

a nuclear attack) would eliminate the need for forward deployment of nuclear systems, and reduce the likelihood of accidental or unauthorized use.¹⁵ It could even allow forces to be de-targeted and de-alerted. Accordingly, the C3I systems required need not be "too sophisticated, elaborate or costly,"¹⁶ and the technical and economic investment required in the areas of surveillance and early warning would be similarly "reduced."¹⁷

Yet while a minimum deterrent may be conceivable in some form, the version which the Advisory Board proposes is likely to pose obstacles which would make its attainment unlikely either in the short or the medium-term.

Technically, the creation of the sea-based leg of the proposed triad would be particularly daunting – an observation which past Chinese experience amply supports. Current naval reactors are too large for submarines, and the Indian Navy continues to show little interest in the capital investment required to develop necessary alternatives. In fact, even if India begins research and development in this area in earnest, most analysts estimate that actual realization of a sea-based deterrent would take at least 10-12 years. The creation of an effective mobile-missile system could also prove technically challenging.

Economic costs would impose additional burdens. The expense associated with earlier, less sophisticated deterrents have proven prohibitive. In 1985, a balanced nuclear force consisting of missile systems, aircraft and warheads "in the low three-digit figures" was estimated at 70 billion rupees (which in current terms would amount to 180 billion rupees or \$5 billion), and rejected by then-Prime Minister Rajiv Ghandi largely on the basis of expense.¹⁸ The financial resources associated with the NSAB proposal would be far greater. According to Bharat Karnad – one member of the Board – a triad of 350-400 weapons, built over the next decade, would cost "...an estimated \$178 billion at current prices."¹⁹

In fact, notwithstanding assertions that the arsenal's limited purpose would reduce its technical sophistication and expense, much could depend on the reactions of nuclear neighbours to

¹⁵ See P.K. Subrahmanyam, "A Reasoned Policy: Nuclear Deterrence in South Asia", *Harvard Asia-Pacific Review* (Internet Edition), www.hcs.harvard.edu/~hapr/winter98/subra.html

¹⁶ *Ibid.*

¹⁷ *Ibid.* In fact, the key area of investment would be force survivability. Such efforts would be essential to insure that potential enemies could never be certain that a strike would completely eliminate Indian capability.

¹⁸ A More recent estimate by Indian analysts reported that New Delhi would have to spend about \$1 billion a year over the next 10 years to field a dyad in the low three figure levels.

¹⁹ Reported in Sadanand Dhume, "Choosing the Target: Hardliners Say India's Nuclear Weapons Should be Able to Strike the U.S., Moderates Want a Regional Deterrent," *Far Eastern Economic Review* (16 September 1999), p. 30.