

Thuraya Satellite Begins Commercial Mobile Phone Service

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Satellites, Ground Systems Equipment and Mobile Handsets Supplied by Boeing Satellite Systems and Hughes Network Systems

Thuraya, the satellite-based regional mobile communications system built by Boeing Satellite Systems (BSS) and Hughes Network Systems (HNS for Thuraya Satellite Telecommunications Company of United Arab Emirates (UAE)), will begin launching commercial service to more than 20 countries in July. The Thuraya service relies on the high-power Thuraya-1 GEO-mobile satellite built by BSS, a unit of The Boeing Company (NYSE: BA), along with ground facilities and handsets built by HNS, a unit of Hughes Electronics Corporation (NYSE: GMH).

Thuraya held a successful soft service launch in May with limited trial service in the UAE that has since expanded to Italy, the United Kingdom, Denmark, Romania and Sudan. This came a month after a call was placed successfully between Morocco and Bangladesh, the two farthest points within the Thuraya coverage area. More markets are due to come on line in the weeks leading up to the full service launch beginning in July.

"Trials have validated that the voice quality and availability of the Thuraya system have been very good," said Thuraya Chairman Mohammad Omran. "Based on the initial demand as well as system performance, we should see demand for about 400,000 handsets in a year's time. We've informed the manufacturers that we may have to order more handsets."

Thuraya will receive 235,000 handsets by the end of this year. Thuraya will ultimately provide satellite-based mobile communications to a region encompassing approximately 2.5 billion people in 100 countries across the Middle East, North and Central Africa, Europe, the Indian subcontinent and Central Asia. The Thuraya service will be delivered through service providers throughout its coverage region. Currently Thuraya has about 40 service providers and 77 roaming partnerships.

"We are extremely pleased to have reached this important milestone with Thuraya in the development of their infrastructure and launch of their business," said Randy Brinkley, president of Boeing Satellite Systems. "We are confident that commercial service will proceed smoothly as Thuraya continues to extend operations to its other local service providers. We see this as a vital step toward a long-term relationship with Thuraya as its business needs expand."

Thuraya's dual-mode service enables callers to use terrestrial GSM service any time in local networks or to automatically switch to satellite mode whenever the user is outdoors and out of local terrestrial reach. The service integrates satellite, GSM and GPS all in one handset. Each handset offers, voice, data, fax and GPS location determination.

Pradman Kaul, chief executive officer of HNS, said, "We are extremely proud of being a critical element in the success of the Thuraya system. By combining the technical excellence of the Boeing satellites and HNS' ground stations and handsets with Thuraya's business vision and implementation, we are delivering a valuable service to individuals and businesses under the satellite footprint."

By using a single high-power geosynchronous Earth orbit (GEO) satellite, Thuraya requires only one spacecraft and one gateway to serve its regional target markets. The Thuraya-1 satellite was launched in October 2000 aboard a Sea Launch rocket. A second Thuraya satellite has been built as a ground spare or to expand the capacity of the system. Thuraya also has an option for a third BSS satellite.

The satellite is equipped with an innovative 40-foot (12.25-meter) L-band transmit-receive reflector provided by TRW Astro Aerospace. The large reflector is combined with Boeing's on-board digital signal processing to create an active phased-array antenna that allows the spacecraft to create more than 200 spot beams and handle 13,750 simultaneous phone calls. The digital signal processor, five times more capable than any previous Boeing digital processor, has more computing power than 3,000 Pentium III-based computers.

Under a \$960 million contract signed in September 1997, BSS is responsible for the manufacture of two high-power GEM satellites, launch of the first spacecraft, insurance, the primary gateway, and user handsets. The second satellite is a ground spare, and there is an option for a third. The Thuraya primary gateway includes a collocated network operations center, communications gateway and satellite control facility in the UAE. The dual-mode GEM/GSM mobile phones, network operations center and communications gateway are provided by HNS.

About Thuraya

Thuraya is a leading regional mobile satellite telecommunications company. Established in April 1997 in the UAE as a private joint stock company, Thuraya has a shareholder base made up of 18 prominent

telecommunications operators and investment houses. Thuraya is a US \$ 1 billion mobile satellite telecommunications project that will serve about 100 nations in Europe, Africa and Asia. Besides its integrated satellite-GSM handsets, Thuraya's product offerings include a vehicular adaptor, a home docking unit for indoor use and a fleet management system. For more information, visit Thuraya on the web at www.thuraya.com.

About Boeing Satellite Systems

BSS is the world's leading manufacturer of communications satellites and a major provider of space systems, satellites, and payloads for national defense, science and environmental applications. For more information, visit the BSS web site at www.boeing.com/satellite.

The Boeing Company, headquartered in Seattle, is the largest aerospace company in the world and the United States' leading exporter. It is the world's largest manufacturer of commercial jetliners and military aircraft, and the largest NASA contractor. The company's capabilities in aerospace also include rotorcraft, electronic and defense systems, missiles, rocket engines, launch vehicles, and advanced information and communication systems. The company has an extensive global reach with customers in 145 countries and manufacturing operations throughout the United States, Canada and Australia.

About Hughes Network Systems

Hughes Network Systems is the world's leading provider of broadband satellite network solutions for businesses and consumers, with over 400,000 systems installed in more than 85 countries. HNS pioneered the development of high-speed satellite Internet access services, which it markets globally under the DirecPC® and DIRECWAY™ brands and is a major supplier of mobile satellite networks and user terminals. For terrestrial access, it offers the comprehensive AIReach® family of broadband wireless, point-to-multipoint products. In addition, HNS is a leading manufacturer of DIRECTV® satellite television receivers. Headquartered in Germantown, Maryland, USA, HNS maintains sales and support offices worldwide. The earnings of Hughes Electronics Corporation, a unit of General Motors Corporation, are used to calculate the earnings per share attributable to the General Motors Class H common stock (NYSE: GMH). To learn more about HNS, please visit www.hns.com.

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