



ANALYSIS OF THE LEGAL FRAMEWORK UNDERPINNING PROTECTION OF CRITICAL INFRASTRUCTURE IN ARMED CONFLICTS

By

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Abstract

The only legitimate object, which States should endeavour to accomplish during warfare, is to weaken the military forces of the enemy. Accordingly, civilians and services that are pivotal to their survival must not be made objects of attack except in rare circumstances. The paper examined the legal framework underpinning the protection of critical infrastructure in armed conflicts. The paper adopted the doctrinal research methodology relying on both primary and secondary sources of law via an analysis of major international legal instruments in the form of treaties, protocols and reports. The paper found out that despite the high rate of civilian mortality associated with non- international conflicts, the protection given to critical infrastructure during international armed conflicts is more detailed and exhaustive. The paper also found out that the extant legal framework for such protection does not pay adequate attention to the recent possibilities and capabilities of scientific and technological advancements in armed conflicts particularly with the emergence of Cyber warfare. The paper concluded that the current legal framework for the protection of critical infrastructure during armed conflict is inadequate. Consequently, the paper recommended urgent establishment of complementary rules to adequately protect critical infrastructure during non-international armed conflicts; inclusion of rules addressing the emergence of cyber warfare; engagement with non-state actors; and proper orientation and awareness raising by relevant international bodies.

Keyword(s): *Armed Conflict, Infrastructure*

1.0 Introduction

The primacy of security is underscored by the central position it occupies in development discourse. If indeed there cannot be development without peace, then critical infrastructures are most vulnerable in times of armed conflicts. It is expected that both International Humanitarian Law (IHL) as well as various national legislation ought to reflect the protection of critical infrastructure as they ultimately provide services to non-combatants during armed conflicts. This is because the protection of civilians, as the main victims of war, is the crux of IHL. It is for this reason that one of the guiding principles of IHL stipulates that parties to International Armed Conflict (IAC) must at all times distinguish between the civilian population and combatants and between civilian objects and military objectives, and must accordingly direct their operations only against military objectives.² IHL also protects particularly vulnerable civilian groups such as women, children and displaced persons. It is against this backdrop that this paper embarks on an analysis of the major legal instruments governing the protection of critical infrastructure in times of armed conflicts.

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² Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) 1977, art. 48.

2.0 Conceptual Clarification

The key concepts, which are considered to be of utmost importance to this paper, are as follows:

2.1 Armed Conflict

An armed conflict arises whenever there is fighting between States or protracted armed violence between government authorities and organized groups or just between organized armed groups.³ It is imperative to state that armed conflicts are categorized under IHL into two types. They are International Armed Conflict (IAC) and Non-International Armed Conflict (NIAC). Consequently, their respective definitions differ.

2.1.1 International Armed Conflict (IAC)

IAC refers to a situation where one or more states have recourse to armed force against another State. This is irrespective of the intensity or reason behind the confrontation. In effect, any difference arising between two States and leading to the intervention of armed forces is an armed conflict even if one of the Parties denies the existence of a state of war. It makes no difference how long the conflict lasts, or how much slaughter takes place.⁴ IAC also includes armed conflicts in which peoples are fighting against colonial domination, alien occupation or racist regimes in the exercise of their right to self-determination (wars of national liberation).⁵

2.1.2 Non-International Armed Conflicts (NIAC)

NIAC are armed conflicts, which are not of an international character.⁶ They are protracted conflicts between governmental forces and non-governmental armed groups or between such groups only. Consequently, it refers to conflict between a State's armed forces and dissident armed forces or other organized armed groups, which, under responsible command, exercise such control over a part of its territory as to enable them to carry out sustained and concerted military operations.⁷ It includes traditional civil wars, internal armed conflicts that spill over into other States or internal conflicts in which third States or a multinational force intervenes alongside the government.⁸ To infer, NIAC are armed confrontations that take place within the territory of a State between the governments on the one hand and armed insurgent groups on the other hand or between two or more armed groups. It is pertinent to state here that such armed confrontation must reach a minimum level of intensity and the parties involved in the conflict must show a minimum of organization.⁹

³ International Committee of the Red Cross, 'Introduction to the Law of Armed Conflict: Basic Knowledge' <https://www.icrc.org/en/doc/assets/files/other/law1_final.pdf> accessed 12 May 2022.

⁴ The Commentary on the Geneva Conventions of 1949, p 3.

⁵ (n.1), art. 1, para. 4.

⁶ Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field. Geneva, 12 August 1949; Convention (II) for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea. Geneva, 12 August 1949; Convention (III) relative to the Treatment of Prisoners of War. Geneva, 12 August 1949; and Convention (IV) relative to the Protection of Civilian Persons in Time of War. Geneva, 12 August 1949. (Generally referred to as the Geneva Conventions of 1949), Common art. 3. <<https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Treaty.xsp?documentId=AE2D398352C5B028C12563CD002D6B5C&action=openDocument>> accessed 2 May 2022.

⁷ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II) 1977, art. 1.

⁸ (n 5).

⁹ ICRC, 'How is the Term "Armed Conflict" Defined in International Humanitarian Law?' [March 2008] *ICRC*

2.2 Infrastructure

Infrastructure refers to basic and fundamental facilities and services that a State or organization requires functioning properly. They include transportation systems, communication networks, electricity, sewers systems, and power lines and so on. In this sense, Critical Infrastructure represents utility assets or 'public works' which are indivisible from the efficient operational activities of any society. It is universally accepted that any nation's health, wealth and security depend upon the production and distribution of certain goods and services. The Industry Working Group on Multiple Taxation makes an exhaustive list of examples of critical infrastructure namely: Electricity generation, transmission and distribution; Gas production, transport and distribution; Oil and oil products production, transport and distribution; Communications systems; Water supply; Agriculture, food production and distribution; Public health (hospitals, ambulances); Transportation systems (fuel supply, railway network, airports, harbours, inland shipping); Financial Services(banking, clearing and exchanges services); Security services (police, military and civil defence).¹⁰

3.0 Legal Framework

The paper shall examine the various laws in place for the protection of critical infrastructure in respect of both international and non-international armed conflicts. The paper adopts the distinction earlier made, in this respect.

3.1 International Legal Framework for Protection of Critical Infrastructure during International Armed Conflicts

The Geneva Conventions (with the exception of common Article 3)¹¹ and Additional Protocols¹² form the bulwark of the legal framework for the protection of critical infrastructure during International Armed Conflicts. There is also the Convention (IV) respecting the Laws and Customs of War on Land¹³ which makes general provisions in this regard. The paper examines these legal instruments in the light of available provisions for the protection of critical infrastructure during IAC.

a.) Convention (IV) respecting the Laws and Customs of War on Land and its Annex: Regulations concerning the Laws and Customs of War on Land

The 1907 Convention is inspired by the desire to diminish the evils of war, as far as military requirements permit.¹⁴ It is intended to serve as a rule of conduct for the belligerents in their mutual relations and in their relations with the inhabitants.¹⁵ Accordingly, it contains provisions to ensure the

Opinion Paper; 1-5, 4.

¹⁰ Industry Working Group on Multiple Taxation, 'Brief on the Designation of Telecommunications Infrastructure as Critical Infrastructure' < <https://www.ncc.gov.ng/documents/248-brief-on-the-designation-of-telecommunications-infrastructure-as-critical-national-infrastructure/file>> accessed 5 May 2022.

¹¹ (n.5).

¹² Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 8 June 1977; Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977.

¹³ Convention (IV) respecting the Laws and Customs of War on Land and its Annex: Regulations concerning the Laws and Customs of War on Land 1907.

¹⁴ *Ibid*, preamble.

¹⁵ *Ibid*.



protection of critical infrastructure of Contracting Parties during times of war. It in pursuance of this objective, that the paper examines such relevant provisions in the light of such protection.

In effect, Article 25 of the Convention prohibits the bombardment or attack of undefended towns, villages, houses or buildings. In view of this provision, it becomes clear that the buildings serving as corporate offices of parastatals providing critical services to civilians are protected during times of war. Furthermore, the houses of civilians are also immune to such attacks.

Similar provisions in respect of buildings dedicated to religion, art, science or charitable purposes, historic monuments, hospitals and places where sick and wounded persons are collected. The only condition for such immunity from attack is that such buildings or structures are not being used for military purposes.¹⁶ It is however the duty of the besieged state to indicate the existence of such buildings by marking them with visible signs, and notifying the enemy beforehand.¹⁷

b.) Convention (IV) relative to the Protection of Civilian Persons in Time of War

Adopted in Geneva on 12 August 1949, it is commonly referred to as the Fourth Convention.¹⁸ Despite making ample provisions for the direct protection of the civilian person during times of war, it also provides for the protection of critical infrastructure of the State in order to guarantee uninterrupted service delivery to non-combatants.¹⁹

i. Hospitals

The Convention in a bid to ensure undisrupted provision of health care to the civilian population of states engaged in international warfare, excludes civilian hospitals from being the object of attack under no circumstance and shall be protected by parties to the conflict at all times.²⁰ It specifically notes that such civilian hospitals must have been operated to give healthcare to the sick, wounded, the infirm and for maternity cases.

It mandates each State party to provide all of such hospitals with certificates reflecting that they are not used for any other purpose. The Convention went further to vest the responsibility on each State party to mark such hospitals with emblems visible to enemy land, air and naval forces in order to eradicate the possibility of any hostile action.²¹ The only exception being where such civilian hospitals are used to commit, outside their humanitarian duties, acts harmful to the enemy.²² It is pertinent to state here that the protection given to hospitals also extends to hospital staff.²³

ii. Transportation

Land, sea and air transport are protected during warfare. In respect of transportation by land and sea, convoy of vehicles or hospital trains on land or vessels on sea, conveying wounded and sick civilians,

¹⁶ (n 12), art. 27.

¹⁷ *Ibid.*

¹⁸ (n 5), Convention (IV) relative to the Protection of Civilian Persons in Time of War 1949.

¹⁹ *Ibid.*, Pt II.

²⁰ *Ibid.*, art. 18.

²¹ (n 17).

²² *Ibid.*, art. 19.

²³ *Ibid.*, art. 20.

the infirm and maternity cases shall be respected and protected in the same manner as hospitals.²⁴ Furthermore, aircrafts employed for the removal of wounded and sick civilians or for transport of medical personnel and equipment are exempted from attack on the condition that they adhere to agreed flying heights, time and routes.²⁵ Flights over enemy or enemy occupied territory are prohibited except specifically agreed by state parties.²⁶

Consignments of medical supplies, food and clothing and objects necessary for religious worship intended only for civilians of a state party are also allowed passage where there are no reasons for fearing that such consignments may be diverted to a different destination; control may not be effective; or that a definite advantage may accrue to the military efforts or economy of the enemy through such consignments.²⁷

c.) Protocol Additional to the Geneva Conventions of 12 August and relating to the Protection of Victims of International Armed Conflict (Protocol I) 1977

The Protocol restates the obligation of every state in conformity with the dictates of the Charter of the United Nations to refrain in its international relations from threat or use of force against the sovereignty, territorial integrity or political independence of any State or in any manner inconsistent with the purposes of the United Nations. Accordingly, it re-affirms and develops the provisions protecting the victims of armed conflicts and to supplement measures intended to reinforce their application.²⁸

i. Medical units, vehicles and other transport

The Additional Protocol I (AP I) provides that medical units are immune to attacks at all times. It extends this protection to include civilian medical units if they belong to one of the parties to the conflict; they are recognized and authorized by the competent authority of one of the parties to the conflict.²⁹ This also covers mobile medical units. Where the civilian medical unit of a neutral state seeks to lend the assistance of its medical personnel and units to a party to the conflict, it can only do so with the prior consent of its own Government and the authorization of the Party to the conflict concerned. Upon such notification of the adverse party, such medical assistance no longer constitutes an interference in the conflict.³⁰

ii. Cultural objects and places of worship

AP I without prejudice to the provisions of the Hague Convention³¹ and of other relevant international instruments prohibits attacks on cultural objects and places of worship.³² It expressly prohibits any acts of hostility directed against the historic monument, works of art or places of worship, which constitute

²⁴ *Ibid*, art. 21.

²⁵ *Ibid*, art. 22.

²⁶ *Ibid*.

²⁷ *Ibid*, art. 23.

²⁸ Protocol Additional to the Geneva Conventions of 12 August and relating to the Protection of Victims of International Armed Conflict (Protocol I) 1977, preamble.

²⁹ *Ibid*, art. 12; General Commentary 1987, para 512-521.

³⁰ (n 5), Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field 1949, art. 27.

³¹ Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954.

³² (n 27), art. 53.

the cultural or spiritual heritage of peoples.³³ It also stipulates that such objects shall not be used in support of military efforts or made the object of reprisals.³⁴

iii. Food and Water

The API declares starvation of civilians as a method of warfare unlawful.³⁵ Consequent on this provision, it prohibits the attack, destruction or removal of objects indispensable to the survival of the civilian population.³⁶ In this sense, foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and irrigation works are immune to attack especially for denying the civilian population their sustenance value, irrespective of any motive.³⁷ The above protection does not however extend to such objects used by an adverse party as sustenance solely for its armed forces or used in direct military action.³⁸ Furthermore, such objects shall not be made object of reprisals.³⁹

The API also makes provision for the protection of the natural environment from attacks likely to cause widespread, long term and severe damage.⁴⁰ It includes the use of methods or means of warfare which is expected to cause such damage to the natural environment and thereby prejudice the health or survival of the population. Accordingly, such attacks by way of reprisals are prohibited.⁴¹ For a State like Nigeria that is blessed with a host of natural resources (crude oil, tin, coal and so on), this protection speaks great volume particularly when the protection of critical infrastructures comes to mind.

iv. Dams, Dykes and Nuclear Electrical Generating Stations

The API makes the attack of works or installations containing dangerous forces (such as dams, dykes and nuclear electrical generating stations) unlawful.⁴² This irrespective of whether such objects are military objectives in as much as they cause the release of dangerous forces and thereby causing loss to the civilian population. This protection also extends to other military objectives located at or within the vicinity where such installations are sited.⁴³ It is pertinent to note that this protection is not absolute as it can go into abeyance where such installations (dam, dyke and nuclear engineering station) are employed for significant and direct support to military operations and where such attack is the only feasible way to terminate such support.⁴⁴ It also prohibited for any of such installations to be made an object of reprisals.⁴⁵ Accordingly, it is stipulated that such installations be marked with a special sign consisting of three bright orange circles placed on the same axis for ease of identification.⁴⁶ It is pertinent to add that non-defended localities and demilitarized zones are also immune from attacks.⁴⁷

³³ *Ibid*, para A.

³⁴ *Ibid*, para B and C.

³⁵ *Ibid*, art. 54(1).

³⁶ *Ibid*, art. 54(2).

³⁷ *Ibid*.

³⁸ *Ibid*, art. 54(3)(a) and (b).

³⁹ *Ibid*, art. 54(4).

⁴⁰ *Ibid*, art. 55(2).

⁴¹ (n 25), art. 55(1).

⁴² *Ibid*, art. 56(1).

⁴³ *Ibid*.

⁴⁴ *Ibid*, art. 56(2).

⁴⁵ *Ibid*, 56(4).

⁴⁶ *Ibid*, art. 56(7).

⁴⁷ *Ibid*, art. 59 and 60.

3.2 Legal Framework for Protection of Critical Infrastructure During Non-International Armed Conflicts

The provisions of Common Article 3 of the Geneva Conventions initially governed NIACs. However, there is currently the Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflict (Protocol II)⁴⁸ and the ICRC Customary International Humanitarian Law Rules.⁴⁹

i.) Common Article 3 of the Geneva Conventions 1949

This governs all forms of NIAC ranging from traditional civil wars to internal armed conflicts. Common Article 3 of the Geneva Conventions establishes fundamental rules governing NIAC from which no derogation is permitted.⁵⁰ These provisions are the earliest as far as NIAC is concerned. Though not as detailed as its counterpart IAC provisions, it provides that in conflicts not of an international character, there shall be humane treatment for all persons in enemy hands, without any adverse distinction. It specifically prohibits murder, mutilation, torture, cruel, humiliating and degrading treatment, the taking of hostages and unfair trial. It further requires that the wounded, sick and shipwrecked be collected and cared for. It further vests the ICRC with the right to offer its services to the parties to the conflict. In order to foster general application, it calls on the parties to the conflict to bring all or parts of the Geneva Conventions into force through special agreements. It recognizes that the application of these rules does not affect the legal status of the parties to the conflict.⁵¹

ii. Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflict (Protocol II) 1977

Prior to the adoption of this instrument, Article 3 common to all four Geneva Conventions of 1949⁵² was the only provision, which protected the victims of NIAC. This was however inadequate because it was discovered that since 1945, a whopping 80% of victims of armed conflicts were drawn from NIAC. More compelling was the fact that NIAC are more rampant compared to IAC. It was against this backdrop that the need to extend the essential rules of armed conflict to internal wars arose.⁵³ Accordingly, the following provisions reflect protection of critical infrastructure during NIAC.

a. Medical Units and Transports

Just like other instruments, Protocol II makes provision for the protection of medical units and transports at all times to the effect that both medical units and transports shall not be the object of attack.⁵⁴ It however, notes that such immunity from attack in times of NIAC shall cease they are employed to commit hostile acts as against their humanitarian purpose.

Furthermore, Protocol II sets a condition upon which the protection of medical units and transports would cease. Article 11(2) provides that such protection against attacks afforded to medical units and transports shall only cease where warning has been given and that such warning must be appropriate,

⁴⁸ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of Non-International Armed Conflict (Protocol II) 1977

⁴⁹ ICRC Customary International Humanitarian Law Rules 2005.

⁵⁰ (n 5).

⁵¹ *Ibid.*

⁵² (n 47).

⁵³ *Ibid*, preamble.

⁵⁴ *Ibid*, art. 11(1).

issued within a reasonable time limit and that it must have remained unheeded. This paper contends that the rationale behind this provision is hinged on the need to save as much civilians as possible owing to the high rate of mortality recorded from NIAC in times past.

b. Cultural Objects and Place of Worship

The protection of cultural objects and place of worship during NIAC is guaranteed under Article 16 of Protocol II without prejudice to the provisions of The Hague Convention. In effect, it is prohibited to commit any act of hostility direct against historic monuments, works of art or places of worship, which constitute the cultural or spiritual heritage of the people.⁵⁵ This prohibition further extends to the use of cultural objects, works of art and places of worship in support of military attacks.⁵⁶

c. Works and Installations containing dangerous forces

Protocol II makes provision for the protection of works and installations containing dangerous forces such as dams, dykes and nuclear electrical generating stations. In effect, these installations are not to be made the object of attacks even where they are military objectives and such attacks may cause the release of dangerous forces and occasion severe losses among the civilian population. It is important to state that this provision is not as detailed when compared to that of Protocol I in terms of extent of protection and where such protection shall cease to take effect.⁵⁷

d. International Committee of the Red Cross (ICRC) Customary International Humanitarian Law Rules 2005

Not all states have adopted the Geneva conventions and the additional protocols governing the conduct of armed conflict. This is where the utility of the ICRC Customary IHL Rules comes in. The ICRC Customary IHL Rules serve as the general international law binding all States and, where relevant, all parties to the conflict, without the need for formal adherence.⁵⁸ This is because owing to common state practice, such rules have grown to the status of popular recognition as norms. Furthermore, customary international humanitarian law can help in the interpretation of treaty law as it is a trite principle of law that a treaty must be interpreted in good faith and due regard for all relevant rules of international.⁵⁹ Accordingly, the ICRC was mandated at the 26th International Conference of the Red Cross and Red Crescent in 1995 at Geneva to:

Prepare, with the assistance of experts in international humanitarian law representing various geographical regions and different legal systems, and in consultation with experts from governments and international organisations, a report on customary rules of international humanitarian law applicable in international and non-international armed conflicts, and to circulate the report to States and competent international bodies.⁶⁰

⁵⁵ (n 47), art. 16.

⁵⁶ *Ibid.*

⁵⁷ *Ibid.*, art. 15.

⁵⁸ (n 48), xv.

⁵⁹ (n 48), xv.

⁶⁰ *Ibid.*

It is in view of the above mandate and the aforementioned reasons that the paper considers the ICHRC Customary IHL Rules as forming part of the legal framework for the protection of critical infrastructure during armed conflicts.

a. Medical Personnel and Units

The ICRC Customary IHL Rules gives medical personnel who have been exclusively assigned to medical duties respect and protection in all circumstances.⁶¹ This protection is however not absolute as such medical personnel lose their protection if they commit, outside humanitarian function, acts harmful to the enemy.⁶² This provision gains credence because State practice establishes this rule as a norm of customary international in both IAC and NIAC. This is without forgetting that it has also been widely recognized in international legal instruments as earlier discussed. Furthermore, numerous military manuals of States stipulate the obligation to respect and protect medical personnel and objects.⁶³ National legislation of many States⁶⁴ as well as official statements and reported practice⁶⁵ have

⁶¹ (n 48), Rule 25.

⁶² *Ibid.*

⁶³ Argentina, *Law of War Manual* (1969), ss 3.008–3.010; Argentina, *Law of War Manual* (1989), s 2.10; Argentina, *Law of War Manual* (1989), ss 2.11 and 7.06; Australia, *Commanders' Guide* (1994), ss 614–615; Australia, *Defence Force Manual* (1994), s 963; Belgium, *Law of War Manual* (1983), pp 47–48; Belgium, *Teaching Manual for Soldiers* (undated), 8, 17; Benin, *Military Manual* (1995), 13; Bosnia and Herzegovina, *Military Instructions* (1992), Item 15, s 3; Burkina Faso, *Disciplinary Regulations* (1994), art 35(1); Cameroon, *Disciplinary Regulations* (1975), art 31; Cameroon, *Instructors' Manual* (1992), ss 220–221; Canada, *LOAC Manual* (1999) s 27; Canada, *LOAC Manual* (1999), p. 4-5, s 41; Canada, *LOAC Manual* (1999), p 4-6, s 53; Canada, *LOAC Manual* (1999), p 17-4, s 34; Canada, *Code of Conduct* (2001), Rule 10, ss 2–3, 7 and 9; Colombia, *Circular on Fundamental Rules of IHL* (1992), s 3; Colombia, *Basic Military Manual* (1995), p 29, s 2.a; Congo, *Disciplinary Regulations* (1986), art 32; Croatia, *Commanders' Manual* (1992), ss 7 and 12; Croatia, *Soldiers' Manual* (1992), pp 2 and 3; Germany, *Military Manual* (1992), s 625; Germany, *Military Manual* (1992), s 624 and s 1209; Nigeria, *Manual on the Laws of War* (undated), s 33; Nigeria, *Military Manual* (1994), p. 45; Nigeria, *Soldiers' Code of Conduct* (undated), s 7; Nigeria, *Operational Code of Conduct* (1967), s 4(d); UK, *Military Manual* (1958), ss 346–347 and 350; United Kingdom, *Military Manual* (1958), s 346; United Kingdom, *Military Manual* (1958), s 32; United Kingdom, *LOAC Manual* (1981), s 6 and 9(a); United States of America, *Field Manual* (1956), ss 225–226; United States of America, *Field Manual* (1956), s 227; United States of America, *Air Force Pamphlet* (1976), s 12-2(b); United States of America, *Air Force Pamphlet* (1976), s 15-3(c)(1); United States of America, *Air Force Commander's Handbook* (1980), s 3-2.

⁶⁴ Bangladesh, International Crimes (Tribunal) Act 1973, s 3(2)(e); Colombia, Emblem Decree 1998, art 10; Colombia, Penal Code 2000, art 153; Croatia, Criminal Code 1997, art 159; El Salvador, Code of Military Justice 1934, art 69; Estonia, Penal Code 2001, s 102; Ethiopia, Penal Code 1957, art 283(a); Georgia, Criminal Code 1999, Article 411(2); Ireland, Geneva Conventions Act as amended (1962), Section 4(1) and (4); Italy, Law of War Decree as amended 1938, art 95; Lithuania, Criminal Code as amended 1961, art 337; Nicaragua, Military Penal Code 1996, art 57(2); Poland, Penal Code 1997, art 123(1)(2); Romania, Penal Code 1968, art 358; Spain, Military Criminal Code 1985, art 77(4); Spain, Penal Code 1995, art 612(2); Tajikistan, Criminal Code 1998, art 403(2); Ukraine, Criminal Code 2001, art 414; Venezuela, Code of Military Justice as amended 1998, art 474(3); Venezuela, Code of Military Justice as amended 1998, art 474.

⁶⁵ China, Statement before the General Conference of UNESCO delivered on 25 October 1972, *Selected Documents of the Chinese Delegation to the United Nations*, (Beijing: The People's Press, 1972) 239; Kuwait, Letter dated 16 September 1990 to the UN Secretary-General (UN Doc. S/21777 1990), 1; Kuwait, Statement at the International Conference for the Protection of War Victims, Geneva, 30 August–1 September 1993; United Kingdom, Ministry of Defence, Training Video: The Geneva Conventions, 1986, Report on UK Practice, 1997, Cap 2.7; Report on the Practice of Rwanda, 1997, Replies by army officers to a questionnaire, Cap 2.7; United States of America, Message from the US President transmitting AP II to the US Senate for advice and consent to ratification, (Treaty Doc. 100-2), 29 January 1987, Comment on Article 10; United States of America, Department of State, Diplomatic Note to Iraq, Washington, 19 January 1991, annexed to Letter dated 21 January 1991 to the President of the UN Security Council, 9UN Doc. S/22122) 21 January 1991, Annex I, 2.

reiterated the protection of medical personnel and objects during armed conflicts. The ICRC Customary IHL Rules specifically makes ample provision for the protection of medical units during warfare. In effect, all medical units exclusively assigned to medical purposes must be respected and protected in all circumstances except where they are employed for functions outside their humanitarian functions to commit acts harmful to the enemy.⁶⁶ This protection also extends to medical transports assigned to medical transportation in all circumstances except where such transports are used non-humanitarian purpose to commit acts against the enemy.⁶⁷

b. Cultural Property

The ICRC Customary IHL Rules makes provision for the protection of cultural property in two respects. On one hand, it provides that special care must be taken in military operations to avoid damage to buildings dedicated to religion, art, science, education or charitable purpose and historical monuments except where such buildings are military objectives.⁶⁸ On the other hand, it extends such protection to properties of great importance to the cultural heritage of every people except imperatively required by military necessity.

It is also pertinent to state that the ICRC Customary IHL Rules further prohibits the use of property of great importance to the cultural heritage of every people for purposes, which are likely to expose it to destruction or damage with the exception of where it is of military necessity to so do.⁶⁹ Each party to the conflict is however saddled with the responsibility of protecting cultural property. To this extent, all seizure or destruction or wilful damage done to such institutions as well as any form of theft, pillage or misappropriation of, and any acts of vandalism directed against, property of great importance to the cultural heritage are prohibited.⁷⁰ In terms of movement of cultural property, the occupying power must prevent the illicit export of cultural property from occupied territory and must return illicitly exported property to the competent authorities of the occupied territory.⁷¹

c. Items Indispensable to Survival

The attack, destruction or removal of objects that are indispensable to the survival of the civilian population is prohibited.⁷² These objects include foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies, and irrigation works. There are however to exceptions to this rule. The ICRC Customary IHL Rules refers to the exceptions provided in Protocols I and II to the effect that where such objects are used by a party to the conflict as sustenance solely for members of its armed forces or in case of military necessity, such objects can be attacked. In addition, where the objects are used in support of military action, they may be attacked provided that in no event shall such action occasion the starvation of the civilian population or cause displacement.⁷³

In respect to objects indispensable to the civilian population, it is also stipulated in the ICRC Customary IHL Rules that parties to the conflict must allow and promote rapid and unimpeded passage of

⁶⁶ (n 48), Rule 28.

⁶⁷ (n 48), art. 29.

⁶⁸ *Ibid*, Cap 12, s A, Rule 38;

⁶⁹ *Ibid*, Rule 39.

⁷⁰ *Ibid*, Rule 40(a) and (b)

⁷¹ *Ibid*, Rule 41.

⁷² (n 48), Rule 54.

⁷³ *Ibid*, 192; Additional Protocol I, art. 54.3; Additional Protocol II, art 14.



humanitarian reliefs for civilians in need. It further prescribes that such passage must be impartial in character and organized without any adverse distinction, subject to their right of control.⁷⁴

d. Natural Environment

It is the position of the ICRC Customary IHL Rules that in the conduct of military operations, all feasible precautions must be taken to curtail and in any event, minimize incidental damage to the environment. In this sense, all methods of warfare must be employed with due regard to the protection of the natural environment. This strict rule of engagement does not absolve an erring party to the conflict merely on the ground of lack of scientific certainty as to the effects of its military operations. In other words, ignorance of the consequences arising from the military operations of a party on the environment is no excuse.

This protection upholds the precautionary principle of environmental law, which seeks to anticipate and prevent damage to the environment and to ensure that where there are threats of serious or irreversible damage, lack of scientific certainty shall not be used as a reason to postpone any measures to prevent such damage.⁷⁵

e. Works and Installations containing Dangerous Forces

The ICRC Customary IHL Rules makes provision for the protection of works and installations containing dangerous force like dykes, dams and nuclear electrical generating stations and other installations. Just like other legal instruments, provides that particular care must be taken if such installations are at or within the vicinity of attack in order to prevent the release of dangerous forces thereby causing severe losses among the civilian population.

The ICRC Customary IHL Rules notes that works or facilities falling under the scope of other works of installations could not be agreed upon at the Diplomatic Conference leading to the adoption of the Additional Protocols. In this regard, it opines that such protection should equally apply to other installations such as chemical plants and petroleum refineries.⁷⁶

f. Demilitarized zones and undefended localities

The ICRC Customary IHL Rules prohibits directing an attack against a demilitarized zone agreed upon by the parties to the conflict.⁷⁷ Indeed, State practice establishes this rule as a settled norm of customary international law, which is applicable in both IAC and NIAC. However, this protection ceases when a party to the conflict breaches the agreement establishing the zone.⁷⁸ There is also the protection of non-defended localities and such attacks on such areas or localities is strictly prohibited by the ICRC Customary IHL Rules.⁷⁹ This is hinged on the traditional concept of open town, which is to the effect that such undefended area holds a possibility of civilian habitation and as such ought to be protected

⁷⁴ *Ibid*, Rule 55.

⁷⁵ ICRC, Report on the protection of the environment in time of armed conflict submitted to the UN General Assembly, reprinted in Report of the UN Secretary-General on the protection of the environment in times of armed conflict, UN Doc. A/48/269, 29 July 1993, § 91; Rio Declaration 1992, Para 15.

⁷⁶ (n 48) Vol II, Cap 13, 141-142.

⁷⁷ *Ibid*, Rule 36

⁷⁸ (n 48), Vol. II, Cap. 11, para 105.

⁷⁹ *Ibid*, Rule 37.



from being made an object of attack. The meaning of an undefended locality has been fraught with controversies. It has been described as:

an open or undefended town as one which is so completely undefended from within or without that the enemy may and take possession of it without fighting or incurring casualties. It follows that no town behind the immediate front line can be open or undefended for the attacker must fight his way to it. Any town behind the enemy front line is thus a defended town and is open to ground or other bombardment subject to the limitations imposed on all bombardments, namely, that . . . the latter must be limited to military objectives . . . Thus, the question of whether a town is or is not an open town is distinct from whether it does or does not contain military objectives. A town in the front line with no means of defence, not defended from outside and into which the enemy may enter and of which he may take possession at any time without fighting or incurring casualties, e.g., from crossing unmarked minefields, is undefended even if it contains munitions factories. On the other hand, all defended towns whether situated in the front line or not may be subjected to bombardment.⁸⁰

4.0 An Appraisal of Armed Conflicts in Nigeria

As it concerns the Nigerian experience, the occurrence of armed conflicts has been a recurring event. In fact, Nigeria currently battles with *Boko Haram* insurgency. This part of the paper gives a brief examination of armed conflicts in Nigeria. It is pertinent to note that these armed conflicts are particularly of a non-international character.

The Nigerian Civil War occurred between 1967 and 1970. It broke out because of an attempted secession of the Southeastern provinces of Nigeria (Republic of Biafra). It is reported that an estimated one to three million people of Igbo descent lost their lives.⁸¹ The ongoing Indigenous People of Biafra (IPOB) agitations have also resulted in protracted attacks between armed forces and members of the group leading to the death and displacement of innocent civilians. In the late 1990s, there was the militant insurgency in the South-South region of Nigeria. It was borne out of the fact that the region was underdeveloped despite being the holder of the nation's oil and gas resources. The insurgency however subsided with the introduction of the Amnesty Programme by the Federal Government of Nigeria in 2009.⁸² The ongoing *Boko Haram* insurgency in the North eastern part of Nigeria is orchestrated by two armed groups the: Islamic State in West Africa Province (ISWAP) and *Boko Haram* insurgents.⁸³ Since 2011 *Boko Haram* has conducted armed attacks against civilians, the armed forces and the police. The 2014 kidnap of over 200 Chibok school girls by *Boko Haram* is but one instance of its armed attacks on Nigerians. As it relates to international humanitarian efforts, it is instructive to recall that following negotiations brokered by the ICRC between *Boko Haram* and the Federal Government of Nigeria, 103

⁸⁰ United Kingdom Military Manual 1958, s 290.

⁸¹ CNN, Leader of Biafra breakaway state dies <<http://edition.cnn.com/2011/11/26/world/africa/nigeria-biafra-leader/index.html>> accessed 13 May 2022.

⁸² L Blazebey, Nigeria in the Grips of Armed Conflict and Violence <<http://valdaiclub.com/a/highlights/nigeria-in-the-grips-of-armed-conflict-and-violence>> accessed 17 May 2022.

⁸³ RULAC, Non-International Conflicts in Nigeria <<https://www.rulac.org/browse/conflicts/non-international-armed-conflict-in-nigeria>> accessed 17 May 2022.



school girls were released in 2017.⁸⁴ The others still remain unaccounted for and the spate of *Boko Haram* attacks still continues unabated. Casualties from the ongoing *Boko Haram* insurgency as at 2021 has been reported to be 35,000 persons in the states of Borno, Adamawa and Yobe as a result of one sided violence since 2009.⁸⁵

5.0 National Legal Framework for Tackling Armed Conflicts in Nigeria

This part of the paper analyses legislation aimed at tackling and preventing the occurrence of armed conflicts in Nigeria. The relevant laws considered of utmost importance to the paper are discussed as follows:

5.1.1 Constitution of the Federal Republic of Nigeria, 1999 (as amended)

The CFRN is a supreme legal framework at the national level upon which other laws or policies are based. It is in this sense that the CFRN declares its supremacy over all other statutes that are inconsistent with its provisions, declaring them invalid to the extent of such inconsistency.⁸⁶ The primacy of the CFRN also extends to all authorities and persons in Nigeria.⁸⁷ In relation to the paper, it guarantees for the protection of both civil, political, economic and social rights of citizens. The protection of these rights during times of armed conflicts form the basis of international humanitarian law. Chapter II of the CFRN embodies the Fundamental Objectives and Directive Principles of State Policy and provides for the following rights namely; the right to security and welfare of citizens and participation in government,⁸⁸ and freedom from discrimination.⁸⁹ It further contains the rights of the citizens to economic and social justice predicated on economic empowerment, equality before the law, governance, peace and security.⁹⁰

Chapter IV provides for Fundamental Rights that are justiciable as well as being civil and political rights. These rights include the right to: life,⁹¹ right to human dignity,⁹² right to a fair hearing,⁹³ right to personal liberty,⁹⁴ right to privacy and family life,⁹⁵ freedom of thought, conscience and religion,⁹⁶

⁸⁴ P Obaji Jr., Inside the Boko Haram Deal that Brought Back more than 80 Chibok Girls <<https://www.thedailybeast.com/inside-the-boko-haram-deal-that-brought-back-more-tham-90-chibok-girls>> accessed 15 May 2022.

⁸⁵ United Nations Development Programme, Assessing the Impact of Conflict on Development in North-east Nigeria (2021) <<https://www1.undp.org/content/dam/nigeria/docs/SDGs/Assessing%20the%20Impact%20of%20Conflict%20on%20Development%20in%20ONE%20Nigeria%20-%20The%20Report.pdf>> accessed 18 May 2022.

⁸⁶ Cap C23 LFN 2004 (as amended), s.1(3); *Ajuwon and Others v Governor of Oyo State* (2021) LPELR (Pt. 55339) 45; *Okon and Others v A-G., Ebonyi State* (2021) LPELR (Pt. 54988) 22-23.

⁸⁷ *Ibid*, s.1(1).

⁸⁸ *Ibid*, s.14.

⁸⁹ *Ibid*, s.15.

⁹⁰ *Ibid* ss. 16, 17 and 18.

⁹¹ *Ibid*, s.33.

⁹² *Ibid*, s.34; *A-G., Kebbi State v Jokolo* (2020) 4 NWLR (Pt. 17115) 566; *Eze v IGP* (2017) 4 NWLR (Pt.1554) 44.

⁹³ (n 85), s.36.

⁹⁴ *Ibid*, s.35.

⁹⁵ *Ibid*, s.37.

⁹⁶ *Ibid*, s.38.

freedom of expression,⁹⁷ freedom of association,⁹⁸ movement,⁹⁹ freedom from discrimination,¹⁰⁰ acquire immovable property¹⁰¹ and acquire movable property.¹⁰²

5.1.2 Nigeria Armed Forces Act

This legislation¹⁰³ was enacted to provide for the command, maintenance and administration of the Armed Forces of Nigeria.¹⁰⁴ The Armed Forces is comprised of the Nigerian Army, Nigerian Navy and the Nigerian Air Force.¹⁰⁵ In relation to the paper, the armed forces is saddled with the responsibility of defending the Federal Republic of Nigeria by land, sea, and air and with such other duties as the National Assembly may direct.¹⁰⁶

The Nigerian Navy is further charged with: enforcing and assisting in coordinating the enforcement of all customs, laws including anti-bunkering, fishery and immigration laws of Nigeria at sea; enforcing and assisting in the coordination of international maritime laws ascribed or acceded to by Nigeria; enforcing safety regulations in the territorial waters and the Exclusive Economic Zone of Nigeria. On the part of the Nigerian Air Force, it is vested with the duty of: enforcing and assisting in coordinating the enforcement of international law, conventions, practices and customs ascribed or acceded to by Nigeria relating to aerial or space activities in the Nigerian air space; enforcing national and international air laws ascribed or acceded to by Nigeria; delineating and coordinating of all aerial surveys and security zones of the Nigerian air space.¹⁰⁷ Armed conflicts takes place on the land, air and sea.

5.1.3 Terrorism (Prevention) Act

The Terrorism (Prevention) Act¹⁰⁸ prohibits all acts of terrorism and financing of same. According to the law, acts of terrorism includes any act done with malice, afterthought which may: seriously damage a country or an international organization; unduly compel a government or international organization to perform or abstain from doing any act; seriously destabilize or destroy the fundamental political, constitutional, economic or social structures of a country or an international organization; seriously intimidate a population; the release of dangerous substance or causing of fire, explosions or floods, the effect of which is to endanger human life; and so on.¹⁰⁹ The offence of terrorism applies to a person or body corporate as well as acts carried out both in and outside Nigeria thereby relating to both IACs and NIACs. This is because the national integrity and sovereignty is often affected owing to such terrorist

⁹⁷ *Ibid*, s.39.

⁹⁸ *Ibid*, s.40.

⁹⁹ *Ibid*, s.41.

¹⁰⁰ *Ibid*, s.42.

¹⁰¹ *Ibid*, s.43.

¹⁰² *Ibid*, s.44.

¹⁰³ Armed Forces Act 1994, Cap A20, LFN 2004

¹⁰⁴ *Ibid*, long title.

¹⁰⁵ *Ibid*, s.1(1).

¹⁰⁶ *Ibid*, s.1(3).

¹⁰⁷ (n 102), s.1(4) (a) and (b).

¹⁰⁸ Terrorism (Prevention) Act 2011.

¹⁰⁹ *Ibid*, s.1(2) (a) and (b).

attacks/offences.¹¹⁰ This is more so given its amendment to provide for extraterritorial application and strengthening terrorist financing offences; and other related matters.¹¹¹

5.1.4 Money Laundering (Prevention and Prohibition) Act

This enactment seeks to provide a comprehensive legal and institutional framework for the protection and prevention of money laundering in Nigeria, establish the Special Control Unit under the Economic and Financial Crimes Commission and other related matters.¹¹² In relation to the paper, failure to report suspicious transactions is criminalized under the Act as failure of a financial institution to report amounts to an offence and liable upon conviction to a fine of N1,000,000 for each day the offence continues.¹¹³ In effect, the provisions of this legislation is relevant to the paper because such a provision forms a preventive measure against the sponsoring of armed conflicts by individuals. It is essentially for this reason that the Act makes it mandatory to report to the Unit, Central Bank of Nigeria and Securities and Exchange Commission, any international transfer or transportation of funds, securities and cash in excess of \$10,000 or its equivalent. Such report is expected to contain particulars of the transaction, sender and receiver.¹¹⁴ The paper contends that such report or declaration is important to enable security agencies investigate the source and purpose of funds, thereby serving as a check against individuals or organizations involved in the financing of non-state actors in respect of IACs and NIACs.

5.1.5 National Orientation Agency Act 1993

The National Orientation Agency Act (NOA Act)¹¹⁵ is saddled with the duty to: re-orientate and encourage Nigerians to take part actively and freely in discussions and decisions affecting their collective welfare. To this end, its objectives include to: ensure that Federal Government programmes and policies are better understood by the general public; mobilise favourable opinions for such programmes and policies; encourage informal education through public enlightenment activities and publications; establish national framework for educating, orientating, and indoctrinating Nigerians towards developing socially desirable attitudes, values and culture which will project individual national pride and position national image for Nigerians, and so on.¹¹⁶ The NOA Act forms an important legislation for the paper because it aims to make Nigerians (state and non-state actors) to more conscious and informed about the rules or engagement during armed conflicts.

6.0 Unpacking the Major Challenges of the Extant Legal Framework for Protection of Critical Infrastructure During Armed Conflict

The extant legal framework for the protection of critical infrastructure during armed conflict is not perfect. More so, the evolving nature of the world especially with technological advancements and innovations present possibilities and capabilities, which the framers of relevant instruments did not envisage. This part of the paper examines these challenges.

¹¹⁰ *Ibid*, s.1(2) (iii).

¹¹¹ Terrorism (Prevention) (Amendment) Act, 2013.

¹¹² Money Laundering (Prevention and Prohibition) Act, 2022.

¹¹³ (n 117), s.7 (1), (2) and (10).

¹¹⁴ *Ibid*, s.3(1) and (2).

¹¹⁵ Cap N64 LFN 2004.

¹¹⁶ *Ibid*, s.4(a)-(m).



6.1 Lack of Respect for Extant Legal Framework

One major challenge militating the effectiveness of the IHL framework is the reluctance of states to adhere to treaty provisions particularly in instances of NIAC. This is further compounded by the complex criteria for triggering the application of IHL to cases of NIAC. The level or intensity of such attacks and the level of coordination as requirements for the application of IHL are vague and does not encourage compliance on the part of States.

Some States continue to deny that there are NIACs occurring within their territory and therefore that IHL applies, rendering it difficult or impossible a dialogue with the ICRC in respect of their obligations under IHL. Certain governments have also been reluctant to acknowledge the need for the ICRC and other bodies to engage non-state armed groups on issues relating to their security and access to victims, as well as to disseminate IHL and humanitarian principles, because the armed groups in question are terrorist organizations.

6.2 Emergence of Cyber Warfare

Technological advancements in war creates difficulty in determining responsibility for violation as well as in complying with the methods of warfare. Reconciling the emergence of the cyberspace as a new arena of warfare with the extant legal framework governing armed conflict is challenging as they do not provide for current realities and possibilities. The emergence of cyber warfare creates difficulties in implementing IHL especially in identifying parties to the conflict (especially the enemy). There is no express IHL provision forbidding such warfare. Remote controlled weapons pose challenges for IHL since these weapons can cause incidental civilian casualties and damage. Likewise, automated weapon system may not make a distinction between the combatant and the civilian. Moreover, it is not clear how these weapons could assess the incidental loss of civilian lives, injury to civilians or damage to civilian objects, and therefore comply with the principle of proportionality. In addition, the determination of which point or extent a cyber-attack becomes an armed conflict still poses a challenge.

6.3 Disparity in NIAC and IAC provisions

NIACs differ enormously from IAC. Despite the frequency of occurrence, NIACs are not regulated in sufficient detail by treaty law. However, some states plagued by internal violence have declined to become party to the Additional Protocol II. NIAC requires equal attention (if not more) in international legal instruments as they account for over 80 percent of victims of armed conflicts. Minimum humanitarian standards must therefore be maintained during NIACs in every circumstance even if there is confusion regarding the exact status of the violence.

There has also been an emergence of multinational NIACs in which two or more national forces may be fighting together against one or more organized group within the territory of the host state. Due to lack of precision in defining NIACs, IHL cannot be applied in a warlike situation in which non-state actors are involved. Furthermore, this proliferation of non-State-armed groups makes it increasingly challenging to identify which armed group can be considered a party to a particular armed conflict.



7.0 Conclusion

The extant legal framework for the protection of critical infrastructure during armed conflict is inadequate especially as it concerns NIACs. There is the urgent need to devote more attention to the protection given to civilians and critical infrastructure during NIACs. Furthermore, there is the need to establish complementary rules that takes into cognizance recent scientific and technological advancements particularly concerns the emergence of cyber warfare in armed conflicts. The attendant ease and speed of damage to critical infrastructure through cyber-attacks reflects the urgency required for the formulation of rules to guide such engagement.

8.0 Recommendations

1. The ICRC must urgently explore avenues to build consensus on the interpretation of the existing IHL rules and if necessary on the development of complementary rules that afford effective protection to critical infrastructure especially in respect to cyber operations.
2. States must become more cooperative with international humanitarian bodies in terms of fact finding support and investigations into armed conflicts. This cooperation should extend to compliance with rules governing NIACs in their respective states.
3. States must adopt a more exhaustive and detailed instrument for the protection of civilians and critical infrastructure during NAICs.
4. Adequate engagement with Non-State armed groups.
5. Regular orientation and awareness raising by the international bodies like the ICRC as well as national bodies (NOA in the case of Nigeria).