

April 11, 2006

CORPORACIÓN NACIONAL DEL COBRE DE CHILE
NTT Advanced Technology Corporation
NTT Leasing Co., Ltd.
Nippon Telegraph and Telephone Corporation

**Establishment of Mining Information,
Communication and Monitoring S.A.**

**~ New Jointly Funded Company to Provide ICT Services for Mining Sites in
Republic of Chile ~**

CORPORACIÓN NACIONAL DEL COBRE DE CHILE (hereafter referred to as CODELCO, having its registered headquarters at Santiago, Republic of Chile; President and CEO: José Pablo Arellano), NTT Advanced Technology Corporation (hereafter referred to as NTT-AT; having its registered headquarters at Shinjuku-ku, Tokyo; President, CEO: Hiroshi Ishikawa) and NTT Leasing Co., Ltd. (hereafter referred to as NTT Leasing, having its registered headquarters at Minato-ku, Tokyo; President and CEO: Kanji Koide) established a joint venture company named “Mining Information, Communication and Monitoring S.A.” (hereafter referred to by its trade name: MiCoMo) in the Republic of Chile on April 10, 2006.

1. Background

Nippon Telegraph and Telephone Corporation (hereafter referred to as NTT; having its registered headquarters at Chiyoda-ku, Tokyo, Japan; President and CEO: Norio Wada) and CODELCO, have been carrying out joint experiments since February 2005, to prove the potential of NTT R&D's Information and Communication Technology (ICT) products for the mining industry. MiCoMo has been launched to commercialize the results of these experiments by providing CODELCO's mining sites with ICT services as its initial business phase.

2. Goal of newly established company

The aim of the new company is to provide ICT services that will improve the safety and labor efficiency of mining sites. MiCoMo will provide next generation ICT mining information systems by employing NTT Group's most recent R&D results and CODELCO's extensive mining industry know-how.

3. Services provided by new company

(1) AWG-STAR

The company provides a photonics network service that is capable of large capacity transmission through its use of wavelength division multiplex technology. This service is capable of controlling hammers for rock crushing in an underground mine from a town situated at the foot of the mountains and about 100 km from the mine. AWG-STAR is a star-shaped network that is suitable for the configuration of tunnels in underground mines. In addition, since it uses a wavelength router that has low latency, it can realize the real-time control of the hammers. Moreover, it can respond flexibly to changes in the network composition that accompany changes in rock crushing

locations. Since the underground mine is high in the Andes Mountains, the labor environment is very severe. By installing AWG-STAR we expect to improve workers' safety and the reduction effect of the dispatch cost during the winter.

(2) WIPAS

Wireless IP Access System (WIPAS) is a Fixed Wireless Access (FWA) system that can provide broadband IP services at low cost. It offers a fast data transmission speed of 80 Mbit/s (46Mbit/s for Ethernet Frame) for a service range of up to 2 km. A wireless network using WIPAS is particularly suitable for open pit mines where the terrain and network nodes move as the mining work progresses. WIPAS makes it possible to reconfigure the network more easily and quickly than is possible with a wired network. A wireless network using WIPAS has many applications including the integrated remote monitoring of video, data and voice at several locations in the pit. WIPAS can also be used as the entrance link of a wireless LAN network, which provides remote monitoring from mobile facilities such as light trucks.

4. Future plan

As the initial business operation phase, MiCoMo will provide consultation, design, construction, equipment, and maintenance services for ICT systems such as remote hammer control systems, video monitoring systems over the latest optical communications technology for underground mines, and broadband wireless communications systems for the open pits at CODELCO's mining sites in the Republic of Chile. MiCoMo plans to extend its services to the mining sites of other companies in the Republic of Chile and ultimately to mining sites in other countries.

5. Company Summary

Name	Mining Information, Communication and Monitoring S.A.	
Headquarters	Santiago, Republic of Chile	
Capital	US dollars 3M	
	Capital ratio	
	CODELCO	US dollars 1.98M(66%)
	NTT-AT	US dollars 0.51M(17%)
	NTT Leasing (U.S.A.) Inc.*	US dollars 0.51M(17%)
Date of establishment	April 10, 2006	
Business activity	Providing consultation, design, construction, equipment, and maintenance services for ICT systems such as remote hammer control systems, video monitoring systems over the latest optical communications technologies and broadband wireless communications systems for the mine.	
Employees	Six (at time of establishment)	
Sales Target	US dollars 10M until 2008	

* NTT Leasing (U.S.A.) Inc. is a 100% owned subsidiary of NTT Leasing.

- 1) [AWG-STAR \(Full Mesh WDM Network\)](#)
- [Appendix 2 Example of Providing ICT Service](#)
- 2) [WIPAS \(Wireless IP Access System\)](#)

[For inquiries from news media]

Nippon Telegraph and Telephone Corporation
Iwasaki
Public Relations, Department I
TEL: 03-5205-5550

[For inquiries form any parties other than news media]

Nippon Telegraph and Telephone Corporation
Maeda
Producer, Department III (R&D Strategy Department)
TEL: 03-5205-5366, E-mail: y.maeda@hco.ntt.co.jp

NTT Advanced Technology Corporation
International Business Promotion Headquarters
Kotera
TEL: 0422-36-6712, E-mail: hiroshi.kotera@ntt-at.co.jp

NTT Leasing Co., Ltd.
International Business Dept.
Okada
TEL: 03-5445-5522, E-mail: Akihiko.Okada@nttl.co.jp

NTT NEWS RELEASE 