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**mitsubishi electric awarded contract by isro to  
provide lithium-ion battery for insat**

**Tokyo, December 2, 2005** – Mitsubishi Electric Corporation (President and CEO: Tamotsu Nomakuchi) announced today it has signed a contract with the Indian Space Research Organization (ISRO) to develop and manufacture a Lithium-ion (Li-ion) battery for the INSAT satellite series, the Indian Space Agency's latest satellite platform, during the year 2006.

The INSAT series will have several satellites for long distance telecommunications such as radio and TV programme distribution, meteorological earth observation, and data relay. It has payload power requirements in the range of 2500 W to 5000 W, and one of the satellites will be configured with a Li-ion Battery to provide 100% payload power support during eclipse and with a design life of 15 years in GEO orbit.

ISRO selected Mitsubishi Electric because of its optimal proposal to ISRO's demands in addition to its base of established battery technology and participation in and experiences with the Japanese government's space program and the international market.

Mitsubishi Electric's Li-ion Battery for INSAT is based on dual modules consisted of 100 Ah cells, the world largest capacity for space-use Li-ion cells. It is well known that Li-ion batteries will have several advantageous characteristics for use in satellites compared to NiH2 batteries, such as low mass and volume as well as ease of maintenance and handling. Mitsubishi Electric's 100Ah Li-ion cell in particular has an elliptic cylindrical shape, giving the battery excellent thermal and structural design. By using cobalt in production, these cells are also better at heat decomposition than other Li-ion cells using nickel. With other built-in safety features (Shunt Circuit and By-pass Switch), Mitsubishi Electric's Li-ion Battery is reliable enough to be used in the harsh conditions of space.

The development and manufacturing of the Lithium-ion battery will be done at Mitsubishi Electric's factory in Kamakura Japan. With its well-established and robust quality management system, the battery is expected to be delivered on time with the full satisfaction of ISRO.

Mitsubishi Electric has been a pioneer of space technology development in Japan since the 1960s, and is strongly committed to international space development and satellite construction. The company's Space Programs Division has participated in a wide range of high performance payloads and bus components in more than 270 spacecrafts worldwide.

### **About Mitsubishi Electric**

With over 80 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi Electric Corporation (TSE:6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. The company recorded consolidated group sales of 3,410 billion yen (US\$ 31.9billion\*) in the fiscal year ended March 31, 2005. For more information visit <http://global.mitsubishielectric.com>

\*At an exchange rate of 107 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2005.

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