

# Autonomous Weapon System: Benefits, Challenges and way Forward

.. Introduction

.. Definition of Autonomous Weapon System

.. Benefits of Autonomous Weapon System

## 3.1. Enhancement of Military Capabilities

~~3.1.1.~~ 3.1.1. Acting as a Force Multiplier

3.1.2. Expanding Battle field

3.1.3. Effective Striking Strength

## 3.2. Effective Operational Powers

3.2.1. Fast and Effective Decision

3.2.2. Easy Control System

## 3.3. Economic Advantages

3.3.1. Low Operating Cost

3.3.2. Less Infrastructural Damages

## 3.4. Less Safety Concerns

3.4.1. ~~Less~~ Soldier Deaths

3.4.2. Lower Pilot Deaths

# 1. Challenges of Autonomous Weapon System

## 4.1. Ethical and Legal Problems

4.1.1. Uninvolvement of Human

4.1.2. Lack of Accountability and Responsibility

4.1.3. Lack of Predictability

## 4.2. Humanitarian Concerns

4.2.1. Loss of life

4.2.2. Increase in Vulnerabilities of Population

4.2.3. Attacking Wrong Targets

## 4.3. Unanticipated Circumstances

4.3.1. System Failures

4.3.2. Adversarial Hacking

4.3.3. Detraction from Environment

## 4.4. Political Fragmentation

## 4.5. Access to Terrorists



## 5. Solution to the Threats of Autonomous Weapons

5.1. Prohibition and Regulation of AWS

5.2. Establishment of New International Rules

5.3. Adopting of New Legal Bindings

5.4. Complying with International Humanitarian Law

## 6. Conclusion

The emergence of Autonomous Weapon System (AWS) marks a significant shift in global warfare capabilities by offering both potential ~~challenges~~ benefits and significant challenges. Autonomous

Weapon system refers to the weapons that use ~~for~~ Artificial Intelligence (AI) to identify, select and kill target without human intervention.

International Committee of Red Crescent (ICRC)

defines Autonomous Weapon System as, "Any weapon system with autonomy in its critical function, can select and attack target without human involvement." However, the benefits

of Autonomous Weapon System are several including enhancement of military capabilities, effective operation powers, economic advantages and less safety concerns. Despite ~~of~~ these benefits

in warfare, these weapons pose significant challenges including ethical and legal problems, humanitarian concerns, unanticipated circumstances, political fragmentation and access to terrorists. While implementation of effective policies such as prohibition and regulation of Autonomous Weapon system, establishment of new International rules, adoption of new legal bindings, ~~and~~ can reduce the risk associated with AWS. In short, Autonomous Weapon System is a Artificial Intelligence (AI) run weapon system which has both the benefits and challenges.