## New Tunnel Construction at Mountain Adjacent to the Natanz Enrichment Complex

Iran should allow IAEA inspections of tunnel facility

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Commercial satellite imagery from DigitalGlobe taken on June 11, 2007 indicates that Iran is building a tunnel facility inside a mountain about two kilometers south of the Natanz uranium enrichment complex. The construction activity is taking place in the closest mountainous area to the Natanz site, strongly suggesting that the site is affiliated with Natanz.

Although tunnel entrances are not readily visible in the imagery, two roads under construction can be clearly seen going up the mountain (see figures 1, 2, 3, and 4). Based on the construction activities seen in the images, one of the roads appears to lead into a tunnel facility inside the mountain (see figure 2). The other road may also lead to a tunnel entrance (see figure 3).

This construction is new. Neither road is visible in low-resolution DigitalGlobe imagery taken in January of 2007 or in earlier Google Earth imagery (see figure 4).

Iran earlier built a tunnel complex near the Esfahan Uranium Conversion Facility to protect a range of nuclear-related equipment and materials and natural uranium hexafluoride from that facility.<sup>1</sup> Iran may be constructing a similar facility near Natanz, fearing that the underground halls at Natanz are vulnerable to destruction by military attack. Such a tunnel facility inside a mountain would offer excellent protection from an aerial attack. This new facility would be ideal for safely storing nuclear items, including centrifuge manufacturing and assembly equipment, centrifuge components, natural uranium, and low enriched uranium.

Other uses are possible. The site could be related to the upgrading of the defenses of Natanz. It is theoretically possible, though we judge it unlikely, that the site could be designed to hold a significant number of operational centrifuge cascades.

Iran should verifiably disclose to the International Atomic Energy Agency (IAEA) any activity in this area related to its efforts at the nearby Natanz site or another nuclear purpose. Citing an outdated protocol no longer observed by any other country with an IAEA safeguards agreement, Iran has stated that it will no longer notify the IAEA about the construction of new nuclear facilities until six months before the introduction of nuclear material. Since April 2007, when Iran unilaterally renounced its adherence to the

<sup>&</sup>lt;sup>1</sup> New Satellite Images Show Tunnel Construction at Esfahan Facility in Iran, February 17, 2005, ISIS, <u>http://www.isis-online.org/publications/iran/esfahantunnels.html</u>; see also <u>http://www.isis-online.org/publications/iran/newactivities.pdf</u>.

updated code, it is the only non-nuclear weapon state party to the Non-Proliferation Treaty (NPT) refusing to provide the IAEA with design information for new nuclear facilities prior to the start of construction.



Figure 1. New construction south of the Natanz Uranaium Enrichment Plant at an adjacent mountain. The two roads leading into the mountainous area are both within one and a half miles of the southern security fence of the Natanz Complex. The activities are consistent with the construction of a tunnel complex in the adjacent mountain.



Figure 2. Construction activity appears related to the building of a tunnel complex. Soil and rock dumps are identifiable. Tunnel entrances are not visible, but they could be at or near the end the end of the road in the upper left section of the image A fenced, apparently secured area, is visible adjacent to the road just past the first set of construction support buildings. This area could store high explosives used in tunneling.



Figure 3. This new road construction could be for building a second tunnel entrance. The tunnel complex in a mountain adjacent to the Esfahan Uranium Conversion facility has multiple entrances.



Figure 4. This Google Earth image from prior to the beginning of 2007 shows the elevation of the mountainous area south of the Natanz enrichment site. The new roads are outlined in red.