



List of critical technologies of initial focus

Critical minerals extraction and processing

Advanced explosives and energetic materials
Critical minerals extraction and processing

Advanced Communications (including 5G and 6G)

Advanced optical communications
Advanced radiofrequency communications (incl. 5G and 6G)

Artificial intelligence

Advanced data analytics
AI algorithms and hardware accelerators
Machine Learning
Natural Language Processing

Cyber security technologies

Protective cyber security technologies
Machine learning (also in AI)

Genomics and genetic engineering

Genetic engineering
Genome and genetic sequencing and analysis (Next Generation Sequencing)
Synthetic biology

Novel antibiotics, antivirals and vaccines

Novel antibiotics and antivirals
Vaccines and medical countermeasures

Low emission alternative fuels

Biofuels
Hydrogen and ammonia for power

Quantum technologies

Post-quantum cryptography
Quantum communications (incl. quantum key distribution)
Quantum computing
Quantum sensors

Autonomous vehicles, drones, swarming and collaborative robotics

Advanced robotics
Autonomous systems operation technology
Drones, swarming and collaborative robots