

United States and Soviet Union deployed strategic defences, they might come to see Europe as a “safe” nuclear battleground.

## 6. Criticisms of the Strategic Defense Initiative

Dr. Richard Garwin, senior researcher for IBM, responded to Dr. Yonas’ presentation on the technology of SDI. He said that, if the Strategic Defense Initiative Organization (SDIO) were looking into the feasibility of such a defence system, he was surprised that none of the proposals had yet been “thrown on the garbage heap.”

Dr. Garwin drew an analogy between President Reagan’s SDI and President Nixon’s “War and Cancer.” During the ten years of this politically-directed, “applied” research, ten billion dollars had been spent but little had been accomplished. In fact, the programme had probably delayed the acquisition of the fundamental knowledge which was currently proving so fruitful.

Space-based defences would be costly and vulnerable, said Dr. Garwin. Even Dr. Edward Teller, an ardent advocate of SDI, had argued against deployment in space, during testimony before congressional committees. When Dr. Garwin had been a member of the Presidential Science Advisory Committee in the 1960’s and 1970’s he had taken part in the analysis of the space shuttle programme. At that time, NASA had promised that the costs of launching vehicles and equipment into low-earth orbit (LEO), would be about \$50 per pound. The current cost was \$1,500 per pound and twice that amount for the polar orbits required for many SDI components. The kind of defence which was feasible was ground-based defence of missile silos. “We don’t do that,” said Garwin, “because it is not worth doing.” The Scowcroft Commission, appointed by President Reagan, had concluded in 1984 that protection of the US “strategic retaliatory capability” — their ICBMs — was not necessary; the “window of vulnerability” did not exist.

It was not true, said Dr. Garwin, that the United States, after signing the 1971 ABM Treaty, had decided to forego deploying the one allowed ABM installation. The United States had set-up a missile defence site at Grand Forks, North Dakota, but in 1975, that was dismantled because US planners realized that it was not worth maintaining. The United States had always been aware that the Soviet Union was carrying out research into strategic defence but the answer from the US side had been offensive countermeasures, which were cheaper and easier. For this reason, Dr. Garwin praised the SDI Organization for implementing the “Red Team” approach