Missile defence in Europe

Behind America’s shield

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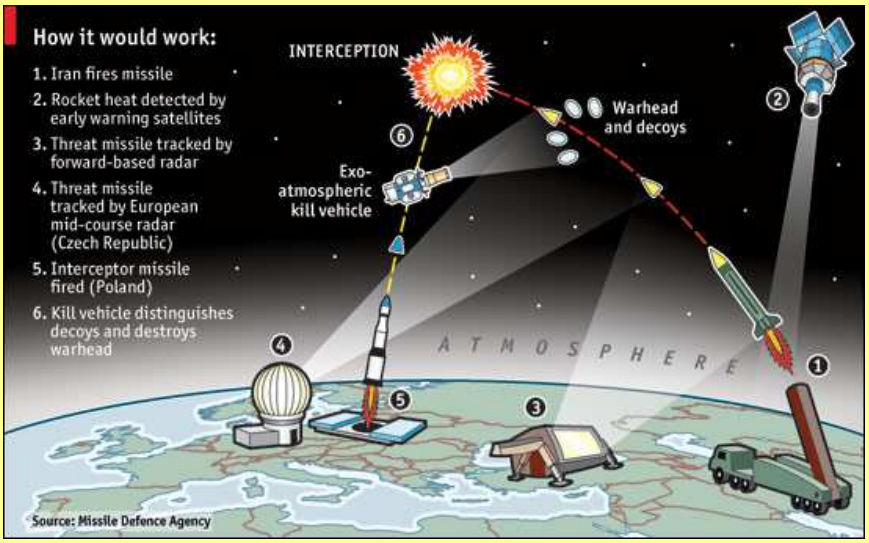
A deal on missile defences angers Russia even though they may not work



THE east Europeans have little reason to fear a strike from Iran. So why are they eagerly signing up to America’s system to intercept Iranian missiles? Because they are scared of Russia. Within days of Russia’s invasion of Georgia, Poland had agreed to host ten American interceptors. Ukraine offered to link up its early-warning radars and contribute to surveillance in space. The Czech Republic had already agreed to host the missile-tracking radar.

“We have crossed the Rubicon,” said the Polish prime minister, Donald Tusk, as the deal was done. Russia said any country involved in America’s missile defences made itself a legitimate target for nuclear attack. Condoleezza Rice, the American secretary of state, who went to Poland to sign the deal this week, retorted that such threatening language “isn’t tolerable”.

Missile defences cannot fend off Russia’s huge arsenal, but countries hosting them place themselves under America’s umbrella, in effect becoming part of the defence of its homeland. American officials said the war in Georgia could have made further delay seem like surrender to Russia. But Mr Tusk offered another view: after Russia’s invasion, America at last accepted Polish demands for help in modernising its armed forces, and for the deployment of an American Patriot anti-aircraft (and anti-missile) battery in Poland.

Iran strengthened America’s case by boasting (apparently falsely) this week that it had tested a missile capable of launching satellites. Previously Iran claimed its missiles could reach targets as far away as Ukraine and the Balkans. But if it ever put objects into orbit, that would allow it to fire warheads a lot farther. The Kremlin still plays down the Iranian threat, and says America’s real objective is to neutralise Russia’s nuclear forces. America has invited the Russians to join in, to no avail.

Missile defences do not just pose a geopolitical risk that could worsen the West's poor relations with Russia. They are also a technological gamble. The system is not fully proven. The two-stage interceptors that will be deployed in Europe have not been built yet, and the geometry of using ground interceptors against a future Iranian threat has still to be tested.

The Pentagon's independent office to evaluate new equipment said last October that it was far from being able to certify "a high probability of [the system] working in an operationally effective manner once deployed". It said intercepts of Iranian weapons were "very distinct" from past tests against simulated North Korean missiles over the Pacific, since shorter distances require a quicker response. The European system must also be able to deal with two kinds of missiles, intercontinental-range missiles fired at America and intermediate-range weapons fired at Europe, with different trajectories and speeds.

General Trey Obering, director of the Missile Defence Agency (MDA), calls Pentagon evaluators "very pessimistic". He says the two-stage interceptor is a simplified version of the three-stage version used above the Pacific. The principles of missile defence differ little regardless of range. Yet critics insist that America is wasting a fortune for an impossible technological fix. It has spent more than $110 billion on missile defences since Ronald Reagan launched his "star wars" Strategic Defence Initiative 25 years ago, evoking an impossibly ambitious "shield that could protect us from nuclear missiles just as a roof protects a family from rain". The new system is less ambitious, designed to fend off only a small number of missiles—but it will still cost as much as $10 billion a year.

The MDA is developing some 16 overlapping systems, designed to hit missiles in different phases of flight on the philosophy of "shoot early, shoot often". The European system will try to intercept missiles in mid-course in space, where warheads separate. In several tests, the MDA has shown that it can "hit a bullet with a bullet" or even, in the words of General Obering, "hit a spot on a bullet". In February an American ship shot down a spy satellite that had spun out of control.

But can the system be fooled by counter-measures? The lack of atmosphere in space means that missiles travel predictably, but it also means that decoys such as balloons move identically. How to identify a decoy dressed up as a warhead, or a warhead wrapped in a decoy? Critics such as Theodore Postol, of the Massachusetts Institute of Technology, say this problem is insurmountable, however powerful the radars and other sensors. "It is like trying to find a bomb hidden in a pile of suitcases only by looking at them, without being able to shake them and without sniffer dogs," he argues.

Not so, says Keith Englander, chief scientist at the MDA. Even in space there are "residual" effects that help to identify warheads. He says the system can already distinguish between warheads and balloons. It cannot yet handle more complex counter-measures, he admits, but these are harder to deploy than critics imagine.

Yet some criticisms have hit the mark. The MDA wants to develop new ways of watching a missile's flight "from birth to death" to try to identify a warhead. And if it cannot spot the real target, it is developing interceptors with multiple "kill vehicles" to destroy decoys too. Besides, the critics have a big weakness: if missile defences were just expensive junk, why would the Russians protest so loudly?