



JOGMEC's Mineral Exploration Activities in Mongolia

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Japan Oil, Gas and Metals National Corporation

Establishment of JOGMEC



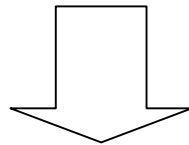
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Japan Oil, Gas and Metals National Corporation (JOGMEC) has been established on February 29, 2004, integrating Metal Mining Agency of Japan (MMAJ) and Japan National Oil Cooperation (JNOC), with the mission to ensure a stable supply of energy and nonferrous metals for Japan.

	MMAJ		JNOC
1963	· Establishment of the Metallic Exploration Financing Agency of Japan	1967	· Establishment of Japan Petroleum Development Corporation (JPDC)
1964	· Geological survey and Exploration activities started and the name changed to the Metallic Minerals Exploration Agency of Japan.	1972	· To improve the technology for exploration and production of oil and gas, Technology Research Center (TRC) was established in JPDC.
1973	· Mine pollution control activities started and the name changed to the Metal Mining Agency of Japan.	1978	· The national stockpiling program begun and the name changed to Japan National Oil Corporation (JNOC)
1983	· National Stockpiling of rare metals started.	2001	· The function expanded to add; funding facility for asset acquisition.
2004.2	Establishment of JOGMEC		

1. Support for Exploration and Development
 - (1) Information collection, analysis, and dissemination
 - (2) Geological Surveys
 - (3) Finance, investment and loan guarantees
2. Support for mine pollution control
3. Research and Development
4. National Stockpiling of Rare Metals

- High Potential of mineral resources in Mongolia

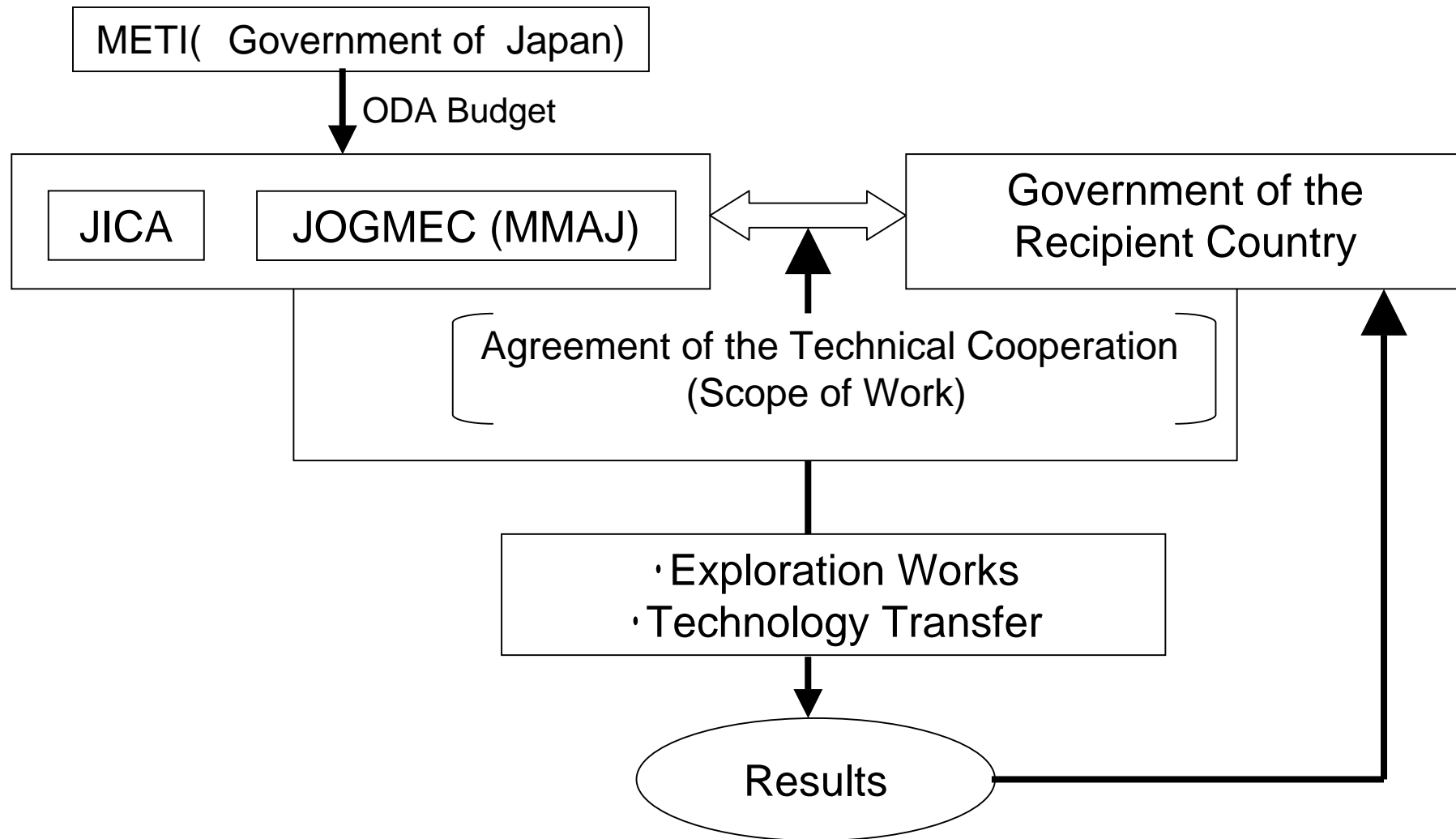


- JICA/JOGMEC(MMAJ) launched Technical Cooperation Program for Mineral Resources Development in 1991, and 6 projects has been carried out continuously until 2003 by Japanese ODA budget.
- Joint Basic Exploration Scheme (JBES) started from 2003 by Japanese ODA budget.

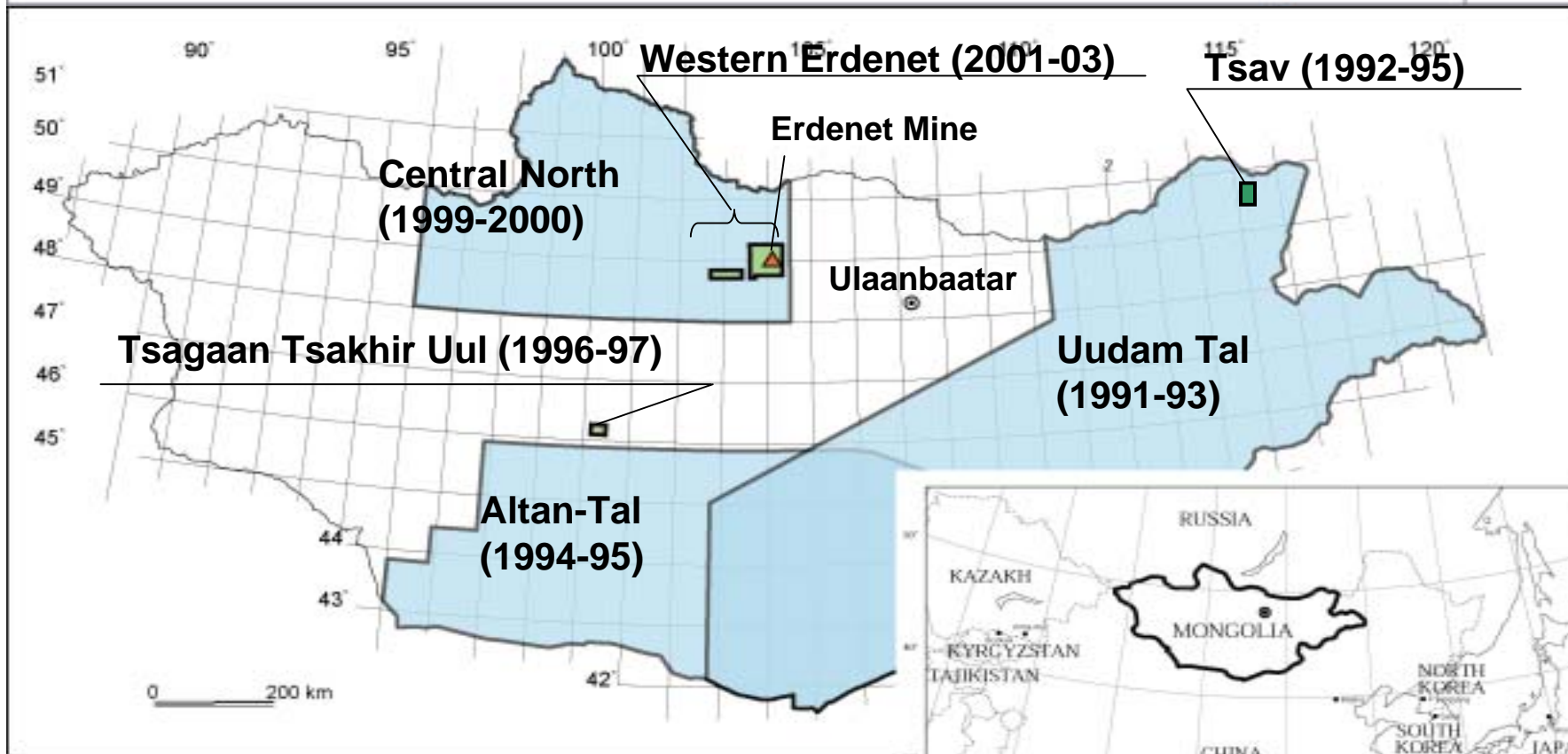
Scheme of Technical Cooperation Program for Mineral Resources Development (1991 ~ 2003)



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Location Map of the Technical Cooperation Programs in Mongolia



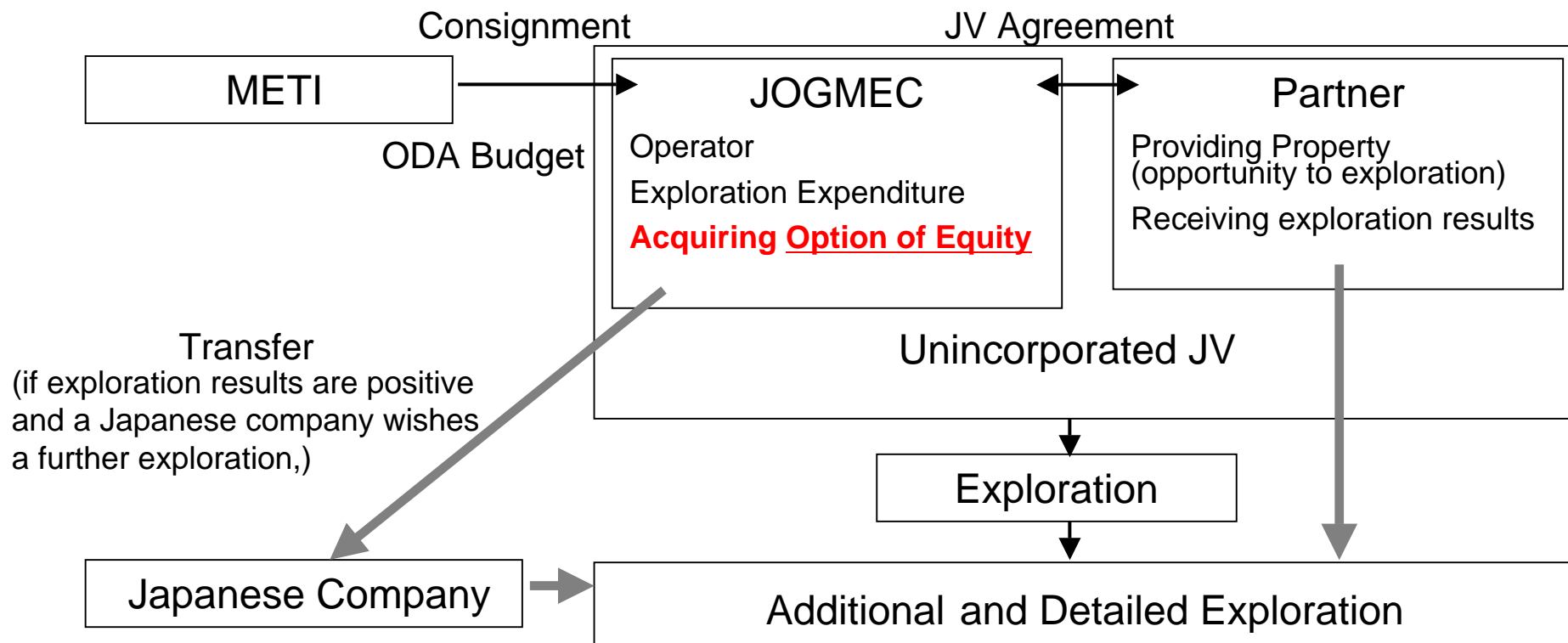
Areas	Target Minerals	Survey method	Brief Summary
<p>Uudam Tal (500,000km²) (1991-1993)</p>	<p>Pb, Zn, Au</p>	<ul style="list-style-type: none"> · Existing data analysis · Geological survey · Geophysical survey · Drilling 	<p>Existing data analysis and reconnaissance geological survey indicated potential of polymetallic and gold mineralization in several districts.</p>
<p>Tsav (Mine Site) (1992-1995)</p>	<p>Pb, Zn, Ag</p>	<ul style="list-style-type: none"> · Existing data analysis · Tunneling · Ore-separation test 	<p>Geologic reserve of 1,540,000 ton (Au 1.5g/t, Ag 263g/t, Pb 6.84%, Zn 4.01%, Cu 0.23%) was confirmed.</p>
<p>Altan-Tal (345,000km²) (1994-1995)</p>	<p>Au, Cu, Pb, Zn</p>	<ul style="list-style-type: none"> · Existing data analysis · Satellite Image analysis · Groundtruth 	<p>96 alteration zones were delineated by satellite image analysis. Within 4 zones, gold mineralization was confirmed by groundtruth.</p>

Brief Summary of the results of the Technical Cooperation Programs (2 / 2)



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Areas	Target Minerals	Survey method	Brief Summary
Tsagaan Tsakhir Uul (43km²) (1996-1997)	Au, Cu, Pb, Zn, W	<ul style="list-style-type: none"> · Geological survey · Geophysical survey · Drilling 	Some drills intersected gold-bearing veins. However gold mineralization was small-scale and judged to be uneconomic.
Central North (200,000km²) (1999-2000)	Cu, Mo, Au	<ul style="list-style-type: none"> · Existing data analysis · Satellite Image analysis · Groundtruth 	Surface alteration indicated possible high-sulfidation gold mineralization and porphyry type mineralization around Western Erdenet district.
Western Erdenet (5,500km²) (2001-2003)	Cu, Mo, Au	<ul style="list-style-type: none"> · Geophysical survey · Geological and geochemical survey · Drilling 	Air-borne geophysical survey, geophysical Survey (IP), geological and geochemical survey, and drilling survey indicated the potential of porphyry type mineralization in the Zuukhiin gol district.



1. Joint Basic Exploration Scheme (JBES) was implemented as a new mineral exploration program in 2003.
2. JOGMEC conducts the JBES under a consignment contract with the Ministry of Economy, Trade and Industry (METI).
3. Two Primary Objectives of the JBES
 - accelerating mineral production and resultant economic growth in developing countries, and
 - contributing to a stable supply of mineral resources to Japan.
4. Major Target
 - Currently primary interest is placed on Copper projects especially in Asia and Latin America.

5. JV Partner

Governmental organizations or private companies which hold mineral properties in developing countries.

6. JV Agreement

- Ordinary joint venture exploration agreement (Farm-in agreement), i.e. JOGMEC acquires an option of equity interest of the Property expending exploration fee.
- An option acquired by JOGMEC will be transferred to a Japanese company with the first priority, if exploration results are positive and a Japanese company wishes a further exploration.

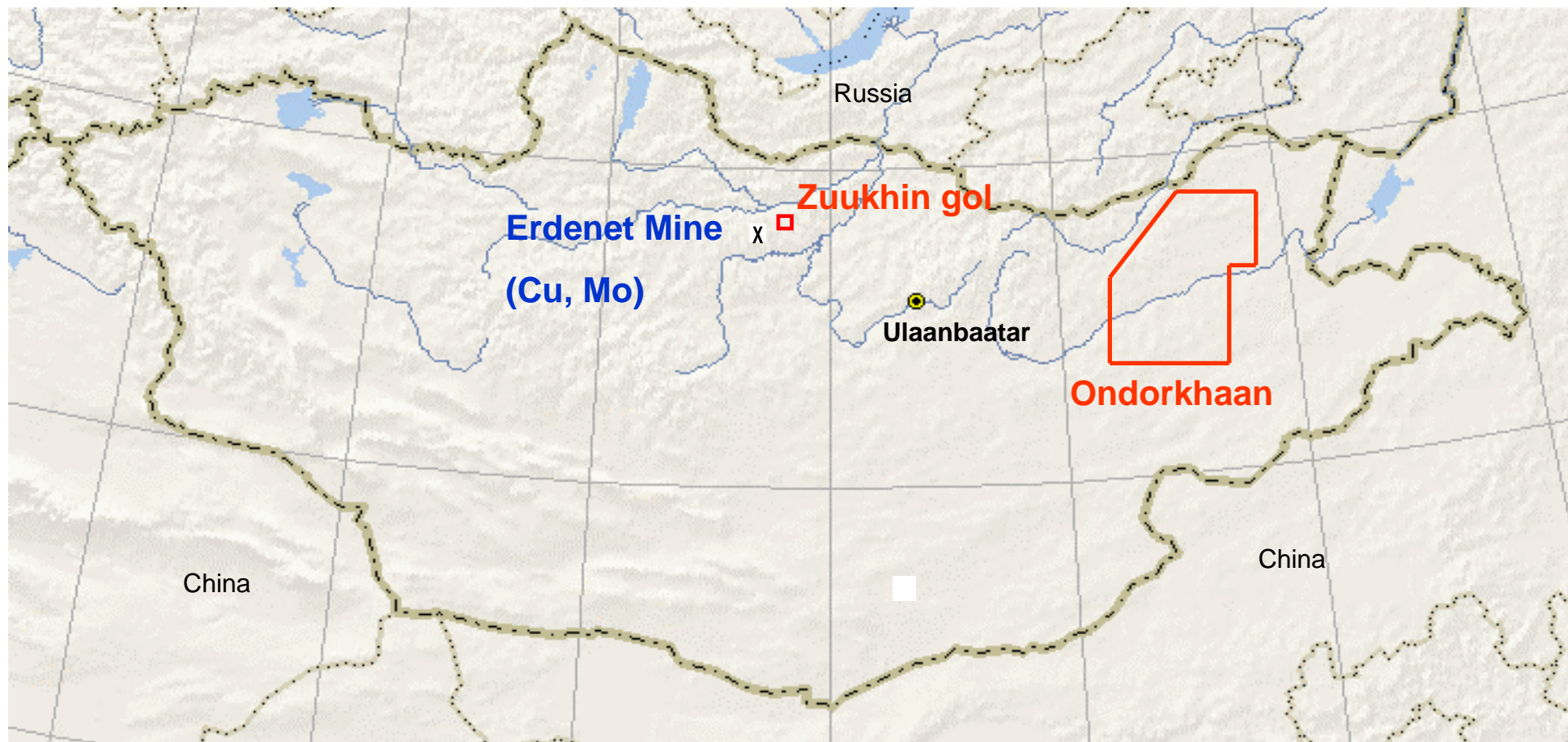
7. Budget

A typical annual project budget between US\$100,000 to \$1million is envisaged, however this will be flexible depending on the project. Typical period will be 1 to 5 years.

Location map of the JBES projects in Mongolia



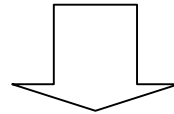
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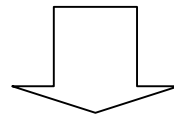
1. Zuukhin gol project(2004 ~)
Partner
Mongolian Ministry and company
Target mineral : Cu
Area : 850km²
Survey method
Drilling Survey
2. Ondorkhaan project (2003 ~)
JV partner
Mongolian company
Target mineral : Cu
Area : 45,000km²
Survey method
Geological survey, Geophysical
survey (IP), Drilling survey



- Encouraging results from the JBES projects.



- JOGMEC's portion of the project will be transferred to (a) Japanese company(ies) for a further exploration and a mine development, if exploration results are positive and a Japanese company wishes to invest.



- Newly developed Mine in Mongolia will contribute to the Mongolian economy.
- Products will be exported to overseas.