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STRATEGIES FOR TRANSLATING ENGLISH-LANGUAGE TERMS CONTAINING THE COMPONENT "TOXIC" IN THE FIELD OF CHEMICAL AND RADIOLOGICAL SAFETY

Introduction. As Ukraine continues to synchronize its defense infrastructure with international standards, the demand for unambiguous terminological systems in the field of chemical and radiological safety has reached a critical point. Accurate translation of hazard-related terms is no longer a purely linguistic task but a functional requirement for effective disaster response. This necessity is particularly evident when dealing with substances that pose immediate threats to personnel and the environment. Within this framework, the terminological density of the concept of toxicity requires a systematic approach to ensure that translated protocols maintain their operational integrity. Consequently, analyzing the linguistic behavior of specific markers of danger becomes essential for bridging the gap between Western safety manuals and Ukrainian military-technical discourse.

The aim of this paper is to identify and systematize the main strategies for translating English terms containing the component "toxic" in the specialized field of chemical and radiation safety, using a corpus of terms from a specialized military dictionary to assess their terminological adequacy and functional equivalence.

Results. An analysis of the research material, comprising over 40 terminological units extracted from the *English-Ukrainian Dictionary of Military Terminology* [2] revealed that the translation of the component "toxic" depends to a large extent on the context of the specific field. Three main translation strategies were identified:

Terminological substitution (contextual equivalence). The most distinguishing feature is the shift from the literal *«токсичний»* (toxic) to *«отруйний»* (poisonous/toxic) in chemical safety contexts. For instance, *"toxic agent"* is rendered

as *«отруйна речовина»* and *"toxic smoke"* as *«отруйний дим»* [2]. This strategy ensures compliance with Ukrainian military and safety standards (DSTU), where "toxic substances" are traditionally classified as "poisonous" in a tactical sense.

Descriptive translation and expansion: This strategy is applied to terms that lack a direct one-word equivalent in the target language (Ukrainian) or require clarification of the hazard mechanism. Examples include *"toxic corridor" – «зона (коридор) поширення отруйних речовин»* and *"toxic industrial materials (TIM)" – «токсичні хімічні речовини промислового призначення»* [2]. Such expansions are integral for maintaining the functional adequacy of safety instructions.

Lexical replacement (state vs. quality): In certain radiological contexts, "toxic" is translated by indicating the result of the impact rather than the property of the substance. For example, *"toxic environment"* is rendered as *"заражене середовище"* (contaminated/infected environment) [2], shifting the focus from the chemical property to the operational status of the area [1].

Conclusions. The results suggest that the translation of "toxic" terminology within the chemical and radiation safety field is a purpose-driven process. The strategic use of terminological adaptation and descriptive techniques reflects a targeted effort to integrate international standards into the Ukrainian framework, thereby enhancing communication accuracy in high-risk operational environments.

References:

1. Baker, M. (2018). *In other words: A coursebook on translation* (3rd ed.). Routledge.

2. *English-Ukrainian dictionary of military terminology*. (n.d.). Retrieved March 16, 2026, from https://english-military-dictionary.org.ua/search/toxic