

# Legality of the Use of Improvised Explosive Devices in Armed Conflicts

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## ABSTRACT:

A profound analysis of the essence and purposefulness of using IEDs, IED categorization, basic rules of international humanitarian law in armed conflicts, and prohibited methods and warfare means clearly indicate that the above means for destructing enemy means and forces in armed conflict can and should be ascribed to those means of warfare the use of which is allowed under certain conditions.

## KEYWORDS:

Improvised Explosive Devices, armed conflict, international humanitarian law in armed conflicts, destruction, prohibited methods and warfare means

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## Introduction

The research purpose was to determine if the use of Improvised Explosive Devices (IEDs) by parties involved in various types of armed conflicts (ACs) is legal in the context of the provisions of the International Humanitarian Law (IHL).<sup>1</sup> The research was inspired by scientifically grounded facts related, on the one hand, to the national, coalition and allied military experience gained during anti-terrorist operations in the territory of the Republic of Iran and the Islamic Republic of Afghanistan (in the first decade of the 21<sup>st</sup> century<sup>2</sup> and recently<sup>3</sup>), and European and non-European experience relating to terrorist attacks in the context of their destructive properties<sup>4</sup>, resulting from the massive and widespread use of IEDs by the “opposing side.”<sup>5</sup> On the other hand, the stimulus for scientific inquiry was the widespread opinion of soldiers and their commanders that due to their destructive impact, IEDs should a priori be assigned to a group of agents that unities both means of warfare banned from research, production, possession, trade and use, and means of warfare banned from use in armed conflicts.

Consideration of the use of IEDs in combat (battle) is under military caution, as failure to meet certain requirements may result in criminal liability – in terms of liability for war crimes – for those who illegally (knowingly or unknowingly) use such means of action in armed conflicts.

## Literature Review

Improvised explosive devices (IEDs) have been a numerically and qualitatively significant subject of scientific research, aimed, including but not limited to, at countering the effects of their use within Counter-IEDs (C-IEDs). New research ideas include unprecedented organizational, technical and technological solutions. A tangible result of epistemological activities is an extensive body of literature on the subject, including publications of the War Studies

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- 1 The IHL, as a subset of public international law (PPI) and domestic law (DL) in force in IHL Signatory States, as defined by the International Committee of the Red Cross (ICRC) on 8 July 1977, are international norms established by international agreements or international custom and specifically designed to meet humanitarian concerns arising directly out of international or non-international armed conflict and that for humanitarian reasons restrict the right of the parties to an armed conflict to choose freely the methods and means of conducting hostilities or to protect persons or property who are or may be affected by an armed conflict.  
“Commentary on the Additional Protocols of 8 June 1977.” ICRC, Geneva, 1987, p. 28; Definiens – defining, definiendum – that which should be defined. See: Sobiecki, J. *W kręgu logiki*. Tyczyn, 1996, p. 128; Batóg, T. *Podstawy logiki*. 2<sup>nd</sup> edition, Poznań, 1994, p. 286.
  - 2 On the territory of the Islamic Republic of Afghanistan, out of the 3383 fallen soldiers of the anti-terrorist coalition (including non-combat losses and losses from own army fire), as many as 1341 lost their lives due to the destructive impact of IEDs. Between 2008 and 2010, these devices accounted for approximately 60% of the deaths. <http://icasualties.org/OEF/Indexaspx>. Accessed 10 Oct. 2013.
  - 3 Use of overhead IEDs by representatives of the Islamic State of Iraq and Sham (ISIS) – Klingert, S. “Terror aus der Luft.” *Bundeswehr aktuell*, no. 2, 2017, pp. 6–7; terrorist attack with an automotive IED – “Krwawy zamach w Afganistanie.” *TVN24* [online], 01 July 2019. <https://www.tvn24.pl/wiadomosci-ze-swiata,2/afganistan-zamach-w-kabulu,949015.html/>. Accessed 24 Sept. 2019.
  - 4 Destruction (Latin *destructio*) – complete destruction, decomposition, disintegration, destruction, expansion, disorganization: destruction of multi-molecular chemical compounds and destruction of armies. See: Szymczak, M., editor. *Słownik języka polskiego PWN*. vol. 1, Warsaw, 1992, p. 336; Bańko, M. *Wielki słownik wyrazów obcych PWN*. Warsaw, 2003, p. 267.
  - 5 Więcek, W. “Zdefiniować przeciwnika nieregularnego.” *Kwartalnik Bellona*, no. 4, 2010, pp. 8–12

University, but it is in vain to look for studies on the legality of the use of IEDs under the IHL during armed conflicts (in national terms). Improvised explosive devices have been devoted much space in the study of the Military Center for Civic Education (WCEO),<sup>6</sup> but mainly to their characteristics as means of destructive impact in contemporary armed conflicts.

## Methodology

This paper presents the results of a scientific study that was conducted by means of a diagnostic survey<sup>7</sup> in three groups of respondents. These included Students of Postgraduate Operational and Tactical Studies (POTS) – participants of crossing-module classes<sup>8</sup> (May 10, 2017) organized at the Military Faculty of the War Studies University in the years 2015-2017 (group I), participants of the war game “Hot July 2017” run on July 11-12, 2017<sup>9</sup> at the War Studies University under the patronage of the Undersecretary of State of the Ministry of Defense (group II), and participants of training classes (Troop Commanders Course, course for battalion commanders, PSOT-17 and improvement course – overcoming water obstacles) addressing overcoming (inland) water obstacles, which took place on June 11–14, 2018 at the Military University of Technology and employed i.a. the Biała Góra Exercise Center (EC) (group III).<sup>10</sup>

The theory of the exploitation of IEDs and their use in practice and the theory and use of the IHL provide a scientifically sound counterbalance to the popular opinion expressed by survey participants.

## Results and Discussion

### Essence and Purpose of Using Improvised Explosive Devices

In the last two decades, improvised explosive devices have become the subject of scientific research not only in the military context,<sup>11</sup> but also outside of that environment,

6 Falkowski, Z., and M. Marcinko, editors. *Międzynarodowe prawo humanitarne konfliktów zbrojnych*. Warsaw, 2014, p. 289

7 Pelc, M. *Elementy metodologii badań naukowych*. Warsaw, 2012, p. 59.

8 One of many issues of the training classes within the crossing module (“Methods of arranging and maintaining temporary military crossings over water obstacles”) was the protection of FP (Force Protection) troops while crossing water obstacles. Among the issues discussed were the use of IEDs in the immediate vicinity of water obstacles (in its defense or during its crossing, including forcing).

9 The main objective of the war game “Hot July 2017” was to determine the tasks of subunits and units from the structures of territorial defense forces in a strategic defensive operation on the territory of the Republic of Poland.

10 The numerical indicators obtained during the survey (group I – 20/90%, group II – 42/85.7% and group III – 120/92.5%) show that the vast majority of respondents – experienced officers from the structures of the Armed Forces of the Republic of Poland (SZRP), from the military rank of captain (PSOT) to the rank of colonel (unit commanders’ course) – claim that IEDs should belong to the set of means of warfare banned from use in armed conflicts. The numerical values in parentheses refer first to the number of people participating in the collection of judgments (opinions) in each group, and second to the approximate and percentage of the surveyed population in favor of classifying IEDs into the set of combatants banned from use in armed conflicts.

11 See: Piela, G. “Materiały wybuchowe domowej produkcji stosowane w działaniach asymetrycznych.” *Bezpieczeństwo wojsk w aspekcie zagrożeń technicznych i medycznych wynikających z użycia improwizowanych urządzeń wybuchowych (IED)*, edited by A. Chciałowski, G. Gielerak, and J. Małachowski, Warsaw, 2017, pp. 59–72.

including the medical community.<sup>12</sup> There have been many studies addressing both the characteristics of these devices and preventing them. These are publications of an epistemological nature – written scientific research studies such as monographs<sup>13</sup> and research and scientific papers.<sup>14</sup>

Identification of the final content of the definition of improvised explosive devices took several years, despite the fact that they are not completely new means of destructive impact<sup>15</sup>, often identified with “engineered means of destruction.”<sup>16</sup> During that period, precise definitions of IEDs were sought, with the epithets “improvised” or “makeshift” being the optimal ones. In Poland, there were arguments in favor of using the term “makeshift”, but due to the lack of its English equivalent, the adjective “improvised” was adopted.<sup>17</sup>

Given the scientifically sound identity of improvised explosive devices, including their nature and purpose of use, it is important to emphasize that before a definitive term was adopted, a thorough analysis and synthesis of synonymous terms such as fougasse, mine, booby traps,<sup>18</sup> explosive charge,<sup>19</sup> explosive device,<sup>20</sup> explosive objects,<sup>21</sup> dangerous objects,<sup>22</sup> explosive and dangerous objects,<sup>23</sup> and dangerous objects containing explosive material (EM).<sup>24</sup> As the term “improvised explosive devices” crystallized, these devices evolved in design and tactics for their use.<sup>25</sup>

12 See: Brzozowski, R., et al. “Obrażenia powybuchowe tkanek miękkich.” *Bezpieczeństwo wojsk w aspekcie zagrożeń wynikających z użycia improwizowanych urządzeń wybuchowych (IED)*, edited by S. Kowalkowski, B. Bębenek, and T. Całkowski, Warsaw, 2014, pp. 117–124.

13 Kawka, W. *Zespoły rozminowania i oczyszczania terenu w operacjach reagowania kryzysowego*. Warsaw, 2009, p. 5; Bębenek, B. *Przeciwdziałanie improwizowanym urządzeniom wybuchowym*. Warsaw, 2014, p. 5.

14 Kowalkowski, S., editor. *Analiza i ocena konstrukcji oraz taktyki użycia improwizowanych urządzeń wybuchowych*. Research and scientific work, Warsaw, 2012, p. 5; Kawka, W. *Wykrywanie improwizowanych urządzeń wybuchowych*. Research and scientific study, Warsaw, 2014, p. 5.

15 The first mention of the use of IEDs appeared in the 1930s, when criminal organizations “competed” with police subdivisions in the U.S. (in particular in Chicago). See: Kawka, W. *Ocena procedur narodowych i międzynarodowych stosowanych podczas wykrywania improwizowanych urządzeń wybuchowych*. Research and scientific study, Warsaw, 2014, p. 40.

16 It is only possible to discuss a particular agent as a means of destruction if there is a real possibility of maneuvering it in the field (so-called equipment maneuver) and the possibility of maneuvering its fire (so-called fire maneuver). See: Laprus, M., editor. *Leksykon wiedzy wojskowej*. Warsaw, 1979, p. 208, 210.

17 Kowalkowski, S. “Improwizowane urządzenia wybuchowe – definicje.” *Przegląd Wojsk Lądowych*, no. 6, 2010, pp. 22–28.

18 “Budowa i pokonywanie zapór inżynierskich.” Warsaw, 1995, p. 14.

19 Bosiacki, H. *Wykłady z mineralstwa. Zeszyt 2. Materiały wybuchowe i ładunki stosowane w wojsku*. vol. 2, Wrocław, 1987, p. 36.

20 Bochenek, R.H. *1000 słów o inżynierii i fortyfikacjach*. Warsaw, 1980, p. 251; Korzun, M. *1000 słów o materiałach wybuchowych i wybuchu*. Warsaw, 1986, p. 199.

21 “Norma obronna NO-02-A043 – Rozpoznanie, rozminowanie i oczyszczanie terenów z przedmiotów wybuchowych i niebezpiecznych.” Ministry of National Defense, Warsaw, 2004, p. 3.

22 Ibidem, p. 5.

23 Kowalkowski, S., editor. *Ocena rozwiązań technicznych wykrywania improwizowanych urządzeń wybuchowych*. Research and scientific study, Warsaw, 2013, p. 22.

24 Kawka, W. *Działania inżynierskie w ochronie ekspedycyjnych zgrupowań wojsk lądowych*. AON, PhD thesis, Warsaw, 2013, p. 65.

25 Kawka, W. “Ewolucja konstrukcji i taktyki użycia urządzeń IED podczas ataków na wojska koalicji antyterrorystycznej na terytorium Iraku i Afganistanu.” *Bezpieczeństwo wojsk w aspekcie zagrożeń wynikających z użycia improwizowanych urządzeń wybuchowych (IED)*, edited by S. Kowalkowski, B. Bębenek, and T. Całkowski, Warsaw, 2014, pp. 53–78.

The requirements for proper construction of definiens – consideration of *genus proximum* (that which is essential) and *differentia specifica* (that which characterizes, explains, describes)<sup>26</sup> – resulted in the terminological identity of IEDs being defined as follows:<sup>27</sup> they are explosive devices designed to incapacitate, damage, destroy, kill or cause distress in the area of their use, made in a non-standard (makeshift) manner from explosive and dangerous objects available in the area of military operations (including asymmetric operations), explosive initiation sources and detonation control means and devices.<sup>28</sup>

### Categorization of Improvised Explosive Devices

Based on the analysis of typical applications of IEDs, conducted in terms of their design and tactical development, and the various technological initiatives of their “constructors,” at least several categorizations (divisions or classifications)<sup>29</sup> of these devices can be presented. The following divisions should be considered the most important:

- by maker: IEDs of military origin (including primarily those used by veteran soldiers of countries that are and are not signatories to ICCPR documents), and IEDs of non-military origin (including primarily those used by terrorists, rebels, guerrillas, representatives of other unauthorized non-military formations, etc.);<sup>30</sup>
- by type of agent of destruction: conventional (military explosive ordnance owned by the armed forces, uniformed formations and other entities authorized to possess and use them), unconventional, i.e. containing components of Means of warfare of Mass Destruction (WMD), including typical CBRN (Chemical, Biological, Radiological, Nuclear) munitions. Unconventional, i.e. containing components of Means of warfare of Mass Destruction (WMD), including typical ammunition containing a CBRN (Chemical, Biological, Radiological, Nuclear) agent<sup>31</sup> and combined devices containing a CBRN agent, as well as other explosive means (e.g. fuels and fertilizers combined with other striking, inflammable, corrosive objects);

26 Sobiecki, J. *W kręgu logiki*. op.cit., p. 68; Batóg, T. *Podstawy logiki*. op.cit., p. 86.

27 Bębenek, B. *Zdolności wojsk lądowych w przeciwdziałaniu improwizowanym urządzeniom wybuchowym*. AON, PhD thesis, Warsaw, 2013, p. 34.

28 Detonation (French: détonation) – explosion of EMs or explosion of fuel mixture. The term has three meanings: a) the noise accompanying the explosion of shells, accumulated gases; gunshots, bursting of large masses of some substance; b) a chemical explosive reaction proceeding at a very high linear velocity, accompanied by a rapid increase in pressure and a strong crushing effect; c) detonation combustion, as well as excessively rapid burning of fuel in the engine cylinder combined with an explosion. See: *Słownik języka polskiego PWN*. vol.1, op.cit., p. 388; *Wielki słownik wyrazów obcych PWN*. op.cit., p. 268; Korzun, M. *1000 słów o materiałach wybuchowych i wybuchu*. op.cit., p. 36; Bochenek, R.H. *1000 słów o inżynierii i fortyfikacjach*. op.cit., p. 42.

29 Sobiecki, J. *W kręgu logiki*. op.cit., p. 109.

30 Więcek, W. “Działania przeciwbelliackie w operacjach. Referat programowy.” *Działania przeciwbelliackie w operacjach*, edited by J. Posobieć and M. Kubiński, Warsaw, 2011, pp. 9–13.

31 In the summer of 2010, IEDs, most likely made by the Taliban, accompanied by medical syringe needles and ordinary razor blades carrying Human Immunodeficiency Virus (HIV), were identified in the UK’s Area of Responsibility (AOR) during an allied ISAF (International Security Assistance Force) operation. See: Kawka, W. *Działania inżynierskie w ochronie ekspedycyjnych zgrupowań wojsk lądowych*. op.cit., p. 72.

- by EM source: military and non-military, including service (Police, Border Guard, State Fire Service and other authorized paramilitary organizations), commercial (commercially available, e.g. gels, suspensions or liquids – as mixtures of fuels and oxidizers), industrial (extractive industry, engineering activities and works, high-energy processing of metals, pyrotechnics). The following types of explosives are of military and non-military origin: military and non-military, including official (Police, Border Guards, State Fire Service, and other authorized paramilitary organizations), commercial (commercially available, e.g. gels, suspended matter, or liquids – as mixtures of fuels with oxidizers, pyrotechnics), industrial (mining, engineering activities and works, high-energy processing of metals and plastics, jewelry, aerospace<sup>32</sup>), and home-made (fuels, mixtures of fertilizers);
- by technical means of detonation: detonated mechanically<sup>33</sup> (including VBIED,<sup>34</sup> SIED,<sup>35</sup> VOIED,<sup>36</sup> BIED,<sup>37</sup> DFCIED,<sup>38</sup> EFPIED,<sup>39</sup> and AIRIED<sup>40</sup>), electrically detonated (including VBIED, CWIED<sup>41</sup>, BIED, DFCIED, and AIRIED), detonated by radio (including VBIED, RCIED,<sup>42</sup> SIED, BIED, DFCIED, and AIRIED), detonated with time delay (including VBIED, TDIED,<sup>43</sup> SIED, and BIED), non-contact detonated (including VBIED, BIED, DFCIED, EFPIED, and a group of ECIED-class IEDs,<sup>44</sup> fitted primarily with passive infrared (PIR) sensors, active infrared (AIR) sensors, light sensors, acoustic sensors, or electromagnetic sensors;
- by the entity initiating the explosion (deciding on the explosion): detonated by victims of the attack (persons, motor vehicles, etc.) – contact<sup>45</sup> or non-contact impact,<sup>46</sup> and

32 Kawka, W. "Illegal Use of Explosives – an Incidental Phenomenon or the Seeds of the Next Real Threat to Collective Security and Public Order?" *Internal Security*, no. 8, 2016, pp. 69–80.

33 These include actuation of pressure switches by external force (causing metal parts to be connected, which in turn closes the circuit and current flows from the power source to the igniter), tension or release of the extractor caused by cutting or breaking it (causing the pin to be pulled and the igniter to be triggered), or movement of the device (moving or changing the angle of position), resulting in the sensor closing the electrical circuit and transmitting the impulse to the igniter.

34 VBIED (Vehicle Based IED) – IEDs planted and exploding in a motor vehicle.

35 SIED (Suicide IED) – IEDs planted and exploding during terrorist suicide bombings (TSB) or terrorist suicide operations (TOS), including Person-Borne IEDs (PBIEDs) or Suicide Vehicle-Born IEDs (SVBIEDs). Experience indicates that it is not uncommon to combine SVBIEDs with PBIEDs.

36 VOIED (Victim Operated IED) – booby trap IEDs.

37 BIED (Buried IED) – IEDs planted in the ground.

38 DFCIED (Directional Fragmentation Charge IED) – IEDs with fragmentation, directional effect.

39 EFPIED (Explosive Formed Projectiles IED) – IEDs with directional and cumulative effects.

40 AIRIED (Air-borne IED) – IEDs delivered to detonation sites by air.

41 CWIED (Command Wire IED) – IEDs equipped with wires and an electric detonator.

42 RCIED (Radio Controlled IED) – IEDs equipped with a radio frequency receiver.

43 TDIED (Time-Delay IED) – IEDs equipped with a timed mechanical (clock or so-called fatigue indicator), electrical (clock or electronic timer), or chemical (chemical detonator) detonator.

44 ECIED (Electronic IED).

45 Primarily including Pressure-Plate IEDs (PPIED), towed, Anti-Lift Switch IEDs (ALSIED) and VBIED, SIED, VOIED, BIED, DFCIED, EFPIED and AIRIED IEDs.

46 Primarily including VBIED, BIED, DFCIED, EFPIED and ECIED IEDs.

detonated by the person(s) who prepared in advance to use the IED, including contact impact (e.g. mechanical), directly on command (signal or pulse, e.g. radio) and controlled with time delay.<sup>47</sup>

There is also a second categorization of improvised explosive devices, in which the criterion of division is the manner of their use (tactics of IED use). The first part of this categorization refers to attacks (assaults) in which only a single device is used, and the victim (casualty) – as a result of the detonation of the IED installed in the device – becomes a person who is in direct contact with the device and causes it to explode by their own impact. In the past, it was rare to amplify the use of IEDs by firing on intended or unintended victims (casualties).<sup>48</sup> The current classification of IEDs corresponds with the subject categorization due to the extension of the previous spectrum of contact impact<sup>49</sup> to non-contact impact.<sup>50</sup> The second part of the basic categorization consists of those events in which the time and place of use of IEDs is (was) decided by terrorists (rebels, guerrillas, representatives of other unauthorized non-military formations), initiating the detonation of the explosive contained in the IED as a result of contact interaction (e.g. mechanical), directly on command (signal or impulse) or control with a specified time delay.<sup>51</sup>

#### Division of Armed Conflicts in the Light of International Humanitarian Law of Armed Conflicts

International humanitarian law of armed conflicts includes the term (designator) “armed conflict” in its name,<sup>52</sup> because, compared to the term “war,” this is more general and holds a universal meaning, especially in the context of the major issues that this law covers. In the past – mainly during the period of the creation of the Hague and Geneva Conventions and even the Additional Protocols<sup>53</sup> – the term was not defined, and it was used implicitly in many contents of the ICCPR in the international arena. The final definition of armed conflict was proposed during the discussions of the International Criminal Tribunal for the former Yugoslavia (ICTY) as follows: an armed conflict exists whenever there is a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups or between such groups within a State. Therefore, the ICCPR is theoretically and practically applied to armed conflicts with both international and non-international characteristics, and the basic feature of any armed conflict is the use of force in relations between two or more identifiable parties.<sup>54</sup> Thus, in international

47 Primarily including TDIED and VBIED, SIED and BIED IEDs.

48 There is a distinction between Direct Fire (DF) and Indirect Fire (IDF).

49 Primarily including PPIED, towed, ALSIED and VBIED, SIED, VOIED, BIED, DFCIED, EFPIED and AIRIED IEDs.

50 Primarily including VBIED, BIED, DFCIED, EFPIED and ECIED IEDs.

51 Primarily including TDIED and VBIED, SIED and BIED IEDS.

52 *Międzynarodowe prawo humanitarne konfliktów zbrojnych*. op.cit., p. 34.

53 Refers to the Hague Conventions of 1899 and 1907, the Geneva Conventions of 1949, and the so-called Additional Protocols of 1977. See: de Mulinen, F. *Podręcznik prawa wojennego dla sił zbrojnych*. Warsaw, 1998, p. 19.

54 Duffy, H. *The “War on Terror” and the Framework of International Law*. Cambridge University Press, Cambridge, 2005, p. 219.

relations, one can distinguish the following events to which the principles and norms of IHL are applied: international armed conflict, wartime occupation, war of national liberation, and non-international armed conflict.

An international armed conflict exists when a declaration of war or any other armed conflict arises between two or more “High Contracting Parties,”<sup>55</sup> even if one of them would not recognize a state of war.

Wartime occupation is a form of presence of foreign troops on the territory of a state as a result of their occupation of that territory (even if the occupation did not encounter any armed resistance), amounting to control of the state’s territory by foreign armed forces and the ability to exercise power over its population without the consent of its sovereign.

A war of national liberation is a non-peaceful method of executing the right of peoples to self-determination, that is, the right of peoples to establish an independent sovereign state, to freely choose their political, economic and social system, and to freely develop in the economic, social and cultural spheres.

A non-international armed conflict is sometimes perceived as a civil war, and, since 1977, as fighting conducted between a state’s armed forces and splinter armed forces or other organized and armed groups under responsible command and exercising such control over part of that state’s territory that they can conduct continuous and consistent military operations.

#### Identification of Armed Conflict Participants and Division Into Military Objectives and Civilian Objects

Scientific argumentation regarding the legality of the use of improvised explosive devices in armed conflicts requires that the participants in armed conflicts (combatants and civilians) and the objectives of military attack (military objectives and civilian objects) be clearly identified.

In colloquial terms, a combatant<sup>56</sup> is a person who once (usually a long time ago) was a participant in military action, thus a combat veteran. In the Polish language dictionary (as in the IHL documents), a combatant is considered a soldier of the regular army taking an active part in the fight; a comrade in arms, a fellow combatant.<sup>57</sup> In an armed conflict, a combatant (with a plaque and identity card) is perceived (irrespective of gender) as a person permitted to directly participate in the armed combat by virtue of the authorization of their state; at the moment of capture by the representative(s) of the detaining

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55 Refers to States-Parties that have signed, ratified and implemented a specific document that directly relates to the principles and standards drafted under the IHL. See: Kawka, W., and W. Kuchta. *Zastosowanie niezabijających środków alternatywnych dla zapór inżynieryjnych w działaniach innych niż wojenne*. Research and scientific study, Warsaw, 2011, p. 21.

56 Combatant (French: combattant) is the term used in the IHL. Under the IHL, a special kind of combatant is the so-called non-combatant (as protected personnel), including military chaplains, military medical personnel, military prosecutors, and war correspondents.

57 Skorupski, S., H. Auderska, and Z. Łempicka, editors. *Mały słownik języka polskiego*. Warsaw, 1969, p. 289; Tokarski, J. *Słownik wyrazów obcych PWN*. Warsaw, 1980, p. 369.



power, such a person, after interrogation, becomes a prisoner of war (with all rights and obligations).<sup>58</sup>

The term “civilian” refers to any person who is neither a member of the armed forces of a State nor takes an active and direct part in armed activities. For this reason, they enjoy a protected status. In addition, a person is considered civilian if:<sup>59</sup>

- they are not a member of the armed forces of a state involved in armed conflicts or a member of militias and units that are part of those armed forces;
- they are not a member of other militias or other volunteer units, including the orchestrated resistance movement;
- they are not a member of an armed force that identify themselves as subject to a non-recognized government or authority;
- they do not belong to the so-called “levée en masse”, i.e. people who, during an armed conflict, spontaneously take up arms in the face of an approaching enemy.

With regard to issues directly affecting veterans (non-combatants) and civilians in armed conflicts, it should be noted that:

- in the context of the principle of distinction – in armed conflicts, it is always necessary to separate the population (e.g., in the case of planning an attack), to distinguish the essential two sets of people with different rights and obligations:<sup>60</sup>
- in the context of threats with destructive properties – civilians, unlike combatants, may find themselves in two different and distinct situations in armed conflicts (in an environment of direct combat operations and under conditions of wartime occupation).

An object considered a military objective<sup>61</sup> in armed conflicts should, according to the ICCPR, meet two essential conditions: it must make a real contribution to the opponent’s military operations, and its seizure, incapacitation, damage and neutralization or destruction must bring a specific military (war) benefit to the other side in combat operations.<sup>62</sup> Civilian goods, subject to protection in armed conflicts against various types of attacks of the opposing party, are all goods that do not constitute military objectives.<sup>63</sup>

58 *The Third Geneva Convention relative to the Treatment of Prisoners of War*. Geneva, 12 Aug. 1949.

59 *The Fourth Geneva Convention relative to the Protection of Civilian Persons in Time of War*. Geneva, 12 Aug. 1949.

60 According to the IHL, if, for example, during the planning of an attack, there is not one hundred percent certainty that combatants of the opposing side will be attacked, then always – in accordance with the principle of the presumption of innocence (with respect to persons legally suspected of committing a misdemeanor or a crime) – such an intention should be abandoned (in anticipation of an attack on civilians who have the status of protected persons in armed conflicts). A similar principle applies when distinguishing between military objectives and civilian objects (including cultural property).

61 The essence of military targets is determined by their nature (e.g., an artillery munitions factory), location (e.g., a maneuver route through a mountain pass), purpose (e.g., an agricultural machinery factory ultimately producing engines for armored personnel carriers), or use (e.g., a church bell tower as a firing position designed for sniper fire). See: <http://www.crimesofwar.org/a-z-guide/military-objectives>. Accessed 12 Sept. 2013.

62 Wall, A.E., editor. *Legal and Ethical Lesson of NATO Kosovo Campaign*. Naval War College, US, Newport, 2002, p. 179

63 The set of these goods – according to the IHL – includes cities, towns and villages (especially as non-defense localities); zones and areas under special protection (e.g. demilitarized zones); buildings and facilities of a civilian character (devoid of military features); central and local government buildings and facilities (not connected in any way with the armed forces); cultural goods; means of civilian transport (e.g. passenger trains) – not used for military purposes; industrial, commercial or financial institutions and facilities – not directly supporting the military effort; goods neces-

## Basic Principles of International Humanitarian Law of Armed Conflict and Its Content Vs. Prohibited (Forbidden) Methods and Means of Warfare

In order to solve the basic research problem – whether it is legal to use IEDs – the existing, historically shaped, basic rules regarding the IHL<sup>64</sup> are not without significance. These are as follows, and they are often intertwined in terms of content:<sup>65</sup>

- humanitarianism – the highest price is paid by human life and health (priority – preventing human suffering and providing assistance to all those in need in armed conflicts);
- distinction – parties to an armed conflict are required to precede any attack by distinguishing between combatants (non-combatants) and civilians, and between military objectives and civilian objects;
- military (war) necessity – allows for actions that serve to militarily overpower or destroy the opposing party, but these must be actions that are not prohibited by international law and that are genuinely necessary to achieve the tactical (operational or strategic)<sup>66</sup> objective and are in proper proportion to it;
- proportionality – expresses the balance between the need to consider military needs and the need for humanitarian requirements.

The message of the fundamental ideas of international humanitarianism in reference to prohibited (forbidden), unauthorized methods used in combat points to two main thematic areas, also significantly related to the issue of legality of the use of IEDs in armed conflicts. The former one concerns the prohibition of all methods that contribute to the excessive suffering of the armed conflict participants (combatants, including non-combatants, as well as civilians), while the second refers to those methods of conducting armed operations that are substantively contrary to the basic principles of the IHL.<sup>67</sup>

The chronologically formed set of prohibited means of warfare<sup>68</sup> is formed by three main subsets:<sup>69</sup>

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sary for the survival of the civilian population (e.g. water supply systems); and passenger trains) – not used for military purposes; industrial, commercial, or financial institutions and facilities – without direct support of the military effort; goods necessary for the survival of the civilian population (e.g., water supplies); and construction and facilities containing so-called dangerous forces (e.g., retention basins in mountainous terrain). See: Rogers, A.P.V. *Law on the Battlefield*. 3<sup>rd</sup> edition, Manchester University Press, Manchester, 2012, p. 84.

64 The literature also mentions other principles of humanitarian law, such as the principle of reciprocity, chivalry, among others. Nevertheless, most often the only criteria to assess the legality of the methods and means of destruction used by the warring parties and actions against the participants of an armed conflict, regardless of its type, are the essence and content of the basic principles of the IHL.

65 Mikos-Skuza, E. "Wprowadzenie do międzynarodowego prawa humanitarnego konfliktów zbrojnych." *Międzynarodowe prawo humanitarne konfliktów zbrojnych*, Dęblin, 2006, p. 37.

66 Wiatr, M. *Między strategią a taktyką*. Toruń, 2000, p. 23.

67 The subject also applies to the rules set forth in the IPL – including other (supplemental) rules of the IHL (e.g., regarding the "scorched earth" policy).

68 For example, one of the first international agreements regulating restrictions on the right of warring parties to freely choose the means of harming the enemy was the so-called Saint Petersburg Declaration of 1868, referring, inter alia, to the prohibition of the use of small-caliber explosive projectiles in combat (based on the dramatic lessons of the 1861-1865 U.S. Civil War). See: Flemming, M. *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. Warsaw, 2003, p. 173.

69 In addition to these three subsets, there is a group of means of warfare that require specific regulations – bans or re-

- means of warfare under a total ban on research, production, possession, trade and use in armed conflict (including mines and booby-traps);<sup>70</sup>
- means of warfare under a total ban on use in armed conflicts (including poisoned means of warfare);<sup>71</sup>
- means of warfare whose use is permissible under certain conditions (including buoyant incendiary means of warfare).<sup>72</sup>

### Criteria for the Legality of IED Use

The analysis of the presented issues, most relevant from the point of view of the legality of the use of IEDs in armed conflicts, allows for indication of the boundary conditions according to which improvised means of destructive impact may be: firstly – assigned to a set of means of warfare that may be used in armed conflicts (taking into account only the permitted methods of conducting military operations) under certain conditions; secondly – compliance with the content specified in the boundary conditions ensures that the use of IEDs will be considered compatible with the ICCPR, including national law.<sup>73</sup> The boundary conditions for the lawful use of IEDs include:

- the possibility of attacking military objectives making a significant real-time contribution to the enemy's military operations;<sup>74</sup>
- the possibility of preparing IEDs in the immediate vicinity of military facilities (as part of the protection of the military facilities of their own troops, similar to the construction of engineering shield dams);<sup>75</sup>
- the need to record IEDs in the field (in reporting and information documentation);<sup>76</sup>
- the need to alert [during Information Operations (InfoOps)] non-combatants and civilians to the presence of IEDs;<sup>77</sup>

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strictions on use during armed conflict – internationally, such as expanding munitions, munitions with significant initial velocity, arrow munitions, depleted uranium munitions, and incapacitating weapons. See: *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., pp. 236–265.

70 Nuclear weapons, biological weapons, chemical weapons (CW – chemical weapon agents) and cluster munitions should also be included in this set. See: *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 237.

71 This set also includes small-caliber explosive projectiles, projectiles that expand easily in the human body, shrapnel that is undetectable by X-rays, and laser blinding weapons. See: *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 255.

72 Ibidem, p. 259.

73 It refers to military actions on and outside the territory of the Republic of Poland (in the so-called expeditionary activities) – in addition to the provisions of the RoE (Rules of Engagement), defined for each expedition. See: "IV Raport z implementacji i upowszechniania międzynarodowego prawa humanitarnego w Rzeczypospolitej Polskiej w latach 2015–2018." Ministry of Foreign Affairs/Legal and Treaty Department, Warsaw, 2019, p.8.

74 The essence of a military objective is defined by one of its characteristics, namely, its nature, deployment, purpose, or use. See: *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 132.

75 "Budowa i pokonywanie zapór inżynierskich." op.cit., p. 261; "NATO – Doktryna wojsk inżynierskich sił lądowych ATP-52." of the Ministry of National Defence / Bureau of Military Standardization Service, Warsaw, 1998, p. 23.

76 Kawka, W., and K. Wysocki. *Inżynierskie dokumenty dowodzenia*. Warsaw, 2014, p. 55.

77 Nowacki, G. *Operacje informacyjne*. Warsaw, 2001, p. 17.

- prohibition of attacks on non-combatants and civilians (with IEDs);<sup>78</sup>
- prohibition of the construction of IEDs with elements from a set of means of destruction that are under a total ban on research, production, possession, trade, and use in armed conflicts (e.g., chemical means of warfare agents) and that are under a total ban on use in armed conflicts (e.g., poisoned means of warfare);<sup>79</sup>
- prohibition of the construction of IEDs with substances not detectable by X-rays;<sup>80</sup>
- prohibition of granting IEDs properties that directly correlate with truculence (e.g., VOIEDs as booby traps);<sup>81</sup>
- prohibition of abuse of the IED-used EM charge gauge (in accordance with the principle of military-war necessity, as well as the principle of proportionality);<sup>82</sup>
- prohibiting non-combatants and civilians from controlling the timing of IED detonations;<sup>83</sup>
- prohibiting non-combatants and civilians from controlling IEDs (e.g., AIRIEDs);<sup>84</sup>
- prohibition of use of IEDs that are undetectable by various types of detectors (e.g. induction detectors);<sup>85</sup>
- prohibition of use of IEDs with contact detonators (e.g., pressure detonators) and with non-contact detonators (e.g., magnetic detonators), i.e., so-called dormant IEDs (their victims may be non-combatants and civilians);<sup>86</sup>
- prohibition of use of civilians and civilian objects (especially minors – under the age of eighteen)<sup>87</sup> as “landmarks” or “markers” to facilitate the precise firing of the EM charge in an IED;

78 *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 174, 210.

79 *Ibidem*, p. 237, 255.

80 Surgical identification of fragments undetectable by X-rays (e.g. plastic) in soft tissues is a kind of equivalent of searches that can be labelled as fortuitous (causing undue suffering to wounded combatants). Brzozowski, R., et al. “Obrażenia powybuchowe tkanek miękkich.” op.cit., pp. 117–124.

81 Breach of faith is the intentional misleading of an adversary into believing that they are entitled to the protection of the IHL or, more commonly, that they are obligated to provide it. The result of this error is that the adversary takes actions that the IHL standards require them to take, such as a cease fire. The essence of breach of faith is to take advantage of this error to cause harm to the party who acted in good faith, such as launching a surprise attack. Good faith refers to a subject’s mistaken, justified belief that their action is lawful or that they are entitled to some right. See: *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 275.

82 Illegal examples of IED use in Iraq and Afghanistan highlighted this issue vividly and tragically; in the outcome, it resulted in difficulties in finding and identifying human body remains. “NO-02-A053-2004 – Działania wojenne – procedury pochówku poległych i zmarłych”. Warsaw, 2004; “Afganistan: Śmierć 5 polskich żołnierzy przed świętami.” *Super Express* [online], 22 Dec. 2011, <https://www.se.pl/wiadomosci/polska/afganistan-smierc-5-polskich-zolnierzy-przed-swietami-aa-eVv8-ny1g-aTf.html/>. Accessed 24 Sept. 2017.

83 *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 210.

84 Klingert, S. “Terror aus der Luft.” op.cit., pp. 6–7.

85 According to experience, a mass of less than 8 g of ferromagnetic material does not yield a so-called return signal for inductive detectors (portable or mobile ones – provided on specific base vehicles) used for detecting such material in the ground or on its surface.

86 *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 245.

87 *Ibidem*, p. 215.

- prohibition on forcing (coercing)<sup>88</sup> non-combatants and civilians (of one's own state, and even more of an adversary's state) to prepare attacks with IEDs.<sup>89</sup>

## Conclusions

The discussion on the results of (theoretical and empirical) scientific research on the legality of the use of improvised explosive devices in armed conflicts was inspired by the desire to present arguments supporting the thesis that these devices may be included in the set of agents that may be used in armed conflicts under certain conditions. Taking into account the nature and purpose of the use of improvised explosive devices, their categorization, the nature of contemporary armed conflicts, the identification of their participants, the division into military objectives and civilian objects, the basic principles of the ICCPR<sup>90</sup> and its contents in the context of prohibited methods of warfare and means of warfare, it should be concluded that the use of such destructive agents in armed conflicts – under certain conditions – is legal (in light of the provisions contained in the ICCPR). This shall not mean, however, that participants in contemporary armed conflicts who are entitled to use IEDs should use them as a primary agent from the extensive collection of sapper munitions (taking into account national solutions).<sup>91</sup> Provisioning troops with the latter is the role of military logistics, including material security (as class V supplies).<sup>92</sup> However, in the absence of access to such agents (and such situations may always arise), IEDs may be prepared in the field, but with the indicated possibilities (alternatives), necessities (obligations), and prohibitions (limitations), e.g. with the use of Special Forces and Territorial Defense Forces subunits during non-regular actions.

The theory and practice of the use of IEDs and the theory and practice of the IHL presented in the publication are a scientific counterbalance to the common and completely unfounded opinion of respondents participating in the surveys. This is because the opinion of soldiers and their commanders shows that IEDs a priori should be assigned to the group of agents which fall both in the category of means of warfare banned from research, production, possession, trade and use, as well as means of warfare banned from use in armed conflicts. In light of the arguments presented, this opinion should be deemed unfounded. The rationale for such attitudes can be seen primarily in the destructive properties of IEDs and the national, coalition and allied traumatic experiences of fighting international terrorism (including in expeditionary operations). ■

88 Regardless of the method or means of coercion – psychological interaction, weapons, alcohol, or drugs.

89 These types of actions may be qualified as war crimes. *Międzynarodowe prawo humanitarne konfliktów zbrojnych: zbiór dokumentów*. op.cit., p. 440.

90 Taking into account the relevant provisions in the international arena – the so-called circular provisions, i.e., primarily the so-called CCW Convention of 10 October 1980 on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects, and the so-called Ottawa Convention of 4 December 1997 on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction.

91 *Album amunicji saperskiej*. Warsaw, 1991, p. 7

92 Kurasiński, Z., editor. *Kompendium logistyka wojskowego*. Warsaw, 2014, p. 13.

**STRESZCZENIE:**

Z analizy istoty i celowości użycia improwizowanych (prowizorycznych) urządzeń wybuchowych, ich kategoryzacji, treści podstawowych zasad międzynarodowego prawa humanitarnego konfliktów zbrojnych oraz zabronionych (zakazanych) metod i środków walki wynika, że owe improwizowane środki destrukcyjnego oddziaływania na siły i środki przeciwnika w konfliktach zbrojnych można i należy przypisać do zbioru środków walki, których użycie jest dopuszczalne pod pewnymi warunkami.

**SŁOWA KLUCZOWE:**

improwizowane urządzenia wybuchowe, konflikt zbrojny, międzynarodowe prawo humanitarne konfliktów zbrojnych, destrukcja, zabronione (zakazane) metody i środki walki

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