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CIVIL SECURITY: MODERN CHALLENGES AND EFFECTIVE STRATEGIES

The Ukrainian experience has redefined civil security from a passive compliance-based approach (e.g., fire safety) to a proactive, biological level of resilience. A modern “antifragile” city does not merely withstand shocks but adapts through an automated transition to backup life-support modes. This systemic shift envisions a landscape where infrastructure is inherently protective and the populace acts as the primary layer of emergency response.

A cornerstone of the emerging strategy is the conversion of civilian infrastructure into multi-purpose protective hubs. Facilities such as educational institutions and transit systems (metros) are being re-engineered as autonomous underground units equipped with independent ventilation, water filtration, and communication arrays.

Furthermore, the proximity of industrial and occupied nuclear zones has necessitated a shift in CBRN (Chemical, Biological, Radiological, and Nuclear) defense. Current strategies prioritize high-density sensor networks and mass public education to mitigate the technical challenges of potential contamination.

Post-conflict recovery relies heavily on “urban demining.” To secure returnee populations and restore agricultural viability, traditional manual clearance is being replaced by a high-tech logistical operation. Key technologies include:

Satellite Thermal Imaging: For the detection of metallic anomalies.

Robotic Platforms: For clearing rubble and neutralizing hazards without direct human risk.

Civilian Integration: Scaling demining efforts by training specialized civilian units to assist military sappers.

A critical, often overlooked component of modern security is psychological fortification. Research suggests that a panicked population is as disruptive as physical damage. The “Mental Shield” strategy treats security as 50% physical protection and 50% information hygiene. By training citizens in acute stress management and disinformation detection, the state ensures a calm populace, allowing emergency services to focus on technical mitigation rather than crowd control.

To institutionalize these findings, the following legislative and social priorities are proposed:

Mandatory “Survival Credits”: Integrating annual hands-on certification in tactical medicine and emergency response into university and corporate curricula.

The “Dual-Use” Mandate: Legislating that all new residential and commercial construction must include certified shelters with independent power/water as a prerequisite for permits.

Dynamic National Safety Mapping: Implementing a real-time public dashboard tracking air quality, radiation levels, and resource availability across all districts.

Energy Decentralization: Transitioning critical social infrastructure (hospitals, schools) to solar/wind microgrids to eliminate the vulnerability of centralized energy nodes.

Normalization of Drill Culture: Establishing regular, neighborhood-scale civil defense exercises to integrate preparedness into the daily social fabric.

Civil security must evolve into a seamless, decentralized insurance policy. By fostering a culture of preparedness and engineering autonomous infrastructure, nations can transform from vulnerable targets into resilient, self-healing systems.

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