of the assay results. • All assay results are processed and validated by the GIS/Database Administrator prior to loading into the database. This includes plotting standard and blank performances, review of duplicate results. • Original assay certificates are issued as PDF's for all results and compared against digital CSV files as part of data loading procedure into the database. • Geology Manager reviews all tabulated assay data as the Competent Person for the reporting of Exploration Results. A total of 111 umpire independent check diamond core samples were collected by Cube (2017) and assayed at PT GeoServices Ltd laboratory in Jakarta. The samples confirmed the tenor of the mineralisation. A total of 30 pulp duplicate samples and 21 duplicate check samples were re-submitted by TetraTech in 2011-2013. Analysis showed no statistically significant

Criteria	JORC Code explanation	Commentary
		difference between the primary and duplicate samples. A very small bias was noted for lower reporting of grades by the check laboratory. McDonald Speijers (1997) selected 60 independent check duplicate core samples at random from within the mineralised zones. Satisfactory correlation between the original and duplicate samples confirmed the integrity of the sampling and assaying procedures
	The use of twinned holes.	No twinned holes have been drilled to date. Masmindo (1996) drilled 6 twin holes using large diameter, triple tube core (PQ3) due to concerns of regarding core loss and grade bias. Average recovery of 90% was achieved and indicated that core loss in earlier holes had not resulted in any significant sample or assay bias.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	For **Nusantara,** documentation procedures included: • Field drilling data is recorded directly into Logging templates in Excel spreadsheet format on laptop computers. • Excel spreadsheets are imported to MS Access format for validation and management by the GIS/Database Administrator onsite. • All drilling data is uploaded and managed via a centralised Dropbox facility with restricted access. • Database is audited by external consultants prior to reporting of Exploration Results and Mineral Resource estimates. **One Asia** primary data was collected using a master Microsoft Office Excel spreadsheet. Paper copies are regularly generated and database copies are routinely sent to Jakarta PT Masmindo Head office for analysis and interpretation. The majority of the historical drilling data exists as hardcopies on site which have been scanned electronically to PDF files. Extensive review and data verification has been completed by various independent consultants over the long life of the project and is well documented.
	Discuss any adjustment to assay data.	All data below detection limit (<0.01 ppm Au) and “0” values have been entered as a small value of 0.005ppm Au which is half the detection limit. Negative values, missing samples, interval gaps denoted by no sample (“**NS**”) and cavities were assigned as nulls (blanks) and ignored when extracting composites for grade interpolation.

Criteria	JORC Code explanation	Commentary
		Samples not received, or with insufficient sample weight for analysis had the interval left blank in the database.
Location of Data Points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	**Nusantara** drill collars were initially located by hand held GPS with an accuracy of about 5-15m, dependent on satellite coverage. Additionally, hole positions were validated by tape and compass measurement from nearby surveyed historic drill collars. All Nusantara drill collar were established by third party surveyors using Differential Global Positioning System (“**DGPS**”) or total station electronic EDM equipment to an accuracy of approximately 0.1m. Down-hole surveys were routinely carried out, generally on 30m spacings using a digital multi-shot instrument Coretell ORIshot (Gen4). **Historical** drillhole collar locations were surveyed using total station electronic distance measuring (“**EDM**”) equipment and DGPS. Downhole surveys were measured in holes deeper than 25m with a Sperry Sun or Reflex camera system on an average downhole spacing of 30m to 50m. Drillhole collar surveys have been checked several times by different owners. Cube (2017) independently field checked 19 random historical collar positions using a handheld GPS. All checked holes were within 5m of the database coordinates which is within the accuracy of the GPS unit used and verifies the drill hole collar locations. The 3D location of the individual samples is considered to be adequately established, consistent with accepted industry standards
	Specification of the grid system used.	All drillhole data is referenced in the UTM WGS 84 Zone 51 (Southern Hemisphere) coordinate system.
	Quality and adequacy of topographic control.	Topographic mapping of the Awak Mas Gold Project area by Airborne Laser Scanning (LIDAR) survey was carried out by P.T. Surtech in November 2017. Topographic control now exists to a vertical and horizontal accuracy of 0.15m and has been incorporated into both the Awak Mas and Salu Bulo mineral resource estimates.

Criteria	JORC Code explanation	Commentary
Data Spacing and Distribution	Data spacing for reporting of Exploration Results.	Average drill spacings for each deposit are; **Awak Mas** Diamond drilling on a nominal 50 m by 50 m grid with local 25 m x 25 m infill holes in three limited areas (Mapacing, Tanjung and Rante). **Salu Bulo** Drill collars have been spaced along a 50 m x 50 m grid, with 25 m x 25 m infill pattern. Effective data spacing ranges between 30 to 100 m as a result of the mineralisation orientation. **Tarra** Drill holes have been spaced on 40 m sections along strike, drilled from 2 directions, with an effective downdip spacing of 60 m to 100 m **Nusantara** drill holes are infill holes between existing historical drill holes to achieve a nominal 25m x 25m data spacing. Historical Reverse Circulation drilling by previous operator (Masmindo) 1996-1997) was on a nominal 50m x 50m grid. Sampling of drill core has generally been at 1m intervals.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The data spacing and distribution is considered sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource category applied.
	Whether sample compositing has been applied.	At Salu Bulo, Placer Dome composited samples to 2m intervals at the preparation laboratory using 750g pulp sub-samples.
Orientation of Data in Relation to Geological Structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Drilling sections are orientated perpendicular to the strike of the mineralised host rocks. Drill holes were inclined between 40° and 90° to optimise intercepts of mineralisation with respect to thickness and distribution. **Nusantara** diamond drilling has confirmed that the drilling orientation has not introduced any sampling bias.

Criteria	JORC Code explanation	Commentary
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The mineralisation can occur in multiple orientations as a stockwork system. **Awak Mas** • Two dominant orientations are well defined, as a shallow to moderate N-NE dipping, foliation parallel orientation, with a less well developed north-south trending narrow sub-vertical structures. **Salu Bulo** • Mineralised zones have a dominant north-south sub-vertical orientation with indications of a shallow dipping low grade mineralisation envelope **Tarra** • Is a single sub-vertical mineralised zone. The sub-vertical mineralisation coupled with steep drill holes can produce long down-dip intersections in places, however most have sampled the full mineralisation thickness and any sample bias as a result of this is not considered to be material to the estimate. Drilling with angled and vertical holes in most instances provides a representative sample across the mineralisation.
Sample Security	The measures taken to ensure sample security.	Chain of Custody was managed by **Nusantara** whereby; • All samples are placed into calico bags with sample tickets and clear sample ID numbering on the outside; • Samples were bagged into polyweave sacks, zip tied, with the sample numbers written on the outside of the sack; • Samples were stored onsite within a locked facility ready for dispatch; • Prior to sample dispatch, the sample numbers, duplicates, standards were checked against the dispatch form; • Samples were freighted by road to Belopa, and then air freighted to the Geoservices laboratory in Jakarta, and • Geoservices in Jakarta notified Nusantara when the samples had been securely received intact. **One Asia** drilling samples were stored on site in a locked core shed and shipped to the assay laboratory in secure packaging by air. When the laboratory received the samples, they were expedited to the laboratory in Cikarang under Chain of Custody documentation. At arrival they were officially checked-in for tracking purposes and submitted for sample preparation.

Criteria	JORC Code explanation	Commentary
		No information relating to sample security and submission, or storage procedures for the other historical owners are described in the available historical reports.
Audits or Reviews	The results of any audits or reviews of sampling techniques and data.	The **Nusantara** sampling procedures and drilling data were reviewed and audited by Denny Wijayadi (Cube Consulting Senior Geologist) while onsite from 11 to 15 September 2017. The site visit involved inspection of the drilling in progress, onsite sample preparation facilities, and an audit of the Geoservices laboratory in Jakarta. Several **historical** reviews have been undertaken by independent consultants over the life of the Project and include: • CSA Global (2017); • Williams and Davys (2015); • Tetra Tech (2013); • SRK Consulting (1998); • RSG Global (1998); • Snowden (1998), and • McDonald Speijers (1997). Cube (2017) independently reviewed, verified and validated data prior to the mineral resource estimate. There were no adverse material results from any of the reviews or audits.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Tenement and Land Tenure Status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Awak Mas Gold Project includes the three main deposit areas of Awak Mas, Salu Bulo and Tarra for which current mineral Resources exist and have been reported to JORC Code (2012) guidelines. Nusantara Resources Limited holds a 100% beneficial interest in the Awak Mas Gold Project via a 7th Generation Contract of Work ("**CoW**") through its wholly owned subsidiary PT Masmindo Dwi Area. PT Masmindo Dwi Area is an Indonesian foreign investment company, which owns the exploration and mining rights to the Awak Mas Project through the CoW with the Government of the Republic of Indonesia. The Awak Mas Gold Project has a long history involving multiple companies through direct ownership, joint venture farm-ins, option to purchase agreements, or equity arrangements; • Battle Mountain discovered the Awak Mas deposit in 1991 after earning a 60% equity in the original partnership between New Hope and PT Asminco; • Lone Star (1994) acquired the equity of both Battle Mountain and New Hope; • Gascoyne structured an agreement which combined the various equities under Masmindo; • Placer (1998) entered, and then later withdrew from a Joint Venture ("**JV**") with Masmindo; • Vista Gold (2004) purchased 100% of Masmindo; • Pan Asia (2009), now One Asia, acquired a 60% interest via a JV with Vista Gold upon completion of a Feasibility Study ("**FS**") and Environmental Impact Assessment ("**AMDAL**"); • One Asia (2013) through its subsidiary Awak Mas Holdings purchased 100% of the Project from Vista Gold, and • Nusantara Resources Limited (formerly Awak Mas Holdings) demerged from One Asia with a 100% interest in the Awak Mas Gold Project and listed on the Australian Securities Exchange ("**ASX**") on the 2nd August, 2017. The 7th Generation CoW was granted on 19 February 1998 and covers an area of 14,390 ha. The CoW allows for 100% ownership, and is located within a non-forested area – (APL) Land for Other Uses.

Criteria	JORC Code explanation	Commentary
		The AMDAL for the project has been approved and Environment Permit Issued April 2017. The Competent Person is not aware of any other agreements that are material to the Project.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The CoW defines a construction period of 3 years and an operating period of 30 years. The Competent Person has not been advised of any environmental liabilities associated with the Awak Mas Gold Project at this time.
Exploration Done by Other Parties	*Acknowledgment and appraisal of exploration by other parties.*	**Awak Mas Area** Since the discovery of Awak Mas by Battle Mountain in 1991, a number of historical resource assessments have been completed. Previous exploration work in the project area includes systematic exploration by several operators, including Asminco and New Hope in 1987, followed by Battle Mountain, Lone Star, Gasgoyne, JCI, Masmindo Mining and Placer Dome between 1991 and 2004. Vista Gold and One Asia, have undertaken the most recent exploration work between 2004 and 2013 which has included the compilation and cataloguing of historic data, completion of significant infill resource drilling, and re-estimation of the contained, classified resources. The mineral resource estimate by completed by Tetra Tech in 2013 was based on the results of the One Asia infill and metallurgical testwork drilling program and was reported in accordance with the JORC Code (2012) guidelines. **Salu Bulo Area** Previous exploration work at Salu Bulo has been characterized by surface geochemical studies and geological mapping, which identified a series of steeply dipping mineralised targets, striking approximately north-south. Prior to One Asia, the most recent exploration work was conducted by Placer Dome in 1999, who completed a core drilling program based on the surface exploration results. Infill diamond core drilling by One Asia in 2011-2013 resulted in the completion of a mineral resource estimate by Tetra Tech which was reported in accordance with the JORC Code (2012) guidelines.

Criteria	JORC Code explanation	Commentary
		Tarra Area From 1988 to 1996, regional reconnaissance survey undertaken by Battle Mountain Gold Company resulted in the discovery of the Awak Mas deposit and identified a number of stream sediment anomalies in the vicinity of the Tarra Prospect. A subsequent regional soil geochemical survey over the Tarra region delineated numerous gold anomalies. From 1996 to 1999, firstly Masmindo Mining Corporation and then Placer Dome conducted geochemical surveys, consisting of trenching and surface traverse sampling, coupled with diamond and reverse circulation drilling at the Tarra deposit. A mineral resource estimate was completed in 2015 by One Asia and reported in accordance with the JORC Code (2012) guidelines.
Geology	*Deposit type, geological setting and style of mineralization.*	**Awak Mas Deposit** A high level, low sulphidation hydrothermal system has developed at Awak Mas which is overprinted by a strong sub-vertical fracture control which has channelled the mineralising fluids. The mineralising fluids have exploited these pathways and migrated laterally along foliation parallel shallowly dipping favourable strata. In addition to the conformable style of mineralisation there is a late stage hydrothermal overprint that has also deposited gold in some of the major sub vertical structures. The multi-phase gold mineralisation is characterised by milled and crackle breccias, vuggy quartz infill, and stockwork quartz veining with distinct sub-vertical feeder structures. Host lithologies for mineralisation are mainly the cover sequence of meta-sedimentary rocks and to a lesser degree the underlying basement sequence of diorites and biotite dominant schists. The cover and basement sequences are separated by an unconformable and sheared contact. Recent interpretation has established the presence of a late stage Highwall Fault at the eastern edge of Rante as evidenced from mineralisation in historical geotech hole AMD293. This fault is analogous to the NNE trending bounding faults that separate each deposit area at Awak Mas and have been confirmed by drilling. An exploration model for drill targeting was developed based on possible further

Criteria	JORC Code explanation	Commentary
		fault repetitions of Rante style mineralisation to the east towards the Salu Bulo deposit. The Highwall drillholes have confirmed that mineralisation extends across the identified Highwall fault and indicates the potential to further develop mineralisation within the Awak Mas to Salu Bulo corridor. **Salu Bulo Deposit** The satellite Salu Bulo gold deposit is located 1.8 km to the southeast of the main Awak Mas deposit and hosts a number of mineralised quartz vein breccia structures referred to as the Biwa, Bandoli and Lelating trends. The geological setting and mineralisation style at Salu Bulo is analogous to that at the nearby Awak Mas deposit, but with a more dominant sub-vertical structural control. A high level, low sulphidation hydrothermal system has developed at Salu Bulo which is overprinted by a strong sub-vertical fracture control which has channelled the mineralising fluids. The mineralising fluids have exploited these pathways with limited lateral migration along foliation parallel shallowly dipping favourable strata (hematitic mudstone) and along low angle thrusts. The multi-phase gold mineralisation is characterised by milled and crackle breccias, vuggy quartz infill, and stockwork quartz veining with distinct sub-vertical feeder structures. Host lithologies for mineralisation are a sequence of chloritic and intercalating hematitic meta-sedimentary rocks metamorphosed to greenschist grade. Interpretation of the new infill definition drilling has visually confirmed the continuity of higher grade zones at Lelating. Flat dipping mineralised structures have been visually identified in recent drillholes, where infill hole SBD133 intersected a 38m wide, silica albite altered stockwork vein system which is analogous to a similar intercept in adjacent historical hole SBD069. Additional drill targets have been defined at the intersection of flat structures with known sub-vertical trends.

Criteria	JORC Code explanation	Commentary
		Tarra Deposit The smaller satellite deposit of Tarra is located 4.5km north of Awak Mas and consists of a single 10 to 50m wide, northwest-trending, sub-vertical structurally controlled mineralized zone in the hanging wall of the Tarra Basal Fault. The Tarra Basal Fault is a northwest trending major structure traceable up to 1.5 km from Main Tarra to Tarra North West. Mineralisation is controlled by favourable sandstone and siltstone units in fault contact with an impermeable hematitic mudstone. Gold mineralisation occurs in a 30m silicified zone at the footwall of the fault and along quartz-pyrite filled fractures in the sandstone. Silica-albite±calcite alteration is associated with veins, stockworks and zones of the silicified breccias. Significant supergene enrichment has occurred exploiting the high angle extensional structures, which has increased gold grades.
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	**Nusantara** drill hole details and relevant mineralised intersections relating to the reporting of the Awak Mas and Salu Bulo MRE's and the Exploration Results are tabulated in Appendix 1 of this release. Drilling completed in 2018 relevant to the current ASX release consisted of 31 PQ3/HQ3 diamond core holes for 5,393.5m as detailed below; **Awak Mas** • 17 metallurgical holes for 1,855.5m. • 8 resource definition holes for 1,166.6m • 5 exploration holes (Highwall area) for 2,240.1m **Salu Bulo** • 1 resource definition holes for 131m The complete dataset of 1,159 drill holes for 135,684m (both historic and current) was used for the mineral resource estimates.
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	Prior drilling completed by Nusantara in 2017-2018 at Awak Mas and Salu Bulo have been previously reported in the following ASX releases; • *Awak Mas Resource Increased by 0.2Moz, dated 31 January 2018;* ○ *Table 1, Appendix 1 Awak Mas - Exploration Results Tabulation.*

Criteria	JORC Code explanation	Commentary
		• *Project Mineral Resource Grows to 2.0Moz Resource, dated 27 February 2018;* ○ *Table 1, Appendix 1 Awak Mas - Exploration Results Tabulation.* • *Significant results from Awak Mas Extension Drilling, dated 4 April 2018;* ○ *Table 1, Appendix 1 Awak Mas - Exploration Results Tabulation.* The historical dataset of 1,091 drill holes for Awak Mas, Salu Bulo and Tarra that were previously drilled have not been included as they are not material to the reporting of the current MRE's. All historical drilling information has been previously reported in the following ASX release; • *Awak Mas Gold Project Resource Update, Mineral Resource (JORC 2012) – 1.74 Moz, New Geological Model, dated 9 May 2017;* ○ *Table 1, Appendix 2 Awak Mas Drillhole Intersection Listing;* ○ *Table 1, Appendix 2 Salu Bulo Drillhole Intersection Listing, and* ○ *Table 1, Appendix 2 Tarra Drillhole Intersection Listing.*
Data Aggregation Methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Exploration results are reported as length weighted averages of the individual sample intervals. The following criteria have been applied in reporting of the Exploration results: • Intercepts reported are intervals of Au >1g/t with intervals of <1g/t Au up to 3m included; • Where no individual intercepts >1g/t exist, the intercepts reported are intervals of Au >0.1g/t with intervals of <0.1g/t Au up to 3m included; • No high-grade capping has been applied, or was necessary, and • All downhole intersection lengths and grades are reported to one decimal place.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Any zones of significantly high-grade gold mineralization have been separately reported in Appendix 1. Details of sample compositing as part of the estimation process are included in Section 3 of Table 1 in this release.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Metal equivalent values have not been used.

Criteria	JORC Code explanation	Commentary
Relationship between Mineralization Widths and Intercept Lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	The mineralisation geometry is complex and variable, but generally has a main shallow orientation parallel to the foliation at ~30º towards the northeast. A secondary mineralisation orientation are steeply east dipping to sub-vertical north-south feeder structures. The drilling orientation is a compromise to target both mineralisation orientations, and generally the downhole length approximates the true width for the dominant broader and shallower dipping mineralised zones. Downhole intercepts of the steep sub-vertical structures will have a downhole length longer than the true width.
Diagrams	*Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	Relevant drill hole location plans and representative schematic drill sections are included within the main text of this release. All mineralised intersections used in the reporting of the Exploration Results are tabulated in Appendix 1.
Balanced Reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	All exploration results from the Nusantara drill program that relate to the current Awak Mas and Salu Bulo mineral resource updates have been reported. All relevant drill hole data was incorporated in the mineral resource estimate.
Other Substantive Exploration Data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Metallurgical testwork for the Awak Mass Gold Project by Minnovo (2017) has indicated improved gold recoveries of 92%-98% based on Whole of Ore ("**WOL**") leaching on samples composited from onsite drill core. Full details on the WOL testwork been reported in the following ASX release; • *Awak Mas Gold DFS Optimisation – Metallurgical Breakthrough, dated 10 October 2017.* Full details on the Maiden Ore Reserves for the Awak Mas Gold Project been reported in the following ASX release; • *Nusantara Delivers Maiden 1.0 Moz Gold Ore Reserve, dated 18 April 2018.* Surface geological mapping and channel sampling have been used to build the geological framework for the mineral resource estimate. The assay results from these sources has not been used to inform the grade estimate as detailed

Criteria	JORC Code explanation	Commentary
		sampling procedures and quality control data does not exist to confirm the veracity of the data.
Further Work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	The Awak Mas Gold Project is an active growth project with additional areas identified for infill (to 25m x 25m) and extensional drilling, including targets at depth and outside of the current mineral resource limits. Planned future drilling at Awak Mas will continue to target extensions to the east, and at depth at Rante, in areas where the trend of mineralisation is open and untested by historical drilling. At Salu Bulo, any further drilling will focus on extending the near surface strike length at Lelating and also on resource extension to the north and south at Biwa. The main objective is growth of the Mineral Resource outside of the currently delineated mineralised domains. An exploration model for drill targeting has been developed based on possible further fault repetitions of Rante style mineralisation to the east of Awak Mas towards the Salu Bulo deposit and will become the focus for future exploration. Further detailed core re-logging and development of a structural model will help progress the current geological model and enable its use as a drill targeting tool both for resource delineation and definition of new exploration targets within the CoW.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC CODE Explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Drilling data was supplied by Nusantara as a Microsoft Access database. Random checks were made comparing between the database and the original digital data spreadsheets for collar, survey, assay and lithology data. The check data was selected to cover the whole of the deposits and critical areas such as mineralisation boundaries and high-grade zones.
	Data validation procedures used.	Data validation procedures included: • Check for erroneous hole collar outliers - easting, northing, elevation; • Check actual versus planned collar coordinates; • Downhole survey checks; • Check sampling and logging overlaps, gaps, end of hole discrepancies between data tables; • Check for unique sampling identification and identification of any duplicate samples; • Management of preferred assays and precedence numbering; • Lookup fields and data coding management; • Assay table was checked for negative assays (other than below detection limit values), missing assays or assays outside of expected ranges, and • Visual inspection of the drill holes in Surpac 3D workspace to identify spatial inconsistencies of drill hole.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*	Nusantara's sampling procedures and drilling data were reviewed and audited by Denny Wijayadi (Cube Consulting Senior Geologist) while onsite from 11 to 15 September 2017. The site visit involved inspection of the drilling in progress, onsite sample preparation facilities, and an audit of the Geoservices laboratory in Jakarta. Cube Consulting Senior Consultant Geologists Adrian Shepherd and Denny Wijayadi were onsite from the 27th to the 30th of January 2017, prior to the May 2017 Mineral Resource estimate and undertook the following; • Independent summary check logging of 3,500 metres of diamond drill core from 19 selected representative drill holes; • Collection of 111 independent check core samples were to verify the tenor of mineralisation;

Criteria	JORC CODE Explanation	Commentary
		- Field verification by hand held GPS of 19 selected collar locations at Awak Mas and Salu Bulo, and - Retrieval of additional hardcopy and digital data from site personnel. Adrian Shepherd is the Competent Person for this Mineral Resource estimate.
	If no site visits have been undertaken indicate why this is the case.	Site visits were completed.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	Systematic and regular drilling provide a degree of confidence in both geological and mineralisation continuity within the gross mineralised zones. However, there is degree of uncertainty in the grade continuity at less than the current average drill hole spacing, which is a result of the complex mineralisation style of multiple veining orientations and high short scale grade variability.
	Nature of the data used and of any assumptions made.	The mineralisation was primarily defined by diamond drill core, with the aid of surface mapping and outcrop locations.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Previous interpretations prior to 2017 have focussed on the definition of multiple narrow complex zones based on a nominal grade cut-off of 0.5g/t Au which is close to the anticipated economic grade cut-off. A lack of a geological framework and assumed greater grade continuity between adjacent holes has resulted in grade models that are likely to be oversmoothed, which overstate the contained metal and do not adequately reflect local grade variations. Grade estimations from earlier models are likely to imply grade continuity that will not be achievable when selectively mined. The current interpretation is considered to be a low risk robust model which reflects the likely outcome from open pit selective mining.
	The use of geology in guiding and controlling Mineral Resource estimation.	Incorporation and interpretation of the historical geological data from high quality surface mapping, trenches and drilling have been paramount in developing the geological model for **Awak Mas** which forms the basis for the interpretation of the mineralised domains for estimation. Structural and lithological interpretation was made to provide a guiding framework for the modelling of the estimation domains. Robust geometrically simple domains were interpreted, incorporating internal dilution to ensure grade continuity and

Criteria	JORC CODE Explanation	Commentary
		using a nominal geological based lower grade cut-off of 0.2 g/t Au. A minimum down hole length of 2m (which equates to 1.5m true width) was employed in the interpretation of the estimation domains. The current mineralisation interpretation and geological models have continued to be confirmed by infill and extensional drilling completed by Nusantara. Confidence in the geological framework and extrapolation outside of the resource limits resulted in the discovery of additional significant mineralisation extensions into the Highwall area of the Awak Mas deposit. At **Salu Bulo**, Infill drilling has confirmed the spatial correlation of shallow dipping thrust zones, sub-vertical structures, and the footwall contact of the hematitic mudstone unit with gold mineralisation. The additional data supports the interpretation of a broad lower grade halo which also encapsulates narrower higher-grade zones along low angle thrust zones proximal to the sub-vertical structures. The revised geological interpretation warranted the application of a non-linear estimation technique at Salu Bulo to better characterise the local grade variability at the SMU scale.
	The factors affecting continuity both of grade and geology.	The complex interaction of multi-phased stockwork and breccia mineralisation associated with at least two dominant structural orientations (shallow thrusts and sub-vertical feeders) results in rapid local changes in the grade tenor and orientation at a scale of less than the current average drill hole spacing (25m to 50m). Grade and geological continuity is dependent on the interplay of the mineralising structures, preferred host lithology, alteration and veining intensity and the effect of later bounding and offsetting structures. With the wide spaced data defining the mineralisation, this structural complexity is still poorly understood. The ladder stockwork vein system developed at Salu Bulo is analogous to that at Awak Mas where there is the inherent complexity of two mineralisation orientations and short scale grade continuity at generally less than the drillhole spacing.
Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The **Awak Mas** deposit has been subdivided into five broad geologically based domains: from west to east these are Mapacing, Ongan, Lematik, Tanjung and Rante.

Criteria	JORC CODE Explanation	Commentary
		These predominantly north-south to north east striking domains lie adjacent to each other, and cover an extent of 1,450m EW by 1,050m NS and extend to a maximum vertical depth of 400m (~820mRL): • **Mapacing** – Single shallowly NE dipping domain with a strike length 810m, plan width 230m width and average thickness ranging from 5-30m; • **Ongan** – Shallowly dipping and sub-vertical domains with strike extent of 730m, plan width of 150m. Shallow domains vary in average thickness from 5-30m and sub-vertical domains have an average thickness of 5-10m; • **Lematik** – Mainly sub-vertical domains with strike extent of 740m, plan width of 220m and average thickness of 5-60m. A central north plunging (at 60º) pipe has dimensions of 80m x 80m along a strike of 280m; • **Tanjung** - Shallowly dipping and sub-vertical domains with strike extent of 910m, plan width of 340m. Shallow domains vary in average thickness from 5-40m and sub-vertical domains have an average thickness of 5-10m, and • **Rante** - Shallowly dipping and sub-vertical domains with strike extent of 70bd0m, plan width of 320m. Shallow domains vary in average thickness from 20-70m and sub-vertical domains have an average thickness of 5-10m. The mineralised domains at **Salu Bulo** are orientated north-south and have an overall combined strike length of approximately 800m. Individual interpreted mineralisation domains are between 150 to 500m in strike length. Sub-vertical mineralised zones vary from 1.5 to 20m in thickness, however are more commonly between 3 to 10m in thickness. The broader shallowly dipping mineralised zones vary in average thickness from 20 to 60m. At **Tarra**, the interpreted mineralised domain is tabular, orientated NW-SE, has an overall strike length of approximately 440m, and dips 70° to the NE. The mineralised domain width varies from 10 to 15m in thickness and extends from the near surface to 300m below the surface.

Criteria	JORC CODE Explanation	Commentary
Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	The grade estimation approach for the Awak Mas Gold Project used a combined Localised Uniform Conditioning (“**LUC**”) and Ordinary Kriging (“**OK**”) technique. Ordinary Kriging was only applied to the narrow steep sub-vertical domains with a thickness of less than 10m. LUC is a recoverable estimation technique typically used for estimation into small blocks using wider spaced resource definition drilling. The technique was considered appropriate given high short scale grade variability and the uncertainty associated with the estimation of the local grade tonnage distribution: • The method provides a more accurate representation of the recoverable grade and tonnage at the Selective Mining Unit (“**SMU**”) scale for non-zero grade cut-offs within the broad shallow domains than would typically be achieved by a traditional linear estimator such as Ordinary Kriging; • The technique is suited specifically for the estimation of grades into blocks that are small relative to the data spacing, and • The technique works well where the spatial continuity between sections is uncertain based on the current drill spacing. Key assumptions are that the grade distribution is diffusive (tested and confirmed) with gradational internal grade boundaries and that free selection of ore/waste SMU’s is possible during the mining process (i.e. open pit mining). Robust geometrically simple domains were interpreted, incorporating internal dilution to ensure grade continuity and using a nominal geological based lower grade cut-off. Grade interpolation used 1m composited samples constrained by hard boundaries within the mineralisation zones. An appropriate top cutting strategy was use to minimise the influence of isolated high-grade outliers Interpolation parameters were derived using standard exploratory data analysis techniques of statistical and continuity analysis. Appropriate interpolation strategies were developed on a domain basis using kriging neighbourhood analysis (“**KNA**”), which included:

Criteria	JORC CODE Explanation	Commentary
		• Oriented ellipsoidal search radii ranged from 60m to 240m depending on the deposit and estimation domain, and • Minimum and maximum number of samples varied from 8 to 10, and from 22 to 26 respectively. A change of support correction was applied to produce a recoverable resource estimate at the local SMU scale. The maximum extrapolation distance from last data points was no more than 50m, which is the average drill hole spacing for most of the deposits. Computer software used were: • Leapfrog Geo v4.2.2 was used for geological interpretation; • Surpac version 6.7.3 for domain interpretation, compositing and block modelling, and • Isatis version 2016.1 used for statistical and continuity analysis, and grade estimation.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Check estimates using Ordinary Kriging (“**OK**”) and Inverse Distance Squared (“**ID2**”) were completed and compared to the final LUC estimate. The LUC estimates were compared against the previous MRE’s. No mining production has taken place at any of the deposits, other than minor artisanal workings along fault structures.
	The assumptions made regarding recovery of by-products.	No by-product recoveries were considered.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	Estimations of any deleterious elements were not completed for the Mineral Resource estimate.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	**Awak Mas** • Non-rotated block model with an azimuth of 000ºTN; • The LUC panel was set at 20m x 20m x 5m (XYZ) with a block size for local estimation to a SMU size of 5m x 5m x 2.5m (XYZ); • The bulk of the drilling data is on 50m by 50m grid spacings with local 25m x 25m infill holes in several areas (Mapacing, Tanjung and Rante), and • Appropriate search ellipses were derived using Search were derived from KNA with an average search radii of 140m and anisotropy of 4:4:1 (major/semi/minor).

Criteria	JORC CODE Explanation	Commentary
		Salu Bulo • Non-rotated block model with an azimuth of 000ºTN; • The LUC panel was set at 20m x 20m x 10m (XYZ) with a local estimation, SMU size of 5m x 5m x 2.5m (XYZ) and further sub-blocked to 1.25m x 2.5m x 1.25m (XYZ) for volume resolution; • Drill holes are spaced along a 50m x 50m grid, with a 25m x 25m infill pattern. Effective data spacing ranges between 30m to 100m as a result of the mineralisation orientation. • Appropriate search ellipses were derived from KNA with search radii varying from 60m to 120m and anisotropy of 3.5:3.5:1 (major/semi/minor). **Tarra** • Rotated (-60º) block model with an azimuth of 320ºTN; • Panel block size used was 5m x 20m x 20m (XYZ) and resultant SMU block size of 2.5m x 5m x 5m (XYZ); • The bulk of the drilling data was on 40m (strike) x 60m to 100m (dip) spaced sections, and • An omni directional search radii of 150m was used within the plane of mineralisation.
	Any assumptions behind modelling of selective mining units.	Selection of the SMU size was based on the geometry of the mineralisation and the likely degree to which selective mining can be successfully applied to the visual geologically based grade boundaries.
	Any assumptions about correlation between variables.	No assumptions were made as gold was the only variable that had sufficient data available to support an estimation.
	Description of how the geological interpretation was used to control the resource estimates.	Geological interpretation guided the creation of constraining mineralised domains. Mineralised domains were used as hard boundaries and were informed only by composited samples lying within those domains.
	Discussion of basis for using or not using grade cutting or capping.	Necessity for grade cutting was based on basic exploratory data analysis, including the level of grade variability as expressed by the coefficient of variation (“**CV**”). Grade cutting completed on a domain basis using log normal probability plots of the grade distribution to determine appropriate level of cutting to minimise the influence of extreme grade outliers. Subsequent high-grade capping was determined using metal at risk analysis

Criteria	JORC CODE Explanation	Commentary
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	All MRE models was validated using the following techniques: • Visual 3D checking and comparison of informing samples and estimated values; • Global statistical comparisons of raw sample and composite grades to the block grades; • Validation 'swath' plots by northing, easting and elevation for each domain; • Analysis of the grade tonnage distribution; • Comparison of the LUC block grade variance to the SMU variance predicted by the Discrete Gaussian Model ("DGM") block support correction, and • Comparative estimates using ID2 and OK techniques.
Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	Tonnages were estimated on a dry basis. Moisture was not considered in the density assignment.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	The adopted cut-off grade for reporting is 0.5g/t Au, based on preliminary economic considerations and in-line with the reporting of mineral resources and reserves from the Maiden Ore Reserve (April 2018).
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	Mineralisation is near surface and of grades amenable to conventional open pit mining methods. The assumed mining method would use drill and blast, utilising 2.5m mining flitches to a maximum vertical depth of 300m. An overall pit slope of 40° is assumed to be attainable based on the Maiden Ore Reserve (April 2018). Mineralised domains were developed on the basis of continuity in diffuse styles of mineralisation and thus included some lower grade zones. A minimum width of 2m was used in interpretation of the mineralisation in order to preserve 3D wireframe integrity and continuity. Outside the mineralised domains, a 'mineralised waste' estimate was made. Domaining for LUC estimation incorporates zones of internal dilution to ensure grade continuity and produces robust geometrically simple zones amenable to selective open mining. The basis for eventual economic extraction was the use of optimisation shells using Whittle software with all-in cost parameters and a base gold price of US$1,400.

Criteria	JORC CODE Explanation	Commentary
		Cost parameters used for calculation of the cut-off grade and optimisation of the shells included: • Total Ore Costs - $12.25/t, this included process costs of $7.79/t, and Grade Control costs of $0.81/t; • Mining recovery 100%, Dilution 0%; • Metallurgical recovery of 70% oxide, 90.5% fresh; • Royalty 3.75%; • Transport $4.45/oz, and • Refining $1.93/oz. All mineral resource estimates were reported within a US$1,400 gold price shell.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	The Awak Mas Gold Project has previously been extensively studied on the basis of a gold flotation circuit with carbon in leach (‘**CIL**’) on reground flotation concentrate. Historical testwork provided recoveries in the range of 85% to 91% with a historical plant design value of 90%. The Definitive Feasibility Study (‘**DFS**’) Optimisation Study has focused on opportunities for improved recoveries and economic outcomes through the use of Whole of Ore Leaching. Following a review of extensive historical comminution testwork, historical gravity and leach testwork and the recent DFS Phase 1 testwork program, a flowsheet comprising gravity and leach (‘**Whole of Ore Leach**’) was selected as the subject for further Nusantara study work (Figure 8). The Whole of Ore Leach flowsheet offers a simplified process route and is a proven flowsheet in the gold industry. The Whole of Ore Leach process plant would have a capacity of 2.5 Mtpa, an average head grade of 1.40 g/t Au and a gold recovery of 91.1%. The process plant comprises of primary crushing, wet grinding in a SAG and ball milling circuit (SAB circuit), gravity gold recovery, cyanide carbon in leach gold recovery and elution, reagents, air and water services. CIL tailings would be thickened and cyanide detoxified prior to disposal in the Tailings Storage Facility. The process plant would produce a gold doré product. Full details on the leach testwork been reported in the following ASX release; • *Awak Mas Gold DFS Optimisation – Metallurgical Breakthrough, dated 10 October 2017.*

<table>
<tr><th>Criteria</th><th>JORC CODE Explanation</th><th>Commentary</th></tr>
<tr><td><i>Environmental factors or assumptions</i></td><td><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></td><td>The location of waste dumps, tailing storage facilities, haulage and access roads, power and processing plants have been determined in the Maiden Ore Reserves for the Awak Mas Gold Project.
Full details on the Maiden Ore Reserves for the Awak Mas Gold Project been reported in the following ASX release;
• <i>Nusantara Delivers Maiden 1.0Moz Gold Ore Reserve, dated 18 April 2018.</i>
A surface water management plan was undertaken to protect mine infrastructure and the environment of the surrounding area from potential impacts associated with the proposed mining activities.
Extensive environmental and social baseline studies have been conducted at the Project site from 2013 to 2017.
All major approvals/permits for the Project are in place. The Awak Mas project location is classified as “land for other uses” and does not have a forestry use designation. Therefore, a Forestry (borrow-to-use) Permit is not required for the Project.</td></tr>
<tr><td rowspan="2"><i>Bulk density</i></td><td><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></td><td>Bulk density was determined from a total of 3,051 water immersion (Archimedes principle) density measurements on recent and historical drill core samples.
Based on analysis of this data, dry density (t/m³) was assigned as follows:
<table>
<tr><th>Material</th><th>Awak Mas</th><th>Salu Bulo</th><th>Tarra</th></tr>
<tr><td>Colluvium</td><td>1.80</td><td>1.80</td><td>1.8</td></tr>
<tr><td>Oxide</td><td>2.40</td><td>2.25</td><td>2.6</td></tr>
<tr><td>Transition</td><td>2.50</td><td>2.35</td><td>2.6</td></tr>
<tr><td>Fresh</td><td>2.65</td><td>2.62</td><td>2.6</td></tr>
</table>
Nusantara collected 1,030 bulk density measurements by water immersion technique from the 2017-2018 core drilling, which was incorporated into the current MREs.</td></tr>
<tr><td><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></td><td>Density samples were wax coated or coated in plastic where necessary to account for porosity and void space. All samples were then weighed in both air and when immersed in water.
Samples were statistically evaluated by both mineralised and waste material types and by the weathering profile.</td></tr>
</table>

Criteria	JORC CODE Explanation	Commentary
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Given the distribution of the density samples, the density values were assigned in the block model and not estimated. It is assumed that historical density measurements are representative of the different material types.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.*	The Mineral Resource has been classified as Indicated and Inferred on the basis of a range of qualitative criteria. • data support as defined by drill spacing; • confidence in the domain interpretation; • data quality issues affecting particular zones; • quality of the estimate (slope of regression), and • and reasonable prospects for eventual economic extraction considerations. Quantitative classification using geostatistical simulation was used in the May 2017 MRE and has been used to modify the qualitative classification where required Areas classified as Indicated generally applied to regions of 50m or less drill intercept spacing, where the level of understanding of the mineralisation continuity and quality is considered to be sufficient to allow for mine planning and evaluation of the economic viability. Areas classified as Inferred generally applied to regions of 50m or greater drill spacing, where the level of understanding of the geological continuity is considered to be poor. All remaining estimated material is unclassified and not reported as part of the Mineral Resource.
	Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Classification of the Mineral Resource has taken into account all relevant factors through the qualitative approach as described above.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	Classification of the Mineral Resource reflects the Competent Person's view of the deposit.

Criteria	JORC CODE Explanation	Commentary
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	External reviews of the Awak Mas Gold Project MRE's have been previously completed by reputable third-party mining industry consultants as listed below: • January 2018 - AMC Consultants Pty Ltd; • November 2017 - AMC Consultants Pty Ltd; • June 2017 - CSA Global Pty Ltd. Internal peer review of the estimation methodology was conducted. The reviews to date have not identified any material issues with the Mineral Resources.
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The relative accuracy of the Mineral Resource estimate has been determined by the application of qualitative criteria and by consideration of the estimation quality (slope of regression). Descriptions of drilling techniques, survey, sampling/sample preparation, analytical techniques and database management/validation indicate that assay data collection, quality control and management is within industry standards. On balance the database represents an accurate record of the drilling undertaken at the deposit. The inherent complexity of two mineralisation orientations and short scale grade continuity at generally less than the drillhole spacing, will contribute to high local grade variability and could lead to poor relative accuracy at the SMU scale when selectively mining.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The Mineral Resource estimates are local estimates. All Indicated Mineral Resources (39.3Mt @ 1.4g/t Au for 1.78Moz) are relevant for economic evaluation.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production data is available as the Awak Mas, Salu Bulo and Tarra deposits have not been mined on a commercial basis.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code (2012) Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Mineral Resource estimate used as the basis of this Ore Reserve for the Awak Mas Gold Project ("Project"), is comprised of the Awak Mas and Salu Bulo deposits. This Mineral Resource estimate was compiled by Principal Geologist Mr. Adrian Shepherd of Cube Consulting, who is the Competent Person for these Mineral Resources. The estimate is based on assay data from 158 historic Reverse Circulation (RC) holes, 864 historic diamond holes and 68 recently drilled Nusantara diamond holes. The data set, geological interpretation and model was validated using Nusantara's internal Quality Assurance and Quality Control (QAQC) processes and reviewed by an independent external consultant. The grade estimation approach used a combined Localised Uniform Conditioning ("LUC") and Ordinary Kriging ("OK") technique to estimate the Indicated and Inferred components of the resource. Ordinary Kriging was only applied to the narrow, steep dipping sub-vertical domains. LUC is a recoverable estimation technique typically used for estimation into small blocks using wider spaced resource definition drilling. The technique was considered appropriate given high short-scale grade variability and the uncertainty associated with the estimation of the local grade tonnage distribution. The LUC panel was set at 20m x 20m x 5m (XYZ) with a block size for local estimation to a SMU size of 5m x 5m x 2.5m (XYZ).
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	The Mineral Resources are reported inclusive of the Ore Reserve (refer ASX announcement 08 May 2018).
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.	The Competent Person conducted a Site visit in October 2017. The following activities were completed: • Gained general familiarization with the site including likely mining conditions, proposed pit location, waste dump location, site drainage and site access • Assessed proposed locations of mining related infrastructure relative to the designed open pit • Observed resource drilling activities

Criteria	JORC Code (2012) Explanation	Commentary
		• Inspected core drill hole sites to get an understanding of the variations in weathering profiles across the deposit • Viewed diamond drill core from selected holes. Other key contributors to the Feasibility study have also visited the site.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The Ore Reserve estimate is the result of the preparation of a Definitive Feasibility Study (DFS) completed by a team consisting of Nusantara personnel and independent external consultants. This Ore Reserve Estimate is an update of a previous estimate (Refer ASX announcement 18 April 2018). The significant change from the previous Ore Reserve Estimate is due to additional ore definition drilling resulting in an increase in the underlying Mineral Resource Estimate. The DFS draws on work completed for an Optimisation Study and a pre-feasibility study on the two deposits, Awak Mas and Salu Bulo. The major contributors to the DFS include consultants from AMC Consultants, Cube Consulting, Golder, Minnovo, Lorax, and Resindo Resources & Energy (Resindo). The proposed mine plan supporting the Ore Reserve Estimate is technically achievable. All technical proposals made for the operational phase involve the application of conventional open pit mining, gold processing and tailings disposal technology which is widely utilised in gold mining operations in Indonesia. Financial modelling completed as part of the DFS shows that the project is economically viable under current assumptions. Material Modifying Factors (mining, processing, infrastructure, environmental, legal, social and commercial) have been considered during the Ore Reserve estimation process.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	Variable economic cut-off grades have been applied in estimating the Ore Reserve and were rounded up to 0.5 g/t gold for reporting. Cut-off grade is calculated in consideration of the following parameters: • Gold price • Operating costs • Process recovery • Transport and refining costs • General and administrative cost • Royalty costs.

Criteria	JORC Code (2012) Explanation	Commentary
Mining factors or assumptions	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design). The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	The current deposits associated with the Awak Mas Gold Project will be mined by open pit mining methods utilising conventional mining equipment. Pit designs and waste dump designs were completed as part of the DFS. The estimated inventory within the pit designs is the basis of the Ore Reserve estimates. The selected mining method, design and extraction sequence are tailored to suit the local setting in Indonesia, waste rock removal and storage, orebody characteristics, minimise dilution and ore loss. The sequence is designed to defer waste movement and capital expenditure, utilise proposed process plant capacity and expedite free cash generation in a safe and environmentally sustainable manner. Mining operating and capital costs were estimated from first principles as part of the DFS and referenced against contractor budget quotes.
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.	Geotechnical modelling has been commenced by AMC Consultants and is based on a review of the geotechnical work completed as part of previous studies, supported by a site visit, additional testing, dewatering test pumping, and inspection of diamond drill core samples and three-dimensional slope stability analysis. The analysis considered static and dynamic (earthquake) loading and derived satisfactory safety factors. The recommended geotechnical design parameters are matched to the pit designs and assume dry slopes on the basis of adequate dewatering ahead of mining. A dewatering plan is developed and costed. A geotechnical management plan is developed. Conventional drill and blast mining methods will be employed at Awak Mas and Salu Bulo with blast-hole (BH) sampling utilised as the primary procedure for grade control. In addition, reverse circulation (RC) drilling will be used specifically to determine where ore/waste boundaries exist and for updating the mine planning process for future mining. Shallow trenching across benches will be used selectively to assist with ore mark-out by determining both visually and quantitatively (by sampling) the position of contact boundaries. Floor mapping will assist with creation of dig-blocks which, when coupled with the blast-hole sampling and 3D modelled RC drilling, will give a level of GC necessary to support selective mining where appropriate. The DFS includes provision of an on-site laboratory for assaying.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	Mining dilution and recovery modifying factors were simulated by modelling to a Selective Mining Unit (SMU) of 5x5x5m and regularizing the Mineral

Criteria	JORC Code (2012) Explanation	Commentary
	The mining dilution factors used. The mining recovery factors used. Any minimum mining widths used.	Resource block model to that SMU. The selected SMU is matched to the proposed mining equipment and methodology. The modelling yielded the following results: • Mining tonnage dilution factor of 14% for Awak Mas and 5% for Salu Bulo • A net mining recovery factor of 104% of tonnes and 98% contained gold for Awak Mas and net mining recovery factor of 96% of tonnes and 96% contained gold for Salu Bulo.
	The manner in which Inferred Mineral Resources are utilized in mining studies and the sensitivity of the outcome to their inclusion.	The mining schedule is based on supplying suitable material to the processing plant with a name plate capacity of 2.5 Mtpa. The plant feed included a mix of oxide and fresh material from Awak Mas and Salu Bulo. The mining schedule is based on realistic mining productivity and equipment utilisation estimates, and considered the pit development requirements, the selected mining fleet productivity and the vertical rate of mining development. Inferred Mineral Resources were considered as waste during the pit optimisation process. Minor quantities of Inferred Mineralization are included in the production schedule but do not report to Ore Reserves the project financial result is not sensitive to the inclusion of the Inferred mineralization in the schedule.
	The infrastructure requirements of the selected mining methods.	The proposed mine layout includes designs for a processing plant, tailings storage facility, open pits, waste rock dumps, a ROM pad, a quarry, surface water diversion channels, sediment control structures, surface dewatering bores, light and heavy vehicle workshop facilities, explosives storage and supply facilities, security, technical services and administration facilities, site access roads, power supply, water supply and employee accommodation. Waste material from mining activities will be disposed of as follows: • Topsoil will be disposed of at designated stockpiles for application in on-going rehabilitation activities; • Some waste rock may be utilised to construct the Run of Mine (ROM) pad and other site infrastructure such as roads; • Some selected waste rock may be utilised to construct on-going TSF embankment lifts; • Excess waste rock will be disposed of at designated engineered waste rock dumps.

Criteria	JORC Code (2012) Explanation	Commentary
		• Waste dumps will be geotechnical designed for stability Waste dumps will be designed to allow for water management and sediment runoff control.
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation. Whether the metallurgical process is well-tested technology or novel in nature. The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. Any assumptions or allowances made for deleterious elements. The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole. For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	A processing flowsheet, mass balance, water balance, equipment identification, mechanical and electrical design were all developed to Australian standards and conform to Indonesian standards. A single stage primary crushing, Semi Autogenous Grinding and Ball Milling comminution circuit followed by a conventional gravity, carbon in leach (CIL) and cyanide destruction process is proposed. This process is considered appropriate for the Awak Mas and Salu Bulo ore types. The proposed metallurgical process is commonly used in the Indonesian and international gold mining industry and is considered to be well-tested and proven technology. Significant comminution testing has been carried out on diamond drill core samples. These tests have been carried out on oxide, transitional, and fresh ore types which were obtained across the deposits. These comminution parameters have been applied to process design and equipment selection. An average gravity and whole ore leach gold recovery value of 91.1% has been estimated based on historical gravity and whole ore leach test data (completed between 1994 to 2014) and the recent Phase 1 gravity and leach testwork managed by Minnovo in 2017. Gold recovery was estimated for each ore type based on the average testwork conducted to date for each ore type, weighted by the individual ore domain tonnage proportions from the February 2018 Mineral Resource Estimate. The majority of historical whole ore leach test data (completed between 1994 to 2014) was completed on the Rante, Tanjung and Lematik ore domains. Only a single whole ore leach test was completed for Mapacing, Ongan and Salu Bulo and no historical whole ore leach testwork was been completed on Tarra (Note: the Tarra resource has not been studied in the DFS). Much of the historical whole ore leach testwork was conducted with a different flowsheet to the current design (no gravity concentration and/or a different grind size) and these historical results have been adjusted to reflect the current plant design and grind size. The 2017 Phase 1 testwork program replicated the proposed process flowsheet on a single composite of each of the seven ore domains (Rante,

Criteria	JORC Code (2012) Explanation	Commentary
		Tanjung, Lematik, Ongan, Mapacing, Salu Bulo and Tarra). Excellent results were produced from the recent Phase 1 gravity and leach testwork, with gold recoveries ranging from 92 – 98% after 24 hours of leach. The average gold recovery of 91.1% used for the Study is generally lower than achieved in the recent Phase 1 testwork but higher than achieved in the historical testwork. It is thought some of the historical tests were affected by preg-robbing and/or lack of cyanide addition, which are thought to have been addressed by the addition of carbon and extra cyanide to the recent Phase 1 testwork. Gold recovery will be evaluated in more detail as a part of the DFS Phase 2 metallurgical testwork program (underway), where more extensive variability testwork and cyanide destruction testwork will be conducted across the various ore types. No deleterious elements of significance have been determined from metallurgical testwork and mineralogy investigations.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Extensive environmental baseline studies have been conducted at the Awak Mas Gold Project site from 2013 to 2017. The studies have established a seasonal database for key environmental components, which include: meteorology, hydrology, terrestrial ecology (flora and fauna); aquatic ecology (algae, plankton, benthic invertebrates, nekton and biota tissue metal contents); hydrogeology; surface water quality; stream/river sediment quality; soils, air quality and noise. Baseline studies have been considered in the environmental and social impact assessment (ESIA) for the Awak Mas project. The ESIA (AMDAL in Indonesian) determined the significant impacts of the projects and environmental management plans have been developed to eliminate, and where not possible, mitigate negative environmental impacts associated with mining and processing operations. Monitoring of key environmental components will be continued during the construction, operations and closure phases of the project as stipulated in the approved AMDAL/Environmental Permit, April 2017, for the project. The monitoring data will form the basis for assessment of the efficacy of environmental management plans and continual improvement in environmental management practices for the Project. Geochemical characterization test work on ore/tailings and waste rock have been completed to assess the potential for acid rock drainage/metal leaching (ARD/ML) from mine wastes. The test work has involved static tests to assess

Criteria	JORC Code (2012) Explanation	Commentary
		potential for ARD and kinetic tests to provide an assessment of the long-term drainage chemistry from waste rock and tailings. Majority of the waste rock samples analysed were non-acid forming (NAF) with only 15% to 20% of the waste rock samples being categorized as potentially acid forming (PAF). Given the relatively small proportion of PAF materials, standard ARD/ML management strategies such as segregation and encapsulation of PAF in NAF in waste dumps or blending would be employed to reduce the risk of ARD/ML from waste rock storage facilities. Tailings samples were classified as PAF or Uncertain. Tailings will be deposited to maintain saturated conditions in the lined tailings storage facility (TSF) to mitigate the risk of potential acid generation from the tailings. The kinetic geochemical test work demonstrated that both the waste rock and tailings have a low risk of metal leaching. Locations for engineered waste rock and tailings storage facilities have been selected based on geographical, geotechnical, hydrological, economic and environmental considerations.
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The project site is within economic distances of existing infrastructure of the South Sulawesi province. Existing roads into and from Belopa, the capital of the Luwu Regency, to Site provide for delivery services and consumable supplies. Belopa is some 45km to the east, on the coast, with access to coastal shipping facilities. Nusantara would work with the Regency Government on proposals to upgrade sections of the road that provide access to Site as part of the early works for the Project. An upgraded electricity supply lateral from Sulawesi's power supply grid would be built from Belopa to Site to supply electric power on Site. The mine workforce will be a mix of personnel from within the Luwu Regency and Fly In-Fly Out (FIFO) based at a camp on Site during rostered days on. There is a regional airport at Bua, north of Belopa, which has daily scheduled flights to Makassar, the provincial capital for South Sulawesi. Makassar is a regional hub for the area and has a large port and international airport, which provides connection to south east Asia and Australia. Hydrological studies indicate that there is sufficient water available in the river systems adjacent to the Project to service the needs of the Project for the life of mine. The water from the Songgang River would be pumped to a raw water pond at the process plant. The AMDAL allows for the extraction of water for these purposes.

Criteria	JORC Code (2012) Explanation	Commentary
		Development of a quarry within the Contract of Work (CoW) is proposed to provide rock, which is of sufficient quality for construction of TFS embankment supplemented by mined waste, sediment catchment embankments, haul roads, other infrastructure and to provide feed for the production of aggregates for construction and operation of the mine.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study	All capital estimates are based on a mix of market rates as at 2018; key equipment priced by vendors. It is assumed that all mobile mining equipment required for the project will be supplied and operated by a mining contractor. It is assumed that power infrastructure to Site will be supplied by Perusahaan Listrik Negara (PLN), which is an Indonesian government-owned corporation which generates and manages electricity distribution in Indonesia. The capital cost estimate accuracy is +/-15%. Mine development costs were developed from a combination of inputs from Nusantara, AMC Consultants, Resindo and Minnovo. The basis of the estimate is: • Contract mining assuming drill and blast with conventional excavator and truck mining. Support mining equipment is allowed for site pioneering and ongoing mining. • Mobilisation of mining equipment and personnel from within Indonesia • Earthworks quantities are determined by specialised earthworks modelling using Lidar data, geotechnical inputs by a qualified geotechnical consultant who undertook geological modelling and drilling and site visits by competent engineers to review local conditions and physical features that relate to the development. • Mine dewatering requirements developed from recent test pumping, analysis and hydrogeological modelling • A mining schedule developed on a monthly basis for the first 2 years and then annually • A contingency allowance on capital cost items calculated to reflect the relevant level of confidence in the estimate Processing and processing infrastructure development capital costs have been estimated by Resindo using a combination of inputs from Resindo and Minnovo. The basis of the estimate is:

Criteria	JORC Code (2012) Explanation	Commentary
		• Earthworks quantities determined from detailed site inspections by a competent civil engineer • Concrete and structural quantities developed from site layouts and similar designs from other projects • A mechanical equipment list developed from the recommended process design criteria • Budget pricing from local and international suppliers • Contingency allowances calculated on a line by line basis relevant to the source and confidence in market rates
	The methodology used to estimate operating costs.	The operating cost estimate accuracy is +/-15%. Other support capital costs for accommodation camp facilities, administration office, security facilities, heavy equipment workshop, logistics warehouse at Belopa, access road from Belopa, explosives magazine, etc were estimated by Resindo. Operating costs assume a mix of employees from the within the Luwu Regency and a FIFO scenario with various rosters on Site. A specialist HR consultant advised on the salary scales applicable to all roles envisaged for the project. Mining operating costs have been estimated by AMC on the basis of scheduled material movement and mining rates for a contractor mining scenario with technical services supplied by employees of Nusantara and its wholly owned subsidiary, PT Masmindo Dwi Area (Masmindo) (principally Indonesian Nationals). Mine design and schedules were prepared by competent mining engineers. Process and process plant infrastructure operating costs have been estimated by Minnovo using: • Reagent and grinding media consumption rates derived from testwork and budget quotations • A load list for power consumption • Industry standards The Minnovo operating costs are based on the assumption that: • A primary crush, conventional SAB circuit, gravity and leach and cyanide destruction process plant will be utilised to treat ore at a rate of 2.5 Mtpa • Primary crusher utilisation of 75% and wet plant utilisation of 91.3%

<table>
<tr><th>Criteria</th><th>JORC Code (2012) Explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>Grid power is available through PLN
Reagent delivery will be to the Belopa warehouse for storage, prior to consolidation for delivery to Site
The process plant will be operated by Nusantara employees
The operating cost estimate is considered to be appropriate for the current market in Indonesia.</td></tr>
<tr><td></td><td>Allowances made for the content of deleterious elements.</td><td>No allowance is made for deleterious elements since testwork to date on ore from Awak Mas and Salu Bulo has not shown the presence of deleterious elements.</td></tr>
<tr><td></td><td>The source of exchange rates used in the study.</td><td>Capital Costs for process plant and infrastructure are estimated in 2018 United States dollars.
Foreign currency exchange rates were derived as tabled below.
<table>
<tr><th>Currencies</th><th>Code</th><th>1 Native = USD</th><th>1 USD = Native</th></tr>
<tr><td>US Dollar</td><td>USD</td><td>1.0000</td><td>1.0000</td></tr>
<tr><td>Indonesian Rupiah</td><td>IDR</td><td>0.0001</td><td>14,135</td></tr>
<tr><td>Australian Dollar</td><td>AUD</td><td>0.74</td><td>1.35</td></tr>
<tr><td>Euro</td><td>EUR</td><td>1.16</td><td>0.86</td></tr>
<tr><td>Japanese Yen</td><td>JPY</td><td>0.01</td><td>111.5</td></tr>
<tr><td>Singapore Dollar</td><td>SGD</td><td>0.74</td><td>1.36</td></tr>
<tr><td>Korean Won</td><td>KRW</td><td>0.001</td><td>1,119</td></tr>
<tr><td>Chinese Yuan Renminbi</td><td>CNY</td><td>0.15</td><td>6.82</td></tr>
</table></td></tr>
<tr><td></td><td>The derivation of, or assumptions made, regarding projected capital costs in the study. Derivation of transportation charges.
The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</td><td>Transport charges - Gold bullion transportation charges are derived on the basis on information provided from a leading Indonesian bullion shipment organisation.
Treatment and refining charges are estimated on the basis of rates from a leading Indonesian Gold Refinery.</td></tr>
</table>

Criteria	JORC Code (2012) Explanation	Commentary
	The allowances made for royalties payable, both Government and private.	An allowance has been made for all royalties, including an allowance of 3.75% of revenue for royalties payable to the Government of Indonesia and an allowance for other royalties payable to private parties.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc. The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	The mined ore head grades are estimated utilising industry accepted geostatistical techniques with the application of relevant mining modifying factors. Gold price and exchange rates have been determined by an external financial expert group on the basis of current market trends. A Life-of-mine (LOM) gold price forecast of US$1,250/oz (Real 2018) is applied in the financial modelling for the project supporting the Ore Reserve calculation process. This price forecast was established by Nusantara on the basis of review of US$ gold price forecasts and gold price inputs for Ore Reserves by peer projects. The peer information reviewed supported a range between US$1,200/oz and US$1,300/oz with Nusantara adopting US$1,250/oz.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. A customer and competitor analysis along with the identification of likely market windows for the product. Price and volume forecasts and the basis for these forecasts. For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	There is a transparent market for the sale of gold.
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. NPV ranges and sensitivity to variations in the significant assumptions and inputs.	Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. Key value driver inputs into the financial model included: • Gold price at US$1,250/oz based on forecast long term pricings • Discount rate of 10%, on real, ungeared forecast cashflows. The Ore Reserve estimate is based on work completed to at least a DFS level of accuracy with inputs for mining, processing, general and administration, sustaining capital and contingencies scheduled and costed to generate the initial Ore Reserve cost model. The Project cost model based on the Ore Reserve returns a positive NPV based on assumed commodity prices and the Competent Person is satisfied

Criteria	JORC Code (2012) Explanation	Commentary
		that the project economics that support the statement of the Ore Reserves retains a profit margin against reasonable future commodity price movements.
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	Nusantara and previous owners through a wholly owned subsidiary, PT Masmindo Dwi Area (Masmindo), have occupied the site for over a decade and has worked harmoniously with the local community over that period. There has been extensive and ongoing community engagement over a number of years, including specialist studies as part of an Environmental and Social Impact Assessment. Masmindo enjoys a strong relationship with the communities around Awak Mas and are committed to working with these communities to ensure the project benefits extend beyond direct employment.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: Any identified material naturally occurring risks. The status of material legal agreements and marketing arrangements. The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	The Project is held under a 7th Generation Contract of Work (CoW) signed with the Indonesian Government (GOI) in 1998 and is owned 100% by Masmindo. The CoW grants Masmindo the sole right to explore and develop the Awak Mas Gold Project. In March 2018 Masmindo signed an amendment with the GOI which reaffirms Masmindo as the legal holder of the CoW with the sole rights to explore and exploit minerals within the CoW area until 2050 with the option of two ten-year extensions under the IUPK mining licence regime. The Amendment more closely aligned the CoW to prevailing laws and regulations. All major environmentally-related approvals/permits for the Awak Mas project are in place, specifically these are: • Government of Indonesia Feasibility Study (GOI FS) – Approval of the technical and economic components was granted by Ministry of Energy and Mineral Resources (MEMR) on June 17, 2015 and approval of the complete GOI FS (including environmental components) was granted on May 17, 2017 (subsequent to the approval of the AMDAL in mid-2017) • AMDAL and Environmental Permit – Approval of the AMDAL and issuance of the Environmental Permit was granted by the Government of South Sulawesi on April 12, 2017 • Construction Permit – MEMR issued the Construction Permit for the Awak Mas project on June 20, 2017 followed by a Minister's Decree on January 16, 2018 regarding change from Construction to Production/Operations Phase (which includes construction) for the Awak Mas Project, which is valid until June 19, 2050

Criteria	JORC Code (2012) Explanation	Commentary
		There will be a requirement to submit amendments to the existing approved GOI FS and AMDAL. The Project location is classified as "land for other uses" and does not have a forestry designation. Therefore, a Forestry 'borrow and use' (Pinjam Pakai) Permit is not required for the Awak Mas project. In addition to the major permits listed above, several minor permits are required for the operation phase of the project. Examples include TSF dam safety permit, tailings permit, explosive permit, water use permit, hazardous waste storage permit, etc. These permits will need to be secured during construction and operations.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories. Whether the result appropriately reflects the Competent Person's view of the deposit. The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	The main basis of classification of Ore Reserves is the underlying Mineral Resource classification. All Probable Ore Reserves derive from Indicated Mineral Resources in accordance with JORC Code (2012) guidelines. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit. No Probable Ore Reserves are derived from Measured Mineral Resources. No Inferred Mineral Resource is included in the Ore Reserves.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	The testwork and models, which form the basis of the Ore Reserve estimate was subjected to various reviews and audits: • Metallurgical testwork was reviewed by Nusantara metallurgists and process engineers and confirmed to be adequate for a PFS level study • Geotechnical inputs were prepared by AMC • Open pit designs, production schedules and mining cost models were reviewed through AMC's internal peer review system • The basis of design for the process plant and infrastructure was reviewed by Nusantara metallurgists and process engineers and was deemed appropriate for the study • The financial model applied for project valuation was reviewed by Nusantara financial accountants and was considered to be appropriate for the study
Discussion of relative	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the	The Awak Mas DFS resulted in a technically robust and economically viable business case for a greenfield gold mining operation located in Indonesia. This is deemed to be an appropriate basis for the Ore Reserves estimate.

Criteria	JORC Code (2012) Explanation	Commentary
accuracy/ confidence	Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating are reasonable and to a level of accuracy supporting the statement of Probable Ore Reserves. Gold price and exchange rate assumptions were set out by Nusantara and are subject to market forces and present an area of uncertainty. In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental and social approvals to operate will be granted within the project timeframe.

About Nusantara Resources

Nusantara is an ASX-listed gold development company with its flagship project comprising the 1.1 million-ounce Ore Reserve and 2.0 million-ounce Mineral Resource Awak Mas Gold Project located in South Sulawesi, Indonesia. Discovered in 1988, the Project has over 135 km of drilling completed in over 1,100 holes.

The Project is 100% owned through a 7th Generation Contract of Work (CoW) with the Government of Indonesia (GoI). The CoW was secured prior to the current Mining Law and has recently been amended by mutual agreement to align with the current law.

PT Masmindo Dwi Area (Masmindo), a wholly owned subsidiary of Nusantara, has sole rights to explore and exploit any mineral deposits within the project area until 2050. After this period, the operations under the CoW may be extended in the form of a special mining business license (IUPK) in accordance with prevailing laws and regulations, which currently allows for an extension of 10 years and a further extension of 10 years.

In the 10th year after commercial production, Masmindo is required to offer at least 51% of its share capital to willing Indonesian participants at fair market value according to international practice.

Nusantara's development strategy is for construction of a modern, low strip ratio open pit operation with ore processed by standard carbon-in-leach (CIL) processing delivering high gold recoveries. Environmental approval has already been received for the Project, which is favourably located in non-forestry land close to established roads, ports, airports, and grid power.

Nusantara's second strategy is to grow the resource base and support a mining operation beyond the initial project life of 11 years. Multiple drill-ready targets have already been outlined extending from the three main deposits and in other areas of the 140km^2 CoW.

Competent Persons Statements

The information in this announcement that relates to the Ore Reserves of Nusantara Resources is summarised from publicly available reports as released to the ASX of the respective companies. The results are duly referenced in the text of this report and the source documents noted above.

Exploration and Resource Targets

Any discussion in relation to the potential quantity and grade of Exploration Targets is only conceptual in nature. While Nusantara Resources may report additional JORC compliant resources for the Awak Mas Gold Project, there has been insufficient exploration to define mineral resources in addition to the current JORC compliant Mineral Resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.

Exploration Results

The information in this report which relates to Exploration Results is based on, and fairly represents, information compiled by Mr Colin McMillan, (BSc) for Nusantara Resources. Mr McMillan is an employee of Nusantara Resources and is a Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 109791).

Mr McMillan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr McMillan consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Mineral Resources

The information in this report that relates to the Mineral Resource Estimation for the Awak Mas Gold Project is based on and fairly represents information compiled by Mr Adrian Shepherd, Senior Geologist, (BSc), MAusIMM CP, for Cube Consulting Pty Ltd. Mr Shepherd is an employee of Cube Consulting Pty Ltd and is a Chartered Professional geologist and a current Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 211818).

Mr Shepherd has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Shepherd consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Ore Reserves

The information in this report that relates to the Ore Reserves Estimation for the Awak Mas Gold Project is based on and fairly represents information compiled by Mr David Varcoe, Principal Mining Engineer, for AMC Consulting Pty Ltd. Mr Varcoe is an employee of AMC Consulting Pty Ltd and is a current Fellow of the Australian Institute of Mining and Metallurgy (AusIMM No: 105971).

Mr Varcoe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Varcoe consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Metallurgy

The information in this report that relates to metallurgy and metallurgical test work and findings for Awak Mas Gold Project is based, and fairly represents information compiled by Mr John Fleay, Manager Metallurgy, FAusIMM, for Minnovo Pty Ltd. Mr Fleay is an employee of Minnovo Pty Ltd and is a current Member of the Australian Institute of Mining and Metallurgy (AusIMM No: 320872). Mr Fleay has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Fleay consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

New Information or Data

Nusantara Resources confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources and Ore Reserves, which all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the competent Person's findings are presented have not materially changed from the original market announcement.

For more
information
please contact:

Mike Spreadborough
Managing Director and Chief Executive Officer
Nusantara Resources Limited
+61 (0)419 329 687
info@nusantararesources.com

Nusantara Resources
Nusantara_ASX
www. Nusantara.com