



GOLDEN ALLIANCE

White paper

2017

GOLDEN ALLIANCE COIN

Golden Alliance Coin is a special company registered in Switzerland as an ICO friendly company with a single purpose – to invest in the GOLDEN ALLIANCE group of companies

PRESERVING AND INCREASING AVAILABLE FUNDS AND SAVINGS

GOLD-BACKED DIGITAL ASSETS



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1. DEFINITIONS

Blockchain means a special rules based continuous consecutive chain of blocks (a chained list) containing information. The copies of blockchains are usually stored and processed independently at numerous different computers. The blockchain technology is a strictly structured database with concrete rules of creating transaction chains and providing access to the information that excludes data theft, fraud and violation of property rights, etc.

Initial Coin Offerings (ICO) means an initial public coin (token) offering used for raising money for projects, including startups at early stages of its development, by virtue of which they may raise funds from a great number of previously unavailable investors, attract first clients and create a community around the project.

Token Generating Event (TGE) means a complex of events used to generate tokens.

ETHEREUM means a decentralized blockchain platform required for creating project tokens and launching crowdfunding campaigns.

Golden Alliance, project token (GDA) means a token granting the right to obtain profits from implementation of the project in compliance with the ICO terms. Token is built on the ETHEREUM blockchain platform.

Cryptoeconomy means social and economic relations of the digital society, which are focused on interaction based on network protocols. Key elements of cryptoeconomy include: cryptographic tokens (cryptocurrencies), digital assets; decentralized social security and crowdfunding systems; decentralized management systems; self-executed 'smart' contracts; commercial markets for computing resources; online trust and reputation systems; consensus algorithms; etc.

2. INTRODUCTION

Thanks to the development of modern financial technologies, including active blockchain expansion, the representatives of the investment community receive new instruments for investment in numerous and diversified projects, and the investors of such projects receive additional opportunities for raising funds required for their implementation.

GOLDEN ALLIANCE is an international investment group of mining and consulting companies established with a view of gaining profits resulting from the implementation of gold and other mining investment projects and increasing revenues of investors by raising the real value of assets and their liquidity.

Since its establishment, the group has gained considerable experience in managing mining projects, which receive investments in exploration, evaluation and development of solid mineral fields, primarily gold, as well as in development and integration of innovative technologies in mining and processing industries.

The activities of the company include choosing and purchasing investment attractive facilities of subsoil use (enterprises, fields and promising deposits), implementing investment projects based thereon on the establishment of efficient enterprises, managing these projects and raising funds for their implementation.

GOLDEN ALLIANCE enables external investors to purchase a part of its profile by bringing it to market by means of ICO, as well as creates an opportunity to gain profit through volatility of market prices of tokens.

We are sure that offer excellent investment opportunities to all those, who would like to diversify its profile with investments in golden assets.





3. MARKET

Russia is one of the world's largest producers of gold and has rich gold reserves. Russia has ground gold reserves exceeding 13.83 thousand tonnes being ranked second in the world (according to the State Reserves Register data of 01 January 2016). There are 5,894 gold mines in the territory of Russia.

Overall gold production in Russia rose 1.2% in 2016 to 297.393 tonnes (\$13.5 billion), compared to 2015, including: Production of refined gold in ingot form was roughly level with 2015 at 288.55 tonnes (\$13.5 billion) and sales of gold (in concentrates of various forms) outside the customs territory of the Russian Federation rose 39% to 8.843 tonnes (\$363 million).

Overall Russian gold mine production rose by 3% in 2016 to 262.379 tonnes (\$12 billion), compared to 2015, of which 238,782 tonnes (\$11 billion) were from fields where gold was the prevalent mineral; gold received as byproduct after processing of complex polymetallic fields reduced to 14,754 tonnes (\$635 million); and production of gold in concentrates rose to 8,843 tonnes (\$363 million). Gold recoveries from scrap (secondary gold) in 2016 fell 9% to 35,014 tonnes (\$1.6 billion), compared to 2015.

Growth of gold production in Russia in 2016 was assured by several leading regions: Krasnoyarsk Territory – by 5% to 52 tonnes (\$2.3 billion), the Magadan region – by 17% to 27 tonnes (\$2.3 billion), Kamchatka Territory – by 75% to 6.3 tonnes (\$272 million), Trans-Baikal Territory – by 8% to 12 tonnes (\$544 million) and others.

Year 2016 in Russia marked the seventh consecutive year of a continued growth of gold extraction from fields, both placer and metalliferous, where gold is the prevalent mineral. Increase in production is generally related to the integration of new and the development of existing capacities.

Gold mine production in Russia at year-end 2017 may raise 2-3% compared to the previous year to around 270 tonnes (\$12 billion).

The Russian Gold Producers' Union forecasts that Russia could raise gold production roughly 2%-2.5% in 2017 to 304-305 tonnes (\$14 billion), compared to 2016.

According to Metals Focus, gold price this year will be on a rising trend, which will have a positive impact on the profitability of gold mining companies around the world. Gold will average at \$1,270/oz this year.

The world's largest gold producers are:



- 12.9% – China. It is on the top. The record of the Chinese gold mining corporations is 300 tonnes (\$13.6 billion). It is worthy of note that this country is not going to slow down its development rate.

In China there is a rising demand for physical gold, and private investors continue to keen to purchase gold in bars, bullion coins and medals. According to the World Gold Council, 531.7 tonnes of physical investment gold were purchased in the first half of the year, which represents an increase of 11% compared to the previous year. China was the main purchaser of physical metals. According to the WGC, the demand of the Chinese population for these metals has increased by 38% to 172 tonnes in half a year. According to the WGC report "weak currency and concerns over imposition of restrictions on transactions related to real estate in the cities of the first and second levels have prompted the demand for gold as liquid asset."

- 11.2% – Russia. In 2016, Russia produced 288 tonnes (\$13 billion) of these minerals. The list of top producers includes the Krasnoyarsk Territory and Altai.
- 9.5% – South Africa. The country produces 250 tonnes (\$11.3 billion) of this precious metal per year. In 1970s, these regions produced an unprecedented volume – about 1 million kg of this yellow metal. This represents the biggest gold production in the world.
- 9% – Australia. The country is the fourth largest gold producer in the world. Gold mining companies deliver more than 225 tonnes (\$10.2 billion) to the national fund per year. The largest fields are located in the west and north of the mainland.
- 8.9% – North America and South America. Peru is the largest gold producer. 175 tonnes (\$8 billion) are delivered annually to national banks.



4. ABOUT GOLDEN ALLIANCE GROUP OF COMPANIES

Mission

Income growth for all participants in investment projects through effective use of raw material, material and intellectual assets of the company, as well as technical, economic and scientific capacities in compliance with best standards of corporate management.



Strategy

Dynamic growth of the group. Establishment and further participation in the development of mining enterprises, while maintaining the balance of interests of investors and staff members and achieving sustainable advantage over competitors.

Targets

- Construction and launch of gold mining enterprises at gold fields belonging to the group in various regions.
- Creation of highly efficient mining companies based on available assets with a view of capitalizing their cost by means of receiving access to international capital markets.

Ways to Achieving Objectives of the Group

- To invest into the development of the most liquid and promising fields;
- To prepare to and implement the mining investment projects in compliance with international standards;
- To support and develop international standards on cooperative management; and
- To prepare projects for receiving access to international capital markets.

Main Achievements of the Group

An effective holding structure was established, and a team of highly qualified experts was created.



The assets of the group include fields with high competitive advantages, the most important of which are: reliably developed reserves of mineral resources, developed infrastructure in the site, predominating open-cut mining, and rather simple hydrogeological and mining conditions of field development.

- ! **Raw-materials base of the holding company includes reserves of industrial gold in the amount of 7,27 tonnes (\$308 million), as well as gold resources – 50,72 tonnes (\$2.3 billion).**
- ! **There is a possibility to increase the reserves of industrial gold up to 30,4 tonnes (\$1.4 billion) and resources up to 85 tonnes of gold (\$3.8 billion).**

The staff of the companies has gained the great experience in preparing feasibility studies (FS) of projects, development of financial models and implementation of expert evaluations on projects of development of solid mineral fields.

The internal standards of various business processes have been developed, in compliance with which a procedure for managerial decision-making has been established and a level of responsibility of the participants has been defined.

GOLDEN ALLIANCE has moved from consolidating raw assets to a new stage of its development, that is capitalization and rapid building of the capacity gained.



5. MAIN ACTIVITIES

Receiving the Right to Use Subsoil

- Carrying out a comparative assessment of fields of mineral resources and selecting promising subsoil use facilities for their further purchasing;
- Finalizing the package of documents for participation in auction (competition);
- Participating in auctions (competition);
- Monitoring and ensuring obtaining, reissuing, amending and expanding licenses, as well as entering the facilities into the list put up for an auction (competition);
- Settling the rights to use subsoil and use land.

Geological Exploration and Research

- Conducting evaluation of the resource base of mineral resources and economical efficiency of metalliferous and non-metalliferous fields;
- Developing innovation technologies in the area of extraction and processing of mineral raw materials;
- Organizing and monitoring prospecting and evaluation works, and technological research;
- Developing FS of permanent and provisional exploratory standards;
- Preparing geological reports and calculating the reserves;
- Evaluating the processing properties of the ore materials and concentrates;
- Elaborating process regulations; and
- Developing programs and projects on selection and investigation of samples and their processing technology.

Information and Analysis

- Consolidating and analyzing geological exploration and research with recommendations for their subsequent implementation; and
- Analyzing and justifying technical and technological solutions for development of fields of mineral resources.

Drafting and Constructing

- Organizing and conducting tenders;
- Preparing technical design assignments;
- Elaborating pre-project documentation;
- Preparing feasibility studies (FS), developing financial models and implementing expert evaluations of projects of development of solid mineral fields;
- Drafting projects for prospecting and evaluation works;
- Developing projects and working papers for construction of enterprises and development of fields of mineral resources;
- Complex designing of mining enterprises and construction materials; and
- Supporting the construction of enterprises for extraction of mineral resources.



Extraction of Mineral Resources

- Management of mining and treatment of precious and non-ferrous metals.

Technical Consulting

- Elaborating concepts of development of enterprises;
- Elaborating information memoranda;
- Evaluating projects and carrying out a due diligence;
- Evaluating and auditing recourses and reserves;
- Technical auditing the fields of mineral recourses and elaborating recommendations for their development;
- Drafting proposals on optimization of ways to development of enterprises, their reconstruction, modernization and technological improvement;
- Elaborating FS of investment attractiveness and FS of expediency of development of solid mineral fields; and
- Preparing technical and economic calculations and expert judgments.

Financial and Legal Consulting

- Developing business plans;
- Evaluating investment projects;
- Attracting debt and equity financing to development of project;
- Preparing additional securities issues for state registration, including drafting securities prospectus and further share placing;
- Monitoring the correct use of the financing provided;
- Providing consulting service while issuing the securities;
- Elaborating strategies of development of mining companies;
- Monitoring and managing costs during implementation of mining projects;
- Organizing the budget process;
- Establishing enterprises of various legal organizational forms; implementing a full range of legal actions from zero to state registration of a legal person;
- Establishing companies with foreign investments and further promoting their assets to international equity market;
- Preparing financial statements in compliance with the IFRS requirements;
- Preparing consolidated financial statements.

Corporate Management

- Organizing the work of Societies' Boards of Directors;
- Preparing and organizing general shareholders' meeting;
- Creating effective system of internal control;
- Ensuring transparency and information openness of companies;
- Elaborating full package of documents of the company, provisions on the Board of Directors, General Director, significant transactions, Corporate Secretary, holding company, contract work, etc; and
- Organizing the work of Corporate Secretaries.



6. TEAM

GOLDEN ALLIANCE projects are implemented by expert team with more than 30 years of experience in mining industry.



Nikolay Tsyganov

Mining engineer with more than 30 years' experience in the investment efficiency assessment and analysis of the economic feasibility of field development, design of mining operations and exploitation of mineral deposits, commissioning of new mining enterprises, design of mineral deposit facilities (mines, quarries, factories) and an audit of operating mining enterprises; has worked in the Russian, Australian and Canadian companies.



Vyacheslav Miklyayev

Director of Geology with more than 30 years' experience in the geological structure research and ore field and deposit structure in the North Caucasus; Georgia; Tajikistan; Transbaikalia, Yakutia (Russia); Mongolia; India; organization of investment projects with large international mining enterprises, international Mining, Minerals and Sustainable Development projects, exploration of Dolpran and Komator gold fields (Republic of Kyrgyzstan), exploration of 9 productive mines with open and underground mining systems in Russia, Kazakhstan, Guinea and Burkina Faso, creation of a distributed geological modelling and mining planning system based on SQL MS and Gems software, discovery and exploration of the Gross, Uryah and Buli gold fields.



Vitaly Menshikov

Chief Geologist with over 30 years of experience in the design and implementation of exploration drilling for the purpose of incrementing reserves; Chief Geologist according to the company's concessions (zona Sur): El-Placer, San-Rafael, Emilia; the city of El Dorado, Venezuela, the discoverer of San Rafael / El Placer and Alvarez gold fields. Vitaly Menshikov carried out geological exploration work on facilities in Central Asia (Uzbekistan, Tajikistan). He worked on a number of uranium and gold deposits in Russia, Ukraine and other countries.



Nikolay Belyakov

Mining engineer with more than 30 years' experience in the open-cut technology research; use of new mining technical solutions. He cooperated in Indonesia with mining enterprises for the supply of mining equipment, effectiveness analysis of open-cast mining technical solutions, sale of mineral raw materials. He assessed the efficiency of open-pit mining, optimization and modelling of mining enterprises, geological modelling, assessment of enterprises at various stages of field development, including preparation of IPO materials, strategic, medium-term and current planning, improving the business process productivity, technology selection and activity management of the mining enterprise.



Oleg Pavlyuk

Director of Corporate Development and Legal Affairs. Lawyer, Economist, Director of Investment and Legal Affairs. He graduated from the Higher Investigations School of the Ministry of Internal Affairs and Federal State Budgetary Educational Institution of Higher Professional Education *RF Government-affiliated Financial Academy*. He has worked in legal departments specializing at complete legal support of enterprises at various levels. Being employed by the group of companies, Oleg Pavlyuk is responsible for legal affairs management in the Company and its subsidiaries; for the legal protection of the Company's and its subsidiaries' interests.



7. GOLDEN ALLIANCE COIN

GOLDEN ALLIANCE COIN is a special purpose entity, registered in Switzerland, as an ICO friendly jurisdiction with a single purpose to invest into GOLDEN ALLIANCE group of companies.

Upon the results of the ICO, GOLDEN ALLIANCE COIN acquires a 25% stake in GOLDEN ALLIANCE and will be fully entitled to a share in the profit of the company.

GOLDEN ALLIANCE COIN mission is to attract investments through cryptoassets in mining projects, mainly in gold mining projects, in different countries of the world.



8. ICO STRUCTURE

Golden Alliance Tokens (GDA)

GOLDEN ALLIANCE COIN attracts up to \$ 50 million in order to invest in the GOLDEN ALLIANCE project portfolio. \$ 25 million will be used to purchase 25% of GOLDEN ALLIANCE at the estimated value of the portfolio. \$ 20 million and the funds exceeding this amount will be invested in the future similarly investment-oriented GOLDEN ALLIANCE project portfolio. If the attracted amount is less than \$ 45 million the purchase share will be proportionally reduced.

We have elaborated a model of future profit distribution for tokens holders using the mechanism of tokens repurchasing. Tokens will be issued as debt obligations. As a limited partner, GOLDEN ALLIANCE COIN will get a GOLDEN ALLIANCE stake and obliges to use it for repurchasing of tokens (100%) at the market price in case it receives the net profit for exploitation of fields, mining of gold, silver and other metal. Repurchasing of tokens seems to be attractive for investors due to its liquidity and volatility.

GOLDEN ALLIANCE using international companies proved gold, silver and other metal reserves at its own fields guarantees investments by gold reserves in the ICO framework. Investors will be able to receive additional significant profit from the company's investment in exploration, verification and extraction in the existing fields and at new mines the company plans to explore.

For the first time GOLDEN ALLIANCE COIN plans to issue not only its own electronic cryptocurrency but also its standard as golden coins and bars of various values. These golden coins will have their own quotations and their value will depend not only on the value of gold they will be made from but also on the value of Golden Alliance tokens (GDA) at the stock exchange of cryptocurrencies. Thus the value of Golden Alliance tokens (GDA) will be lower than the value of its golden equivalent.

Besides, the company will be able to pay a part of benefits to the investors both transferring funds in cryptocurrency and, upon the wish of investors, in golden equivalent.

There will be three stages of the project's implementation:

STAGE 1: «Raising ICO funds»

Total amount of tokens: 500 million tokens shall be issued.

Start-up rate: 1 Golden Alliance token (GDA) will have a value equivalent to \$0.1.

Timing: 27.11.2017 (00:00 GMT) - 27.12.2017 (00:00 GMT).



Acceptable fiat and cryptocurrency: \$ (USD), euro (EUR), RUB, bitcoin (cash, original), LTC, ETH, DASH, NEO, Ripple, Waves, etc.

Tokens distribution:

- 450 000 000 tokens (90%) issued for free market;
- 10 000 000 tokens (2%) reserved for bounty (award for assistance in ICO promotion);
- 40 000 000 tokens (8%) left to be introduced into national economy and for producers.

Compensation bonus to the tokens purchased:

- First three days - 25%.
- Next five days - 20%.
- Next seven days - 15%.
- Next ten days - 10%.

Issuing and transferring tokens:

Golden Alliance token (GDA) will be created at the Ethereum blockchain platform using Smart contract technologies.

Tokens will be available and displayed within 7 (seven) calendar days upon the completion of ICO according to the conditions of the Smart contract.

In case of early raising of funds tokens will be available and displayed within 7 (seven) calendar days after the date of early raising of funds according to the conditions of the Smart contract.

Upon the completion of ICO, Golden Alliance tokens (GDA) will be available for trade at the stock exchange of cryptocurrencies.

We are sure that many groups of investors will be interested in ICO, including:

- Traders (due to high volatility);
- Venture investors (even with small funds);
- Cryptoassets holders (for diversification of assets by fiat investments);
- Ordinary investors (due to liquidity);
- Fiat investors.

STAGE 2: «Investments into GOLDEN ALLIANCE portfolio»

December 2017 – February 2018

- GOLDEN ALLIANCE COIN acquires a 25% stake in GOLDEN ALLIANCE



January 2018 – November 2019

- Exploitation and development of Kopna gold ore field (Kemerovo region).
- Exploitation and development of a gold ore field in the republic of Buryatia.
- Exploitation and development of Uksunaysk gold ore field (Altai krai).
- Exploitation and development of Yuzhno-Altaysk gold ore field (Altai republic).

STAGE 3: «Repurchasing»

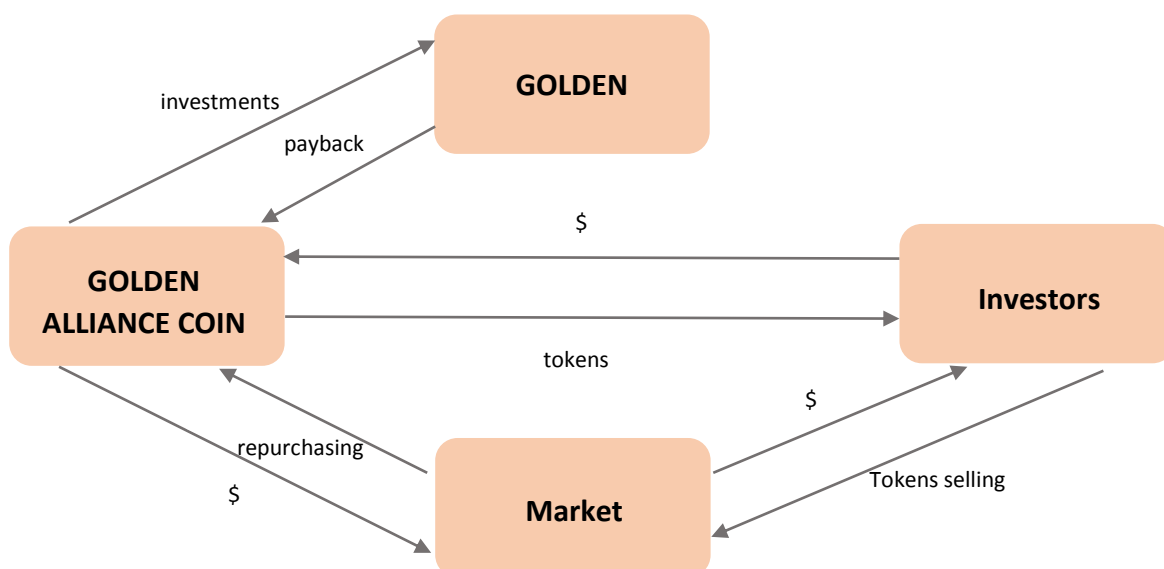
November 2019 – November 2021

Repurchasing of Golden Alliance tokens (GDA) starts within 24 months once raising of funds is terminated, in the amount of 100% of tokens at the market price in case it receives the net profit for exploitation of fields, mining of gold, silver and other metal. Investors are also entitled to change a Golden Alliance token (GDA) into its relevant golden equivalent issued by GOLDEN ALLIANCE COIN.



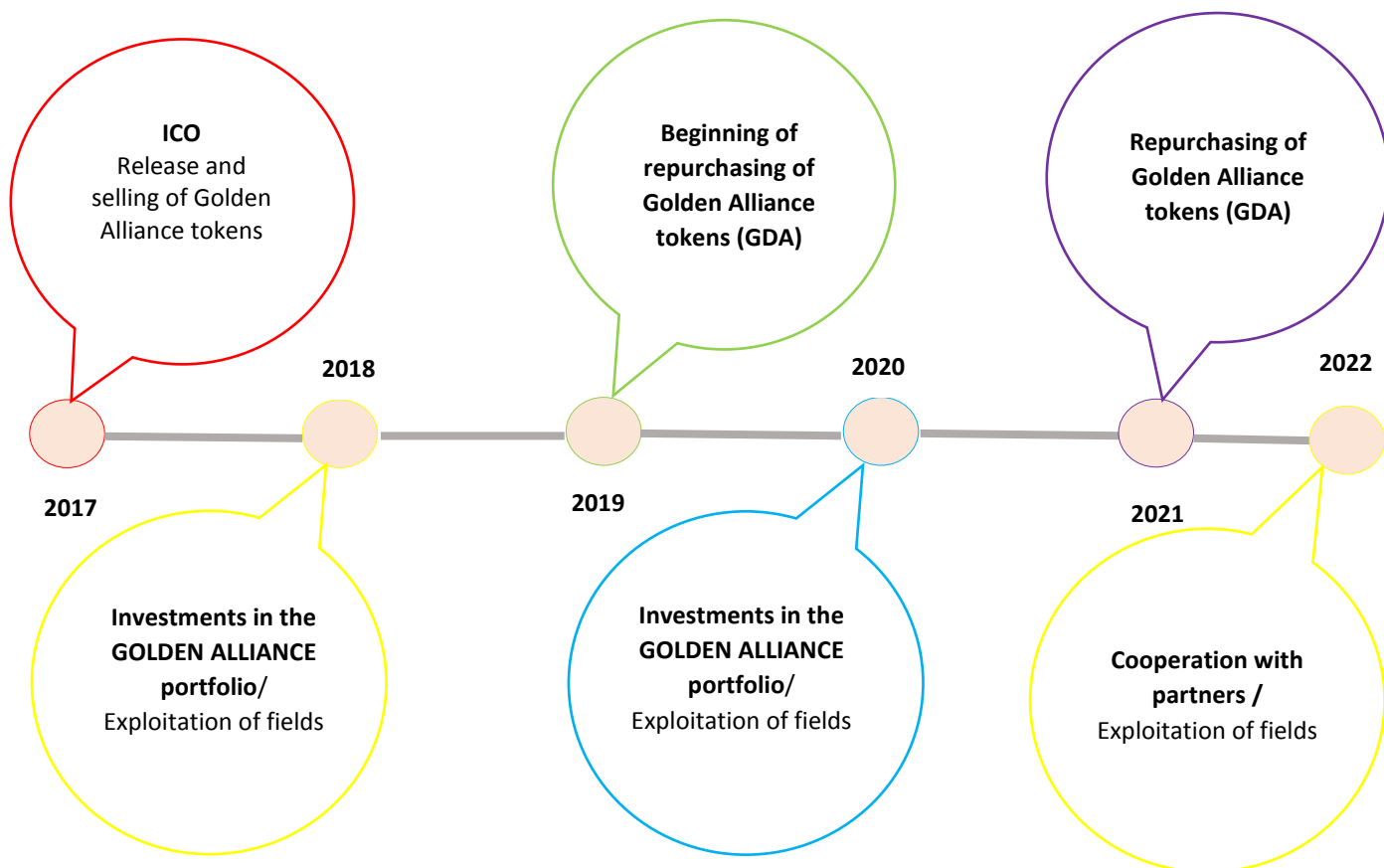
9. ICO TERMS

1. GOLDEN ALLIANCE COIN issues Golden Alliance tokens (GDA) that will be distributed during ICO.
2. GOLDEN ALLIANCE COIN obliges to invest in the assets attracted in GOLDEN ALLIANCE portfolio within the ICO framework.
3. Golden Alliance tokens (GDA) will bargain at the stock market of cryptoassets.
4. GOLDEN ALLIANCE COIN obliges to use net profit for exploitation of its own fields, mining of gold, silver and other metal in order to purchase 100% of tokens at the 2019 and 2021 market price.
5. GOLDEN ALLIANCE COIN obliges to use the assets left after the portfolio liquidity related events (quitting the portfolio) for repurchasing tokens at the market price.
6. Tokens must be repurchased during the established period after receiving the net profit.
7. At first tokens with minimal market price will be distributed.





10. ROADMAP

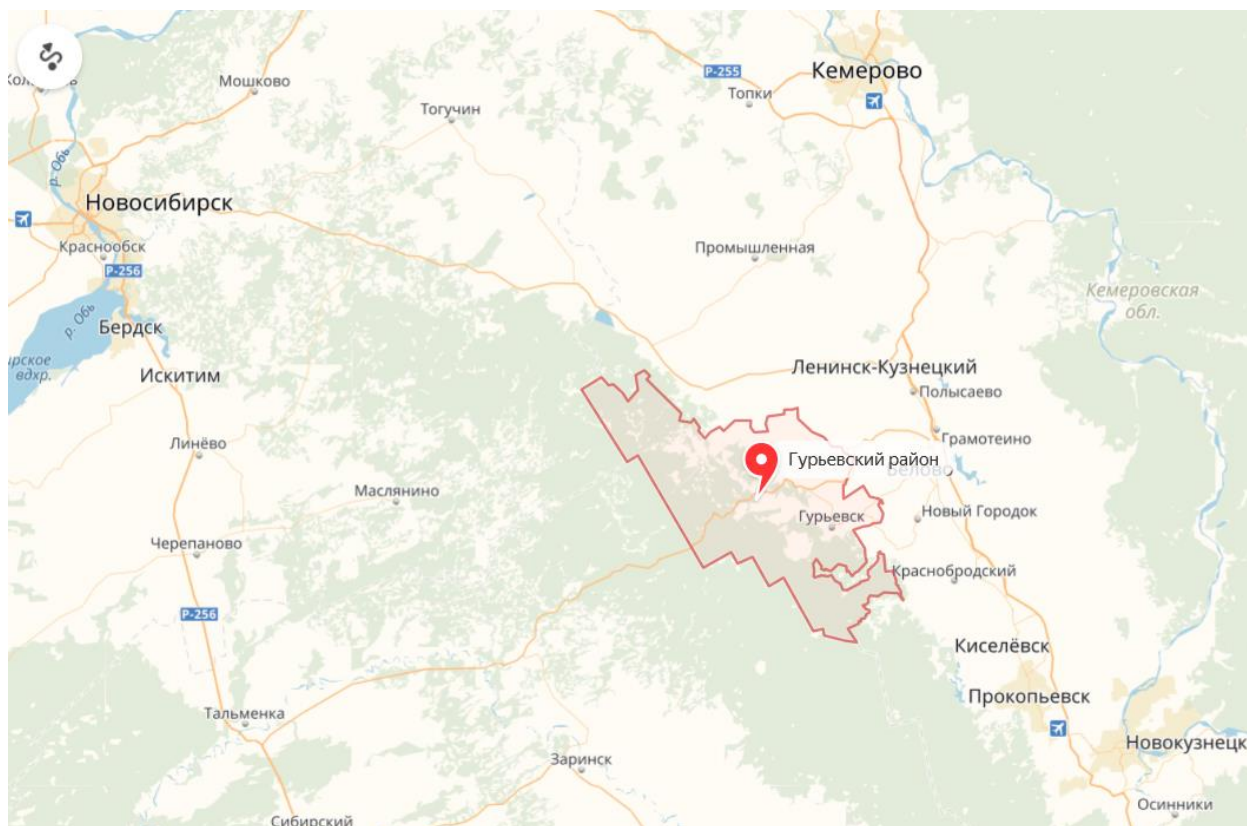




11. ANNEX: ACTIVE GOLDEN ALLIANCE FIELDS

11.1 Kopna field development (Kemerovo region)

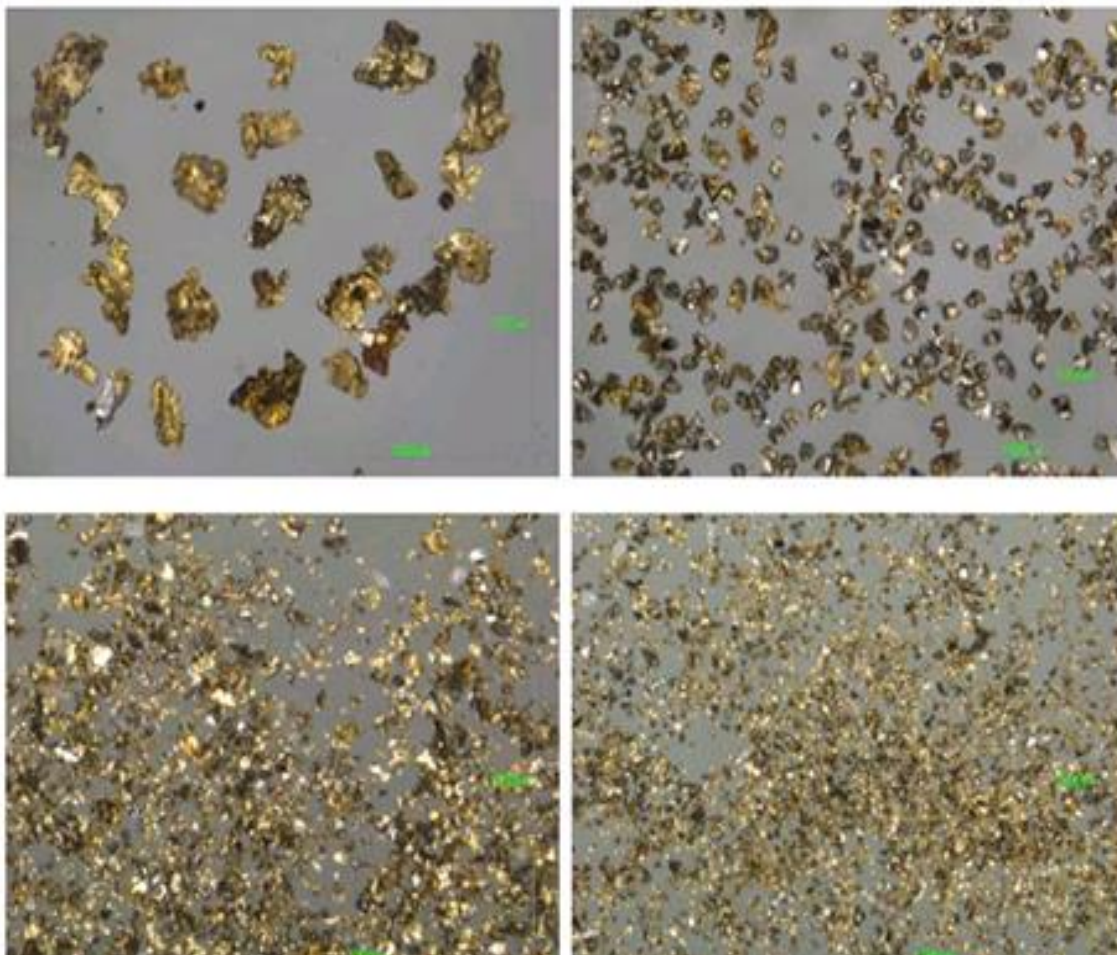
A subsoil plot called the Kopna field development is administratively located in the territory of Guryevsk municipal district of the Kemerovo region of the Russian Federation. Its industrial center – the city of Guryevsk – is located 45 km southeast of this plot. Its biggest settlements – Arinichevo, Gorskino and Varanovo – are located 7, 16 and 30 km, respectively, away from this plot. No settlements are located in the territory of the subsoil plot called the Kopna field development.



The subsoil plot called the Kopna field development is located in the northwestern part of the Ursk ore field that is an isle structure of igneous rocks of the Pecherkinskaya suite of the Lower Cambrian period among the limestones of the Ancheshevskaya suite of the same period. The district has been studied since 1970. Until 1974, a detailed study was undertaken here that included ditch digging, exploratory drilling, geophysical studies, and various types of sampling. As a result, four contiguous gold-bearing zones were found in the quartzites. The results of the consideration of reserves in the State Balance of Reserves were reflected only in the part of gold reserves.



As of January 1, 2017, the State Balance of Reserves accounted for 4,114 kg of ore gold reserves of the C2 category in the complex topaz-quartz ores in the Kopna field, including 104 kg in the spoil heap.



Gold nuggets extracted during mineralogical analysis of the technological products (gravitation concentrates)

The Kopna field is a highly attractive field for investment.

High performance technology

- High extraction ration – about 79.0%.
- Low expenses per an ounce.

The facility is ready for industrial exploitation

- High degree of exploration of reserves.
- Necessary technological research has been carried out.
- Major and development opening.
- Project documentation has been subject to state expertise.

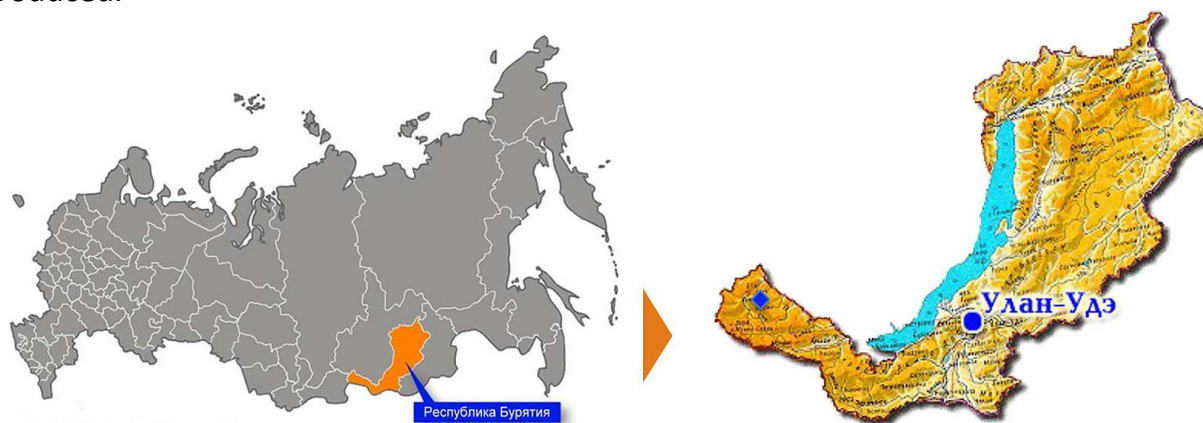
Extended infrastructure

Kopna field is located in the area with extended infrastructure near highway and railroad, which contributes to lower investment and exploitation expenses.



11.2 Field development of the Republic of Buryatia

The field is located 850 km from Ulan-Ude and has a verified, high-quality mineral resource base, counting for more than 3.5 tonnes of gold with concentration of 7.6 g/t in ore, as well as additional resource potential; sealed off mining and dressing complex with the capacity of 120,000 tonnes per year (underground mine, ore dressing plant, power supply complex and other surface infrastructure); rotation camp, assay laboratory, and tunneling and automotive equipment. Exploration and experimental-industrial processing of reserves have been carried out, with 1,182 kg of chemically pure gold produced.



All necessary infrastructures are available: energy, water supply, all-year round operating roads and bridges.

Raw-materials base of the project: two stages are planned. First of all, previously explored reserves are involved in the processing: 159 kg of K. ore body and 435 kg of Central ore body. Secondly*, while mining, 2,580 kg of Central ore body and 701 kg of K. ore body will be converted from resources to reserves.

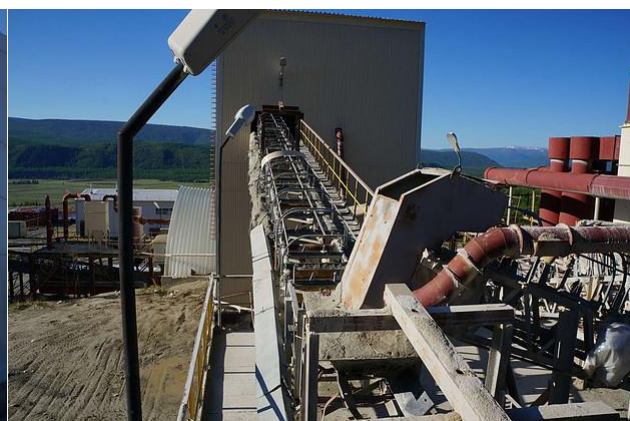


Subsurface mining: For mining of K. ore body and 9th mining horizon of Central ore body a development system with ore shrinkage is used for processing reserves of undrilled horizons: 10, 11, 12 and 13, it is planned to apply an effective development technology with a sub-level breaking and framing, which makes it possible to increase the quality of the extracted ore.



Ore treatment: During the first 4 years, season work of ore-dressing plant is planned – 6 months per year – with a subsequent transition to a all-year round operation.

Documentation: all necessary permissive and design documentation, as well as licenses, are available.



Result**: over 7 years, total production will be more than 3551 kg of chemically pure gold.

Gold, kg

Raw-materials base	Total	Central ore body	K. ore body
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First stage, C1+C2	594	435	159
Second stage, P1	3,281	2,580	701
Total	3,875	3,015	860

* The surface of resources is calculated according to the contours of planned operation blocks. In addition, a confirmation rate of $k=0.38$ based on operation data received from higher horizons is taken into account.

** The detailed calculations are contained in 2016 Technical and Economic Calculations of the Appropriateness of Field Mining.

Investment attractiveness

Gold price	\$/oz	1,200
Basic rate during the first year	RUB/\$	65.5
Inflation (annually)	%	5
Funding needs	RUB million	877
Free cash flow	RUB million	3,608
TCC*	\$/oz	860
NPV (15%)	RUB million	1,783
DPBP	Years	4
IRR	%	66

Project cash flows

Indicator	Unit	Year of project implementation							Total
		1	2	3	4	5	6	7	
Gold production	kg	0	316	488	607	738	1,015	388	3,551
Cash flow from operational activities	in thousands of rubles	- 583,101	158,402	481,648	774,184	1,224,650	1,535,861	357,387	3,949,030
Cash flow from investment activities	in thousands of rubles	- 46,906	- 90,430	- 105,974	-30,743	-56,052	-11,167	0	- 341,270
Project free cash flow	in thousands of rubles	- 630,007	67,972	375,674	743,441	1,168,598	1,524,694	357,387	3,607,760
Net present value	in thousands of rubles	- 630,007	59,106	284,063	488,825	668,150	758,043	154,508	1,782,688

- Funding is needed during the first year of implementation of the project, as well as during the first and the second quarters of the second year of the project implementation.
- The project generates a positive cash flow starting from the sale of the first consignment of refined gold (19th month of project implementation).



- A payback period is full and discounted – in the fourth year of project implementation (short investment phase compared to gold mining projects).

The key project risks are:

1. Volatility of gold price.
2. Exchange rate volatility between U.S. dollar and ruble.

These are external and uncontrolled risks. In order to analyze the extent of their influence on the project effectiveness, a sensitivity analysis is given.

Volatility of gold price and dollar rate

Project IRR, %

		Gold price, \$/oz				
		1,000	1,100	1,200	1,300	1,400
Basic rate, RUB/\$	60	35%	47%	57%	66%	75%
	65	45%	56%	66%	75%	84%
	70	53%	65%	75%	84%	93%
	75	61%	73%	83%	93%	102%
	80	69%	80%	91%	101%	110%
	85	76%	88%	98%	108%	117%

Volatility of gold price and dollar rate

Project NPV, billion of rubles

		Gold price, \$/oz				
		1,000	1,100	1,200	1,300	1,400
Basic rate, RUB/\$	60	0.6	1.0	1.4	1.8	2.1
	65	1.0	1.4	1.8	2.2	2.6
	70	1.3	1.7	2.1	2.6	3.0
	75	1.6	2.1	2.5	3.0	3.4
	80	1.9	2.4	2.9	3.4	3.9
	85	2.2	2.7	3.2	3.8	4.3



Calendar production schedule

Indicator	Unit	Total	1 st year	2 nd year	3 rd year	4 th year	5 th year	6 th year	7 th year
Tunneling works	linear meters	17,245	2,115	2,161	2,770	2,340	3,055	3,578	1,225
	cubic meters	148,541	21,129	21,156	24,244	20,077	27,190	25,885	8,860
Ore breaking	tonnes	406,102	22,400	28,150	41,000	52,340	59,393	105,613	97,207
Refining breaking	tonnes	256,987	22,400	28,150	11,177	22,517	29,570	75,789	67,384
	cubic meters	95,180	8,296	10,426	4,140	8,340	10,952	28,070	24,957
Preparatory workings	tonnes	149,116			29,823	29,823	29,823	29,823	29,823
	linear meters	32,564			6,513	6,513	6,513	6,513	6,513
	cubic meters	55,228			11,046	11,046	11,046	11,046	11,046
Ore mining	tonnes	487,960	27,921	31,617	54,537	64,555	74,522	129,074	105,735
Refining	tonnes	406,102	22,400	28,150	41,000	52,340	59,393	105,613	97,207
By-product	tonnes	81,858	5,521	3,467	13,537	12,215	15,129	23,461	8,528
Composition	g/t	7.66	5.77	5.9	9.14	10.13	10.22	8.45	3.65
Refining	g/t	8.36	6.09	6.09	10.73	11.44	11.47	9.46	3.79
By-product	g/t	4.18	4.49	4.34	4.3	4.5	5.33	3.9	2.04
Metal in ore	kg	3,738	161	186	498	654	762	1,090	386
Refining	kg	3,395	136	171	440	599	681	999	369
By-product	kg	342	25	15	58	55	81	91	17
Rock	cubic meters	298,949	29,425	31,582	39,429	39,462	49,188	65,001	44,862
Ore treatment	tonnes	487,960		56,071	58,004	61,269	77,808	118,493	116,316
Composition in ore	g/t	7.66		5.93	8.85	10.42	9.98	9.01	3.51
Metal in ore	kg	3,738		332	513	639	777	1,068	408
Extraction	%	95%		95%	95%	95%	95%	95%	95%
Chemically pure metal	kg	3,551		316	488	607	738	1,015	388
	oz	114,158		10,154	15,679	19,504	23,727	32,624	12,470

Financial model

Indicator	Unit	Year of project implementation							Total
		1	2	3	4	5	6	7	
Gold production	kg	0	316	488	607	738	1,015	388	3,551
Gold price	\$/g	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
Inflation	%	5%	5%	5%	5%	5%	5%	5%	



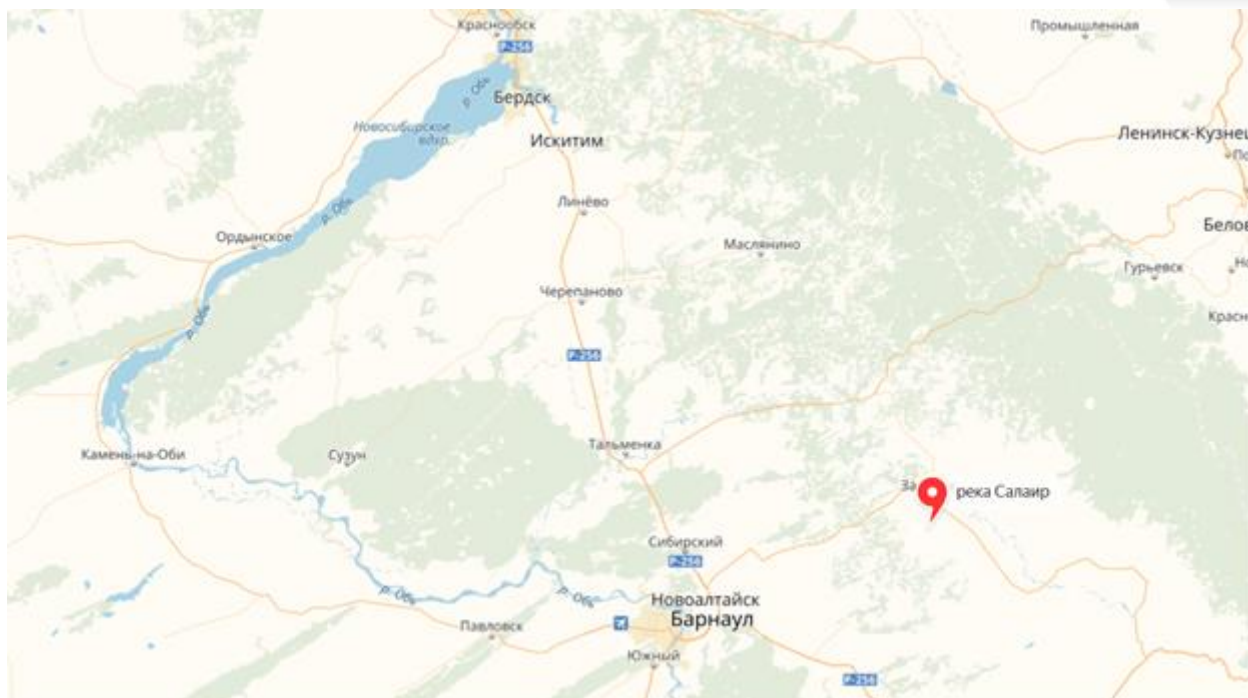
<i>Inflation rate</i>	<i>Unit</i>	<i>1.00</i>	<i>1.05</i>	<i>1.10</i>	<i>1.16</i>	<i>1.22</i>	<i>1.28</i>	<i>1.34</i>	
<i>Rate</i>	<i>RUB/\$</i>	<i>65.0</i>	<i>68.3</i>	<i>71.7</i>	<i>75.2</i>	<i>79.0</i>	<i>83.0</i>	<i>87.1</i>	
Operational activities									
Proceeds from gold sale	<i>in thousands of rubles</i>	0	829,984	1,345,641	1,757,590	2,245,016	3,241,234	1,300,816	10,720,282
Current expenses	<i>in thousands of rubles</i>	524,851	590,900	695,185	816,252	833,692	1,046,868	977,647	5,485,395
Refining	<i>in thousands of rubles</i>	0	13,280	21,530	28,121	35,920	51,860	20,813	171,525
MET	<i>in thousands of rubles</i>	0	33,039	80,738	105,455	134,701	194,474	78,049	626,457
MPI	<i>in thousands of rubles</i>	16,533	13,283	13,473	13,400	13,146	12,946	12,659	95,440
Amortization	<i>in thousands of rubles</i>	25,901	38,819	53,958	58,350	66,358	67,953	67,953	379,292
Gross profit (-loss)	<i>in thousands of rubles</i>	-567,284	140,663	480,756	736,011	1,161,199	1,867,133	143,695	3,962,173
Profit tax	<i>in thousands of rubles</i>	0	0	0	0	0	363,695	28,739	392,435
Net profit (-loss)	<i>in thousands of rubles</i>	-567,284	140,663	480,756	736,011	1,161,199	1,503,437	114,956	3,569,738
Circulating funds	<i>in thousands of rubles</i>	41,717	62,798	115,864	136,042	138,949	174,478	0	0
Changes in circulating funds	<i>in thousands of rubles</i>	41,717	21,081	53,066	20,178	2,907	35,529	-174,478	0
Cash flow from operational activities	<i>in thousands of rubles</i>	-583,101	158,402	481,648	774,184	1,224,650	1,535,861	357,387	3,949,030
Investment activities									
Capita investment in equipment and construction and installation operations	<i>in thousands of rubles</i>	46,906	90,430	105,974	30,743	56,052	11,167	0	341,270
Cash flow from investment activities	<i>in thousands of rubles</i>	-46,906	-90,430	-105,974	-30,743	-56,052	-11,167	0	-341,270
Cash flow from operational and investment activities	<i>in thousands of rubles</i>	-630,007	67,972	375,674	743,441	1,168,598	1,524,694	357,387	3,607,760
Financial activities									
Obtained loans (70%)	<i>in thousands of rubles</i>	634,000	126,000	0	0	0	0	0	
Repaid loans	<i>in thousands of rubles</i>	0	160,000	300,000	300,000	0	0	0	
Accrued interests % (15%)	<i>in thousands of rubles</i>	47,750	92,550	67,500	22,500	0	0	0	
Repaid %	<i>in thousands of rubles</i>		29,495	81,947	118,658	0	0	0	
Cash flow from financial activities	<i>in thousand</i>	634,000	-63,495	-381,947	-418,658	0	0	0	



	<i>s of rubles</i>								
	<i>in thousand s of rubles</i>								
Project free cash flow		3,993	4,478	-6,274	324,783	1,168,598	1,524,694	357,387	3,377,660
	<i>in thousands of rubles</i>								
Cumulative cash flow		3,993	8,471	2,197	326,981	1,495,579	3,020,273	3,377,660	3,377,660

11.3 Exploitation and development of Uksunaysk gold ore field (Altai krai)

Uksunaysk gold ore field is a large-capacity field with favorable mining and geological conditions that allow to mine gold by digging without drilling and blasting operations.



The ore body is processed 30 meters deep, aping thickness is 5-7 meters. During such processing there is high economic efficiency of gold mining from the decayed Uksunaysk field. The field reserves and resources permit to plan constructing a gold mining plant with the capacity of 1.0-2.0 million ore per year and having reserves for a period over 20 years.



The P2 prognostic gold resources through the whole Uksunaysk filed are estimated to make 45.9 tonnes in 63.6 million tonnes of ore with an average content of 0.72 g/tonne.

The results of chemical and assaying analisys of Uksunaysk field ore

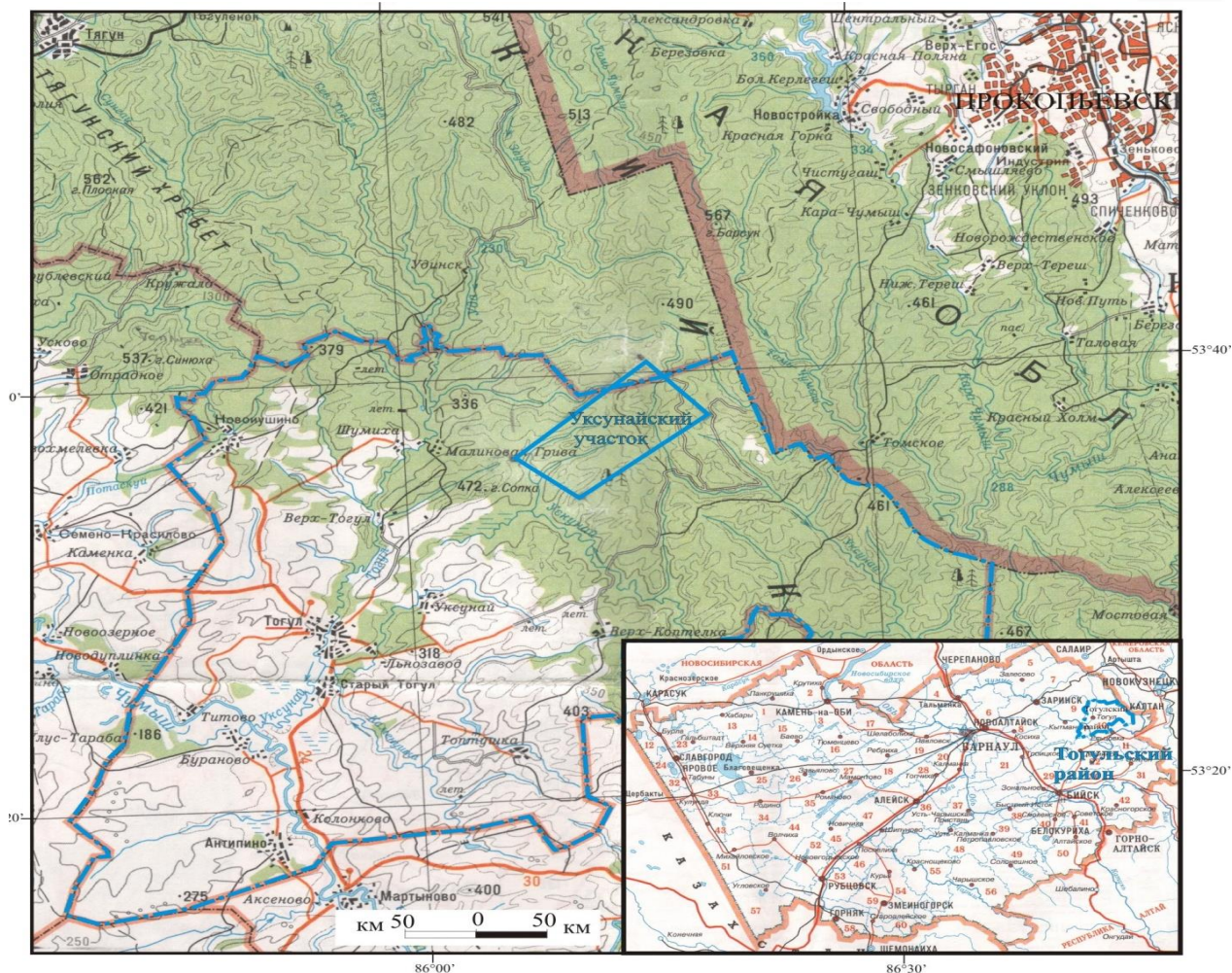


Elements	Element content, g/t	Elements	Element content, g/t	Compounds and elements	Content, %	Compounds and elements	Content, %
Li	4,75	In	0,11	SiO ₂	55,48	Soбш	0,07
e	0,23	Sn	1,27	Al ₂ O ₃	16,94	Ssulf	0,03
B	9,74	Sb	2,76	Fe	10,13	Coбщ	0,14
	5843,95	Te	0,08	P ₂ O ₅	0,24	Corg	< 0,01
Mg	7903,67	I	0,48	CaO	0,98	Zn	0,016
Al	39709,06	Cs	0,41	TiO ₂	0,94	Pb	< 0,01
Si	57186,93	Ba	192,13	MnO	0,34	Cu	0,014
K	8867,18	La	3,51	MgO	1,97	Au, g/t	2,48
Ca	5480,57	Ce	10,88	As	< 0,01	Ag, g/t	5
Sc	53,43	Pr	1,54				
Ti	1760,71	Nb	6,15				
DV	182,55	Sm	1,37				
Cr	81,31	Eu	0,40				
Mn	1342,20	Gd	1,16				
Fe	51669,93	Tb	0,15				
Co	30,54	Dy	0,87				
Ni	69,00	Ho	0,14				
Cu	92,88	Er	0,40				
Zn	83,69	Tm	0,06				
Ga	18,51	Yb	0,54				
Ge	1,30	Lu	0,07				
As	255,35	Hf	0,80				
Se	2,44	Ta	0,07				
Br	71,65	W	4,19				
Rb	13,69	Re	0,00				
Sr	82,50	Hg	0,27				
Y	6,59	Tl	0,12				
Zr	46,70	Pb	6,60				
Nb	1,39	Bi	0,04				
Mo	0,00	Th	2,00				
Cd	0,13	U	0,66				

Classification of gold

Size category, mm	Release, %	Content Au, g/t	Au distribution, %
-1 + 0,5	20,90	3,28	30,6
- 0,5 + 0,25	19,00	2,86	24,3
- 0,25 + 0,1	11,90	4,82	25,6
- 0,1 + 0,071	4,40	3,67	7,2
- 0,071 + 0,04	9,00	1,72	6,9
- 0,04	34,80	0,35	5,4
Total	100,00	2,24	100,0

The field is located at Salair – a historical gold area where the first Russian gold and silver coin mining plants were built in the middle of the XVIII century. Practically all Salair rivers are rich with gold nuggets that have been extracted till now. The source of alluvial gold is original ore gold and gold of decay having hundred of tonnes of reserves.



Uksunaysk field has high investment attractiveness:

- state approved gold reserves;
- Simple technology of ore processing (heap leaching);
- Open way of field exploitation;
- Minor capital expenses;
- Developed infrastructure in the area;
- Possibility to increase plant capacity regarding the volume of product release;
- Possibility to increase reserves at licensed sites as well as by purchasing new sites and increasing plant capacity and production efficiency;
- Possible reserve increment at the filed flanks;
- Possibility to introduce modern technologies and equipment while mining and raw materials processing;

Uksunaysk field is situated in the area with developed infrastructure near highways and railroads; it contributes to lower investment and exploitation expenses.

11.4 Yuzhno-Altaysk field development (republic of Altai)

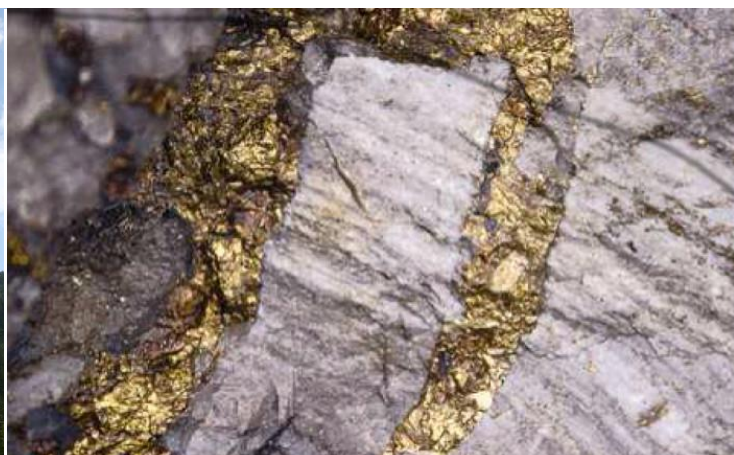


There are many granitoids in the geological structure of Yuzhno-Altaysk formation zone of rocky Altai of Altai krai.

To the present time the area has been characterised by wolfram and molybdenum ore genesis forming an ore belt of rear and precious metals.

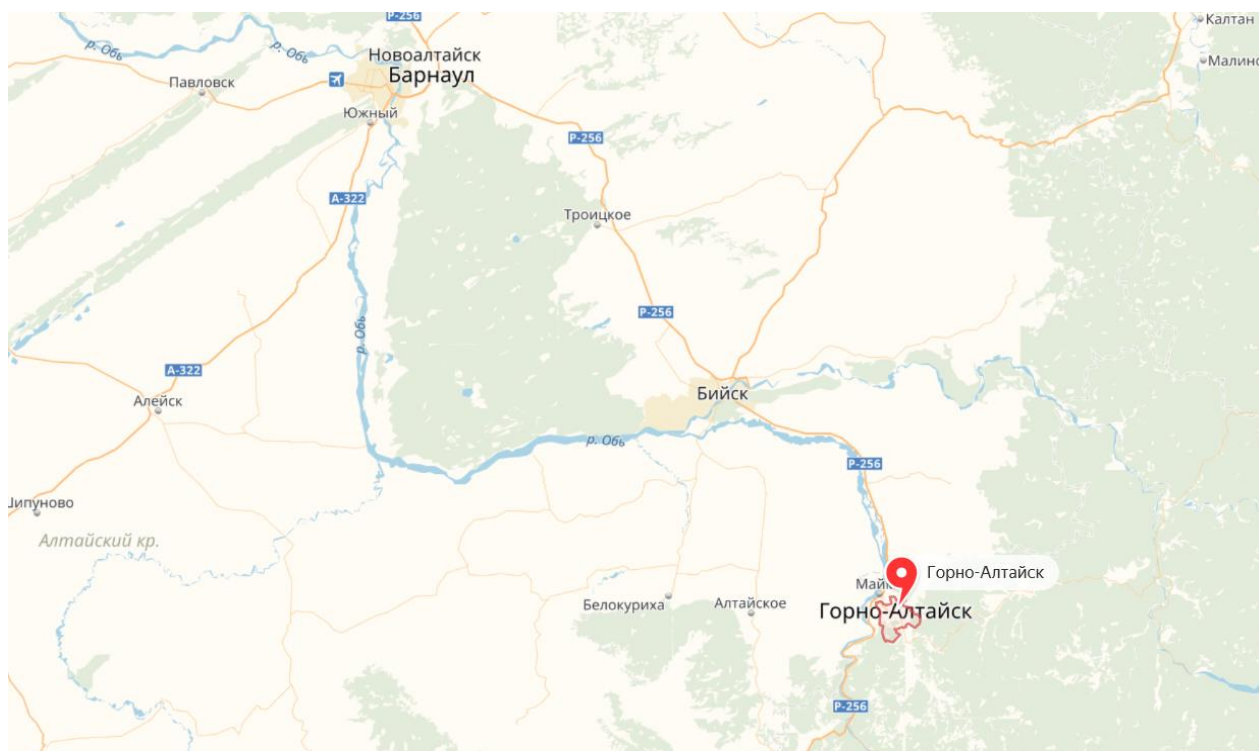
According to the results of geological exploration and geophysical research, granite-porphyry and contact metasomatite have high concentration of tantalum, niobium, lithium, rubidium, caesium, bismuth and beryllium, and the upper layer has gold, silver, and rhenium.

Since 2001, there have been intensive exploration and mining of rare and precious metals (gold) in Yuzhno-Altaysk zone.



The total area of the field is 270 ha.

The reserves being extracted make 173 tonnes (in fact 519 tonnes).





Yuzhno-Altaysk field has high investment attractiveness:

- State approved gold reserves;
- Simple technology of ore processing (heap leaching);
- Open way of field exploitation;
- Minor capital expenses;
- Developed infrastructure in the area;
- Possibility to increase plant capacity regarding the volume of product release;
- Possibility to increase reserves at licensed sites as well as by purchasing new sites and increasing plant capacity and production efficiency;
- Possible reserve increment at the filed flanks;
- Possibility to introduce modern technologies and equipment while mining and raw materials processing;

Yuzhno-Altaysk field is situated in the area with developed infrastructure near highways and railroads; it contributes to lower investment and exploitation expenses.



12. TERMS AND PROVISIONS

This document is for information purposes only and is not a proposal or an appeal to sell assets or securities of GOLDEN ALLIANCE or any other affiliated or associated company.

Holding of Golden Alliance tokens (GDA) does not grant the holder property or ownership right within GOLDEN ALLIANCE or any other affiliated company. While the community's opinion and comments can be taken into account, Golden Alliance tokens (GDA) do not empower to participate in the decision making process concerning some GOLDEN ALLIANCE affiliated business development area. Golden Alliance tokens (GDA) can be used to distribute the revenue from implementation of the GOLDEN ALLIANCE projects.

All examples of income and revenue calculations used in this document were set only for demonstration purposes or showing average indicators of the area and do not guarantee that these results will be reached according the marketing plan.

Golden Alliance tokens (GDA) issued at the ETHEREUM platform. Therefore any failure or maloperation of the ETHEREUM protocol may provoke unexpected functioning of the Golden Alliance tokens (GDA) functioning.

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Golden Alliance tokens (GDA) are not an official or liable investment. In case of unforeseen circumstances the purposes mentioned in the document may be changed. Despite our intention to cover all points mentioned in this document all persons and sides participating in purchasing of Golden Alliance tokens (GDA) do this entirely at their own risk.

The technical innovations such as quantum computers may be dangerous for cryptocurrencies, including Golden Alliance tokens (GDA).

Though Golden Alliance tokens (GDA) should not be considered as investment they may become progressively valuable or may lose their value.

Funds being raised are not immune. In case of loss of value there is no private or public insurance company the purchaser may call.



Due to different possible reasons, inter alia regardless any limits, business arrangements or marketing strategies GOLDEN ALLIANCE projects and all future raising funds related marketing actions may not succeed.

Golden Alliance tokens (GDA) are a rather new and untested technology. Besides the risks mentioned in this document there are additional risks that GOLDEN ALLIANCE cannot foresee. These risks may turn into other forms of risks than those mentioned herein.

Refusal to provide guarantees

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Golden Alliance tokens (GDA) are not offered and distributed to residents and citizens of the U.S., Puerto Rico and United States Virgin Islands.