



AUSA BACKGROUND BRIEF



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THE ARMY'S TECHNOLOGY BASE MASTER PLAN*

The Army Technology Base Master Plan (ATBMP) is a comprehensive, strategic plan for technology base investment to satisfy the Army's future highest-priority warfighting requirements. The ATBMP provides top-down guidance to focus Army research and development activities by linking the technology base to the Army's force modernization plans. This enables the Army to insert technology in a timely fashion throughout the research, development and acquisition process.

The ATBMP was first published in April 1989. It is a resource-constrained document to be updated periodically in response to changes in the threat, DOD guidance, technology advances and user requirements. The technology base is a corporate investment to counter the threat, maintain technological superiority, ensure technological competitiveness, and avoid technological surprises. The ATBMP includes specific objectives and associated milestones along with an investment strategy.

The technology base must deliver timely and affordable advanced technologies in support of systems and concepts required by force modernization. This demands close linkage between Army force modernization and the technology base for effective technology insertion into the next generation and future Army weapon systems.

Such weapon system development plans allow for the inclusion of advanced technology demonstrations which speed the maturing of technologies needed by future systems. These demonstrations — which are technology base funded — are conducted with early operator and tester involvement in an operational environment. This permits the timely assessment of potential technology solutions or enhanced capabilities.

The Technology Base Investment Strategy (TBIS) calls for 25 percent of the total technology base money to fund 13 key emerging technologies that offer the highest return on investment in terms of major improvements in the Army's warfighting capability. These technologies include:

- Advanced materials and materials processing.
- Microelectronics, photonics and acoustics.
- Advanced signal processing and computing.
- Artificial intelligence.
- Robotics.
- Biotechnology.
- Directed energy.
- Power generation, storage and conditioning.
- Low observables.
- Advanced propulsion.
- Space.
- Protection/lethality.
- Neuroscience.

Limited resources, combined with a widening range of technological opportunities and changing world threats, make it imperative that the Army invest where the requirements and potential improvements are greatest. The Army Technology Base Master Plan provides a strategic investment plan that exploits critical emerging technologies and leverages science and technology. Its objective is to ensure Army science and technology superiority into the 21st century.

(*The contents of this Background Brief were extracted from the March-April 1990 *Army Research, Development and Acquisition Bulletin*. The original article of the same title was authored by Sharon Vannucci and Brian David.)

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