

A.Q. Khan's nuclear world

**as far as we know*

- Suppliers
- Customers

Physical Dynamic Research Laboratory, Amsterdam, Netherlands
Khan works in this centrifuge research lab after getting his Ph.D. in metallurgy in 1972.
Urenco enrichment facility, Almelo, Netherlands
In 1970s, Khan works at Urenco centrifuge facility. Is allowed unsupervised access to centrifuge diagrams to translate them into Dutch. Steals them in 1975.

Bushehr and Nantanz, Iran
Khan visits Iranian reactor site as part of Pakistani collaboration on "peaceful" atomic energy in 1986-87. Arranged to sell 50,000 centrifuges, blueprints.

Engineering Research Laboratory, Kahuta, Pakistan
Khan founds lab (later A.Q. Khan Research Laboratory) in 1976 to develop centrifuges for Pakistani nuclear program. Works on enriching uranium; by mid-1980s has enough for a bomb. First bomb tested in 1998.

Traco Electronic EG, Switzerland
Supplied centrifuge balancing equipment.

Pyongyang, North Korea
Khan visits North Korean capital many times in 1990s. Agrees to sell centrifuges, designs.

Hanbando, Inc., South Korea
Balancing machines for centrifuges.

People's Republic of China
Deng Xiopeng government decides to promote third-world proliferation. Transfers "export ready" nuclear weapons designs to Pakistan in 1983. Blueprints are later sold by Khan to other nations.

Tripoli, Libya
Khan works out deal to sell centrifuges to Libya, elaborate global network to avoid setting off international arms controls (parts from Malaysia, South Africa, Switzerland, South Korea, Dubai, Turkey, Singamore, others). In 2003, a container ship, *BBC China*, intercepted in Italy while going to Tripoli with centrifuges, exposes network.

SMB Computers and Gulf Technical Industries, Dubai, UAE
Front companies to handle Khan network transactions.

ETI Elektrotechnik, Istanbul, Turkey
Centrifuge part supplier for Khan network.

Bikar Metalle Asia, Singapore
Supplied aluminum to Scuumi Engineering.

Scuumi Engineering, Shah Alam, Malaysia
Agrees in 2001 to manufacture aluminum components for Khan network centrifuges.

Krisch Engineering, South Africa
Vacuum pumps for centrifuges.

