Autonomous Weapons Systems and the Rights of Victims: Compensation Claims under Norwegian Law for Violations Committed through the Use of Autonomous Weapons

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ABSTRACT
Ensuring accountability for violations of international law is arguably one of the most important challenges posed by autonomous weapons systems (AWS). This article examines ways in which violations committed through the use of AWS could challenge the rights of victims to reparation for harm suffered. It finds that their use would pose problems in securing the rights of victims under domestic Norwegian law outside the scope of human rights law, where the standard of negligence for State liability apply. The article argues that the existing legal framework could be interpreted in a way as to secure strict liability for reparation in cases of violations of international humanitarian law. Furthermore, the use of AWS would introduce new challenges in proving the facts of the violation. It is argued that the duty to investigate alleged violations of human rights law provide a workable general framework to address these concerns.

Keywords
Human rights, humanitarian law, autonomous weapons, State responsibility, reparation

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1. INTRODUCTION

The prospects of a future where autonomous weapons systems (AWS) play a role on the battlefield have spawned much debate in recent years. In the aftermath of Human Rights Watch’s report on the subject in 2013, the State Parties to the United Nations (UN) Convention on Certain Conventional Weapons decided to examine the issue in a series of yearly expert meetings, with engagement from State and non-State actors. Industrialised states, including Norway, have expressed their concern about weapons with increasing levels of autonomy, but remain cautious with taking a position on the way forward. This cautiousness by Norway, a small yet affluent NATO member with borders to Russia, does not come as a surprise as it is by exploiting military technological advancements that developed countries ensure an asymmetry of military power. This strategic position is reflected in reports of the Norwegian Defence Research Establishment – chief adviser on defence-related science and technology to the Ministry of Defence and the Norwegian Armed Forces’ military organisation – advising a continued Norwegian commitment to remotely controlled, automated and autonomous technologies.

The question that this article seeks to answer is the following: How would the use of autonomous weapons systems influence victims’ right to reparation under domestic Norwegian law for breaches of international human rights law (IHRL) and/or humanitarian law (IHL) during international military operations? Since the Second World War, the vast majority of operations by Norwegian armed forces have taken place outside Norwegian territory. Because of this historical reality, this article limits its scope to military operations outside the territory of Norway. The nature of military operations has varied from observer missions, to peacekeeping missions and law enforcement activities, to instances where Norway is party to the armed conflict. Although this admittedly covers a broad array of contexts, the present author does not consider it necessary to specify the mandate of

the activities of the armed forces further. Instead, for the purposes of answering the above stated question, the article presupposes that (1) Norwegian armed forces have deployed autonomous weapons systems during a military operation (2) these weapons systems have been used in the process of selecting and/or attacking a target (3) the resulting use of force amounts to an arbitrary deprivation of life of civilians and/or a violation of humanitarian law entailing the death of civilians. Lastly, this paper’s main focus is on State responsibility. The liability of developers is therefore not specifically dealt with.

Debates on the challenges posed by the introduction of AWS into the battlefield have devoted considerable space to concerns about the consequences for international legal accountability mechanisms. Existing literature has examined the topic of civil liability often as an alternative to individual criminal liability, and not as a means of implementing the right of victims to reparation for harm suffered. In many cases, the discussion is opened and closed with a recap of US tort law. This article seeks to disconnect the subject from notions of sub-optimal forms of criminal liability and instead to situate it as a right to substantive remedies for victims under international IHRL and IHL. This is in line with the general view that obligations of States to bring perpetrators of serious international crimes to justice and to provide compensation to victims are complementary and cannot be substituted for one another.

The article argues that the use of AWS will introduce new legal challenges for the fulfilment of the rights of victims to receive compensation in accordance with international humanitarian law, specifically concerning the grounds for holding the State liable and for ascertaining the fact of the breach. By taking the Norwegian legal system as a case study, the article hopes also to contribute in clarifying questions concerning the civil liability of the State for violations committed during international military operations, a topic which has not been extensively examined in Norwegian legal literature.

Section 2 of this article is devoted to understanding the concept of ‘autonomous weapons system’. In section 3, the article gives a summary of some of the main concerns relating to the effects of AWS to accountability mechanisms. Section 4 examines how domestic Norwegian tort law can respond to protect the rights of victims facing the use of AWS in international military operations. In section 5, some related questions concerning the burden and standards of proof and of causality are examined. Conclusions are included in Section 6.


9. As Human Rights Watch and International Human Rights Clinic, ibid 27, curiously put it: ‘If victims could not effectively make use of US. civil accountability mechanisms, it is unlikely that they would be more successful in other jurisdictions’.

At the outset, it should be noted that there are no constraints in Norwegian law specifically barring victims from seeking compensation before Norwegian courts for violations committed by Norwegian armed forces in military operations abroad. Any claim for compensation under Norwegian law must satisfy three basic requirements: There must be a damage to a protected interest, a ground for holding the perpetrator liable (culpa or strict liability), and a causal relationship between the former two conditions that is not too remote.11

2. AUTONOMOUS WEAPONS SYSTEMS

While there is no commonly agreed legal definition of what an autonomous weapons system is,12 there is no shortage of attempts to provide a workable definition. In a crude conception, they are often distinguished from remotely controlled and automatic (semi-autonomous) weapons technologies based on the degree of human intervention that is required for their use. Remotely operated systems are operated by a human operator, a typical example being the use of unmanned remotely controlled aircraft (e.g. drones). Automated (or semi-autonomous) systems may operate without a human, yet remain within the sphere of human control as they act according to pre-programmed specifications. These systems necessitate a human ‘in the loop’ of decision-making.13 More elaborate conceptions favour models based on ‘levels’ or ‘scales’ of autonomy. These models permit distinguishing the degree of autonomous capabilities of a system or of parts of its functions. Fully autonomous systems are often conceived to be able to observe, orient, decide and act without human intervention, rendering the human unnecessary for task completion.14 In Human Rights Watch’s distinction, the human is ‘out of the loop’ of decision-making.15 Some have argued that variations of retaining the ‘human on the loop’,16 with oversight or in real-time, may be at risk of providing little safeguard against abuse because of the speed with which the systems will operate, or that it will be unwanted because of the risk of enemy interception of communications between the human and the overseer.17

13. Docherty (n 2) 2.
15. Docherty (n 2) 2.
16. ibid.
The autonomous components of a system may be limited to parts of the functions of the platform. Not all autonomous functions are relevant in examining problematic legal aspects of the systems. This is reflected in the much-cited US Department of Defence (DoD) Directive 3000.09, according to which an autonomous weapon is:

A weapon system that, once activated, can select and engage targets without further intervention by a human operator. This includes human-supervised autonomous weapon systems that are designed to allow human operators to override operation of the weapon system, but can select and engage targets without further human input after activation.

Under the directive, a system that has an autonomous function, but where the function concerns other aspects of the system than targeting and engaging, will not be an autonomous weapon. This is in line with the understanding adopted by the ICRC. The UK definition, in contrast, adopts a more general approach. Paraphrased, it focuses on the capability of the system to understand intent and direction, perceive its environment and act in order to achieve a desired state without human oversight or control. The UK approach is broader than the US definition, and encompasses functions that would not necessarily be problematic from the perspective of the legal rights of victims. In the following, the autonomous functions of selecting and engaging targets will therefore be the main focus.

3. ACCOUNTABILITY CONCERNS

The problem of accountability for breaches of international law has been at the heart of the debate on autonomous weapons systems, some considering it ‘one of the most important challenges’. A major reason for this is the potential that AWS will substitute one of the basic roles of humans in warfare: deciding on the selection and engagement of military targets. The consequence, argued by Human Rights Watch, could be that there would be no way of ascribing individual responsibility outside a weakened command responsibility. Others argue that the removal of control of humans ‘does not mean that no human is responsible for the actions of the autonomous weapon system’. Facing the uncertainty of applicability of the law to operators and commanders, some have directed their attention

20. ICRC (n 18) 71.
23. Human Rights Watch and International Human Rights Clinic (n 8) 25. For a similar view, see ibid 1405-1409.
to the role of the developer based on the notion that with increased levels of autonomy, the control over the weapon is \emph{de facto} exercised by the developer.\footnote{Tim McFarland and Tim McCormack, ‘Mind the Gap: Can Developers of Autonomous Weapons Systems be Liable for War Crimes?’ (2014) 90 International Law Studies 361, 376.} In his analysis, Hin-Yan Liu groups this strand of concerns and coins them as conceptual, because they are based on the premise that responsibility is inherently attached to the functions and responsibilities that individuals have in virtue of their roles (as for example operator, commander or developer). In this sense, there may thus be an accountability gap because the AWS will take over a role previously held by individuals. Closing the gap may then entail an over-extension of existing role responsibilities.\footnote{Hin-Yan Liu, ‘Redefining responsibility: differentiating two types of responsibility issues raised by autonomous weapons systems’, in Nehal Bhuta and others (eds), Autonomous Weapons Systems: Law, Ethics, Policy (Cambridge University Press 2016) 325-344, 341.}

Another strand of concerns relates to the specific characteristics of the technology. This includes the potential difficulty of establishing the facts of violations \emph{ex post}, the difficulty in foreseeing how the AWS will behave in real-life situations, and an increased complexity in establishing responsibility based on the multitude of actors involved and the development of the weapons system.\footnote{Wagner (n 22) 1408-1409.} Again, borrowing from Hin-Yan Liu, these concerns are circumstantial in that they depend on ‘practical technological capabilities and how these are deployed [...]. If, however, technological advances enable accurate predictions of AWS behaviour, then the objections to ascribing responsibility for these consequences to the programmer and commander will lose force’.\footnote{Liu (n 26) 335.}

4. CULPA OR STRICT LIABILITY FOR THE STATE?

4.1 THE NORWEGIAN LEGAL SYSTEM

The Norwegian legal system is of a civil law tradition with a dualist approach to international law.\footnote{Rt. 2000 p. 1811, 1831-1832.} Human rights treaties are to a large extent incorporated through the Human Rights Act of 1999,\footnote{Act no. 30/1999, with a list of incorporated instruments in section 2.} which includes a ‘conflict of norms’ rule in section 3 by which human rights are given priority except in the case of conflict with norms of constitutional rank. In a 2014 amendment, the Constitution incorporated a separate chapter on human rights (chapter E), which encompasses a general obligation for the State to respect and secure human rights (section 92) and several reiterations of international legal obligations, including the right to life in current section 93.\footnote{Kongerike Norges Grunnlov, adopted 17 May 1814.} For those provisions that overlap with their international treaty counterparts, the question in practice will be whether the constitutional protection goes beyond the minimum level of protection afforded by human rights treaty standards. A consequence of the dualistic approach is that non-incorporated international obligations have no direct effect in domestic Norwegian law. Their relation-
ship with the domestic legal system is instead determined by the interpretative principle of presumption of harmony with international law, whereby relevant domestic rules are to be interpreted so that they conform to international law. Although consequential, the principle is limited to apply in cases where there is no conflict of norms (in the strict sense) between domestic and international law.32

Compared to human rights law, the incorporation of humanitarian law is far more limited: breaches by the armed forces of rules in the Geneva Conventions of 1949 and the two additional protocols of 1977, which are aimed at protecting people or property, are punishable under the military criminal code.33 Thus, as far as the rights of victims are protected by international law vis-à-vis the State under IHL and IHRL, they will potentially be regulated domestically by two different sets of rules. Victims’ claims for compensation under domestic law can therefore be broken down into the two following scenarios: breaches of international obligations where the right to compensation is incorporated into domestic law, and breaches of international obligations where the right to compensation is not incorporated into domestic law.

4.2 INCORPORATED RIGHTS – STRICT STATE LIABILITY

A right to reparation is supported by clear and longstanding practice under human rights instruments as an element of the duty to respect and secure human rights. A general requirement to compensate victims for harm suffered flows, inter alia, from the International Covenant on Civil and Political Rights (ICCPR),34 and the European Convention of Human Rights (ECHR). Under the ECHR, the European Court of Human Rights (ECtHR) has long held that ‘where a right with as fundamental an importance as the right to life or the prohibition against torture, inhuman and degrading treatment is at stake, Article 13 requires … the payment of compensation where appropriate’.35 These treaties establish a form of strict liability for the State to provide compensation following a violation, in the sense that the duty to compensate is not conditioned on negligence on the part of the State.

Under Norwegian law, the ‘conflict of norms’ rule in the Human Rights Act section 3 gives primacy to the human rights obligation to compensate the loss of the victim in cases where there is no ground in domestic law to provide compensation. This is reflected in a Supreme Court case of 2013 that concerned compensation based on the State’s failure to take measures to prevent the harassment of a woman by her former partner. The District Court, while finding a violation of ECHR Arts. 3 and 8, had rejected the compensation claim based on the assessment that the authorities had implemented every measure that reasonably could be expected. The Supreme Court however, dispensed with any evaluation on the traditional conditions for liability. Instead, the Court held the State liable to

33. Militær straffelov adopted 22 May 1902 no. 13, section 108.
35. Z and Others v the United Kingdom [GC], Application no 29392/95, § 109, ECHR 2001-V. See also Aksoy v Turkey, Application no 21987/93, § 98, ECHR 1996-VI.
pay compensation based on the finding that there had been a breach of the convention. Following this case, Norwegian law is interpreted to include a form of strict liability for violations of the incorporated human rights instruments that impose a duty to provide substantive remedies in the form of compensation.

A question will then be to what extent human rights treaty standards apply to the conduct of Norwegian forces during international military operations abroad. In answering, one may distinguish between the following two scenarios: first, situations where the international human rights instruments apply extraterritorially, and second, situations outside the scope of international human rights treaty instruments. This section will sketch out the first, while the second situation is covered in section 4.3.

The scope of application of human rights instruments is limited by the notion of State jurisdiction. The practice of human rights institutions over time has resulted in an expansive approach, giving these instruments extraterritorial effect. As expressed by the ECtHR, the treaties ‘cannot be interpreted so as to allow a State party to perpetrate violations of the Convention on the territory of another State, which it could not perpetrate on its own territory’.

Extraterritoriality has been conceptualised based on spatial and personal notions of jurisdiction. Under the spatial notion, jurisdiction may extend beyond the territory of the State to situations where the State exercises effective control over an area. The personal model is conceived to require State agent authority or control over an individual. Recent practice by the ECtHR suggests a relaxation of criteria for characterising a situation within the scope of the personal model. The most notable example to date is the Jaloud case, where the Court held that a car passing through a checkpoint under the command of a Netherlands Royal Army officer was sufficient to establish the authority and control of the Netherlands in the case. Beyond these two approaches, a third model of extraterritoriality has been put forward by Marko Milanovic based on a distinction between the negative obligation to ‘respect’ and positive obligations to ‘secure’ human rights. In short, he advocates for the obligations of the State to respect and secure human rights to be dependent on the ability of the State to comply with the human rights standards. Consequently, while the negative duty to respect human rights will apply in most circumstances outside the

37. See e.g. ECHR Article 1 and ICCPR Article 1(1). As a main rule this implies a territorial limitation, see Legal Consequences of the Construction of a Wall (Advisory Opinion) [2004] ICJ Rep 136, § 109, Al-Skeini and Others v the United Kingdom [GC], Application no 55721/07, § 130, ECHR 2011.
41. HRC (n 34) § 10; Al-Skeini and Others v the United Kingdom (n 37) §§ 138-140 and 142; Legal Consequences of the Construction of a Wall (Advisory Opinion) (n 37) § 112.
42. Jaloud v the Netherlands [GC], Application no 47708/08, § 152, ECHR 2014.
State’s territory, the positive duty to secure human rights will be more restricted insofar as it presupposes a higher level of control over the foreign territory.43

By contrast, international humanitarian law applies without geographical limitations in armed conflict situations.44 When both regimes apply in the given circumstances, humanitarian law is *lex specialis*.45 This, however, does not imply the complete suspension of international human rights law. The regimes are regarded as *complementary* and humanitarian law must therefore be interpreted in light of relevant human rights obligations.46 The relationship between the two regimes is of importance to the rights of victims in two respects. First, in that IHRL must be interpreted narrowly insofar as humanitarian law permits the interference.47 The threshold for what constitutes a breach of IHRL is determined by reference to IHL. This can be inferred from ECHR Article 15, under which derogations from Article 2 are permitted insofar as they are legitimate under IHL. This is also the backdrop for the position of the African Commission on Human and Peoples’ Rights: ‘Any violation of international humanitarian law resulting in death, including war crimes, will be an arbitrary deprivation of life.’48 Second, *lex specialis* as a conflict of norms principle does not exclude the application of human rights norms in the absence of conflict between norms of IHL and IHRL. As there is no conflicting rule under IHL excluding the application of the right of substantive remedies for victims, these rules apply also for human rights violations in the context of armed conflicts.

In sum, strict liability under domestic law applies for human rights violations committed by the State through the deployment of AWS abroad, potentially also within a number of armed conflict situations provided that the State can be held to exercise jurisdiction in the particular case.

44. See Common Article 2 to the Geneva Conventions of 12 August 1949, Protocol I Additional to the Geneva Conventions of 12 August 1949, 8 June 1977, Article 1 (3) and Protocol II Additional to the Geneva Conventions of 12 August 1949, 8 June 1977, Article 1. On the threshold for armed conflicts to exist, see in particular Prosecutor v Tadić (Decision on the defence motion for interlocutory appeal on jurisdiction) ICTY-94-1-A (2 October 1995) § 70.
48. ACHPR, General Comment 3 (n 46) § 32. This has been implicitly confirmed by the ICI, see ibid § 25.
4.3 NON-INCORPORATED RIGHTS – LIABILITY FOR VIOLATIONS OF HUMANITARIAN LAW

4.3.1 INTRODUCTION

Notwithstanding the expansive development of the scope of human rights treaties, there remain situations where they arguably will not apply. The question then is whether there is an obligation under international law to provide reparations to victims. If so, the next question is how this right is dealt with under domestic Norwegian law.49

4.3.2 INDIVIDUAL REPARATIONS UNDER HUMANITARIAN LAW

Under the international law on State responsibility, States have an obligation to make reparations in the case of internationally wrongful acts.50 This can take the form of restitution, compensation or satisfaction.51 The same obligation applies under IHL, under treaty and customary international law.52 Only States have traditionally been held to be entitled to reparation in case violations of international law.53 Whether this entitlement under IHL encompasses individuals as well as the injured State has been argued to be controversial.54 As early as 1987 the commentary to Article 91 to Protocol I Additional to the Geneva Conventions foreshadowed that the obligation enshrined could be owed to individuals, identifying an ‘emerging tendency to recognise the exercise of rights by individuals’.55 In 1988 work began on the Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law.56 The resolution on the Basic Principles was passed without a vote by the UN General Assembly in 2005, and purports to be descriptive of existing international legal obligations.57 The Basic Principles lists the same rights of victims irrespective of the regime applicable, reflecting a harmonisation of the law of reparations under both IHRL and IHL. An individual right to reparation has also been

49. Under domestic law, the findings would arguably be the same in respect of customary human rights law.
51. International Law Commission, ibid, Articles 35-37.
53. The customary international legal rule on diplomatic protection is an expression of this principle, see for example Case Concerning the Mavrommatis Palestine Concessions (Greece v UK) PCIJ Rep Series A No 2, 12.
57. ibid, preamble.
confirmed by the International Court of Justice (ICJ). In his dissenting opinion in the *Jurisdictional Immunities* case, Judge Cançado Trindade, after giving a detailed examination of the question, concluded that ‘recent developments go beyond the strict and traditional inter-State dimension, in establishing the individuals’ right to reparation as victims of grave violations of human rights and of international humanitarian law’, suggesting a convergence in both regimes regarding the question also of compensation. This was not directly disputed by the majority, although it voiced concerns about the implementation of the norm. In sum, there is a strong claim that under international humanitarian law victims of violations have an individual right to reparation, encompassing the right to compensation. Notwithstanding the multiple different possibilities on how to implement such a right, it can ultimately entail a duty to make such remedies available in the national legal order.

Under the general law on State responsibility, compensation covers ‘any damage, whether material or moral, caused by the internationally wrongful act of a State’. The final determination must be based on weighing and balancing procedure: ‘Compensation should be provided … as appropriate and proportional to the gravity of the violation and the circumstances of each case, resulting from … serious violations of international humanitarian law.’ As mentioned in section 4.2 above, the right to compensation is not preconditioned on any notion on fault in the commission of the violation by the State.

4.3.3 COMPENSATION CLAIMS UNDER DOMESTIC LAW FOR VIOLATIONS OF INTERNATIONAL HUMANITARIAN LAW

In 1946, the Norwegian Supreme Court decided on whether the State was liable for damage caused by Norwegian forces during the Second World War. A factory bridge was sabotaged by Norwegian forces during an operation to halt advancing German troops, causing damage to the factory owner. The Supreme Court concluded that the acts were legal as a measure to defend the sovereignty of the nation and that the State therefore was not under a duty to compensate the loss of the citizen. From this and other similar cases post-Second World War, it has been held that the State will not be liable for acts that comply with IHL, but that it may be liable for acts that violate IHL.

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59. *Jurisdictional Immunities of the State (Germany v Italy: Greece intervening)* (Judgment) [2012] ICJ Rep 179, Dissenting opinion of Judge Cançado Trindade, § 250.

60. ibid (Judgment) §§ 98-104.


62. ILA (n 58) Article 13.

63. International Law Commission (n 50) Article 31(2).

64. UNGA, *Basic Principles* (n 56) no 20. See also ACHPR, General Comment 3 (n 46) § 19.


A question, then, is whether a breach of IHL is also sufficient for the State to be liable for reparations under domestic Norwegian law. As of yet, there is no authoritative answer in case law. Based on an analogy to the status of human rights violations prior to the entering into force of the Human Rights Act,67 one should assume that the regular conditions in Norwegian tort law apply, interpreted in light of the presumption of harmony detailed above in section 4.1. This would mean that, in a situation of lack of alternative grounds for liability, the State would be liable to pay compensation in the case of \textit{culpa} in the commission of violations by its armed forces.

Responsibility may first be based on the negligent acts of the State itself.68 This so-called organ liability requires negligence in the top management of the organisation.69 This is satisfied in case of violations attributable to the Minister of Defence, but possibly also when it is attributable only to the leadership of the armed forces.

Second, responsibility could be based on the vicarious liability of the State for negligent acts of its armed forces as employees of the State.70 Even though no person individually has acted with negligence, the State will also be liable if they cumulatively caused the damage in question. This alternative may combine the effect of acts or omissions by the leadership (organ liability) and its employees. Although there is no need to specifically identify who made what contribution, it must be established that they have contributed in some meaningful sense.71 The standard of negligence depends on the particularities of the case and varies according to existing responsibilities and the activity carried out,72 in conjunction with the risk of damage involved.73 Furthermore, the employee and/or employer must have been able to take reasonable and practical steps to prevent the damage from occurring.74 In some cases, considerable difficulties in preventing the damage could be exonerating.75 However, based on the activity, which is connected with the use of lethal force in armed conflict, existing responsibilities of personnel to comply with IHL and the inherent risk in the use of complex new weapons technologies, the standard for what is expected in preventing violations will be high.

Third, even if no person or group of personnel can be pointed out as having acted with negligence, there is a customary ground for strict liability if the arrangement surrounding the deployment of the weapons system \textit{as a whole was reckless}.76 This ground can be conceptualised as an extension of organ liability or vicarious liability of the State.

67. The approach was that domestic law as far as possible was to be interpreted in conformity with human rights law, provided there was no conflict of law situation, see e.g. Rt. 1984 p. 1175, 1181-1182, and NOU:1993:18, Lovgivning om menneskerettigheter (1993) 77.
68. In Norwegian called ‘organansvar’.
69. Nygård (n 11) 228-229.
70. ‘Arbeidsgiveransvaret’ cf. Act relating to compensation in certain circumstances, Section 2-1. This is often considered the starting position for assessing the civil liability of the State: see Ørnulf Rasmussen and Jan Fridthjof Bernt, \textit{Frihagens Forvaltningsrett. Bind I} (Fagbokforlaget 2010) 113.
72. ibid 236-238.
76. In Norwegian called ‘objektivt ansvar for uforsvarlig ordning’.
as employer. A condition is that there was an unavoidable risk that could and should have been removed,77 and that the State is the closest to bear responsibility for the fact that it was not.

As regards the first of these grounds, a central question is whether the leadership had reasons to intervene to prevent the violation from occurring. This will depend on the particular circumstances. Organ liability must therefore be understood in the context of the rigorous procedures for approval of the weapons system prior to deployment,78 and a basic principle of labour sharing: that the leadership must be able to rely on the expert opinions of subordinates, particularly so when dealing with technical questions regarding weapons systems. For this reason, the mere fact that there are external contradicting views concerning the risks posed by AWS would not necessarily be sufficient to engage responsibility. Prior to deployment, organ liability could more easily be conceived if the risks were known but remained unaddressed, or if the leadership remained passive after express concerns were voiced by experts after deployment of the system. Organ liability would clearly also play a role in the unlikely case that a leadership decision is taken in direct contravention of expert advice.

Like organ liability, vicarious liability is inherently tied to the notion of role-responsibility. Although this conception is somewhat diluted when assessing cumulative and anonymous negligence, the assessment will continue to operate within the general framework of responsibilities within the armed forces. Clearly, liability could arise following a failure by the armed forces to comply with their duties. The role of commanders here is of particular importance, given the flexible framework regulating their conduct.79 Because of their role, responsibility could also arise if the commander inadequately framed or laid out the duties or responsibilities of persons interacting with the AWS. It could also arise in case of failure to minimise risks of violations that should have been minimised, or in the case of failure to comply with a general duty of diligence in handling the system and in the training of operators.

The third ground may be considered an exception to the notion of role-responsibility. However, its relevance in the context of the use of new weapons systems is less clear; it has been particularly useful in situations where it has been apparent that there was an avoidable risk that should have been eliminated.80 The use of AWS by contrast, may involve highly complex risk evaluations.

Although these three grounds cumulatively encompass a vast number of situations, some seem to fall outside their scope. One type of case is related to the increased impor-

77. Nygård (n 11) 277.
78. The Norwegian State has incorporated Protocol I Additional to the Geneva Conventions Article 36 domestically through the adoption of Direktiv om folkerettslig vurdering av våpen, krigføringsmetoder og krigføringsmidler by the Norwegian Ministry of Defence (18 June 2003).
79. Protocol I Additional to the Geneva Conventions of 12 August 1949, Articles 86 and 87.
80. In the present author’s opinion, this was arguably the case in Rt. 1970 p. 1192 (Epileptiker), where a radiator in the prison cell of an epileptic inmate entailed the risk of the inmate suffering burns during an epileptic seizure, Rt. 1948 p. 1111 (Trikkedom), where a tramway driving with open doors entailed the risk of passengers falling out and injuring themselves, and Rt. 2000 p. 388, where the lack of reinforced windows in a closed psychiatric unit at a hospital entailed the risk of patients breaking the glass and injuring themselves.
tance of the role of the developer. It is not clear whether the State could be held liable when the violation is caused by a system error, the origin of which goes back to the developer, if the error would not be identified by justifiable maintenance routines or tests. Whether this gap can be effectively closed through developer liability will be highly dependent on the circumstances.81 Second, because self-learning systems by their very design imply leaving a certain discretion in selecting and engaging targets to the system itself, the actions taken by the system will be removed from the direct control of personnel. It is not clear whether this situation would fit the grounds mentioned as long as the removal of control in and of itself was not negligent or reckless. This must presumably be determined by a comprehensive assessment of general policy, the Rules of Engagement for the specific operation, and the information available to operators and commanders. A peculiar parallel could be drawn to the landmark decision in Rt. 1959 p.849 (Læregutt). The case concerned the question of whether the employer, a car repair shop, could be held responsible for the tragic death and injury of individuals resulting from an underage trainee’s joyride with one of the cars delivered for repair. The Supreme Court answered the question in the negative, based on the fact that the damage was not produced as a result of the regular carrying out of duties by the trainee, and that the employer was not negligent in his control with and prevention of such acts. The case of AWS is similar and entirely different, as the decisions by the system at the outset will fall outside the scope of the vicarious liability doctrine.

This gap emerges because liability is based on the link to the performance of roles (role responsibility). The standard of care is shaped by the nature of the functions of each official and the expectations that reasonably can be held based on this function. Exceptions to notions of role-responsibility are in principle construed narrowly in a way that does not adequately compensate for this limitation. Faced with potential gaps like these, domestic courts may prefer to interpret the aforementioned grounds of liability broadly, bordering strict liability.82 In cases concerning violations of IHL, this solution could also be supported by the principle of presumption of harmony with international law and the State obligation to compensate the harm caused to the victims. At the same time, one could ask how far courts would be willing to go in making value judgments inherently connected to notions of culpa concerning the defensibility of using certain technologies in warfare, without it being seen as an undue interference by the judiciary in the expert security/defence area. In addition, the result would have a certain resemblance to the customary domestic doctrine of strict liability for risky activity.83 This doctrine is a product of the industrialisation and the concurrent development of new technologies and patterns of risky commercial activities.84 Certainly, a number of arguments favour the application of the doctrine in

81. Although the Product Liability Act no. 104/1988 (produktansvarsloven) holds the product developer strictly liable for damage caused by products, this does not necessarily apply to foreign developers, see the Product Liability Act section 1-4 and the Convention on the Law Applicable to Products Liability (2 October 1973) Articles 4-7 and 10. For domestic developers, a pertinent question would be whether the self-learning functions of the system and the role of the State in determining the specifications of the System would prove sufficient as exceptions under the Product Liability Act section 2-2 (b) and (c).
82. Nygård (n 11) 245-246.
83. In Norwegian called ‘risikoansvar’ or ‘ulovfestet objektivt ansvar’.
84. Nygård (n 11) 253.
the context of AWS: it is a new weapons technology that creates a certain risk of unlawful acts that may result in damage to individuals. As previously mentioned, however, outside context of technical failures, the notion of risk itself as a condition of civil liability is ill suited in armed conflict situations.  

A solution could be found in the doctrine of strict State liability for unlawful acts. In short, the State will be strictly liable for damage that an illegal act has produced. The extent to which the State can be held liable on this ground remains highly controversial. The application of the doctrine in the context of violations of IHL outside the scope of incorporated IHRL treaties raises two additional challenges.

The first relates to the scope of the doctrine as to the relevant ‘acts’. Traditionally, the doctrine has been applied to administrative decisions typically falling under the scope of the Public Administration Act. Some maintain that the doctrine only applies in these situations, whilst others argue that there is no reason not to include unlawful conduct. To date, it remains highly unclear to what extent it can be translated to other areas of the exercise of public power. Thus, the status of actual conduct of public officials is not clear in instances where the conduct does not result in an administrative decision. The strongest argument for equating the two stemming from case law is in Rt. 1987 p. 1495 (Reitgjerdet II), where the Supreme Court held the State strictly liable for having implemented an unlawful decision to retain an individual in a psychiatric institution. However, problems arise where there is less of a link between decision and implementation, and where there arguably is no conduct by State agents that can be considered unlawful, as is the case when the violation is produced by AWS.

The second challenge relates to the notion of ‘unlawfulness’. The doctrine has had some success particularly in cases concerning interferences with the integrity of individuals. Formally however, the notion of unlawfulness refers to the domestic legal realm, either by itself or interpreted in light of relevant international obligations. This could pose problems because of the apparent lack of domestic laws on the basis of which domestic courts can interpret relevant IHL norms. One option would be to generalise based on the fact that breaches of IHL will generally be covered by the civil and military criminal codes. This criminalisation expresses the legislator’s condemnation of the acts in question and could provide strong support in favour of considering the acts unlawful under domestic Norwegian law.

85. Hagstrøm (n 66) 231.
86. In Norwegian called ‘rettsstridslæren’.
89. For the latter position, see Hans Petter Graver, Forvaltningsrett (4th ed., Universitetsforlaget 2014) 547.
90. See Rt. 1987 p. 1495 (Reitgjerdet II), 1507.
92. Graver (n 89) 548.
Another possibility would be to look to the Norwegian Constitution, either as a separate ground for liability or as a source for considering the act unlawful under domestic Norwegian law. As previously mentioned, the Norwegian Constitution was amended in 2014 incorporating a new chapter on human rights. Section 92 now places an obligation on the State to respect and secure the human rights enshrined in the constitution and in international treaties to which Norway is bound, reaffirming that the constitutional guarantees are not necessarily identical to their treaty-based counterparts. The right to life in section 93 is inspired by the ECHR Article 2 and the ICCPR Article 6. Although it was not intended that the constitutionalisation of human rights would change the substantive level of human rights protection, there is little reason to adhere strictly to jurisdictional limitations in the constitution’s treaty-based counterparts solely because international treaty instruments do not extend to the situation. This is also supported by the fundamental importance attached particularly to the right to life. Thus, an arguable claim could be made that domestic Norwegian authorities are under a duty not to cause arbitrary deprivations of life irrespective of whether particular human rights treaties apply. Any such deprivation of life would thus be sufficient to hold the State strictly liable for damages.

In sum, although existing law would render the State liable for violations committed by AWS, some gaps are likely to remain. It is possible to extend the existing normative framework to close the gaps. However, precisely because this could necessitate an extension of the existing framework, these findings rest at the border between de lege lata and de lege ferenda.

5. ASCERTAINING THE FACTS OF THE CASE

5.1 INTRODUCTION

In addition to limitations in the application of traditional grounds of liability, several other challenges may arise, generally falling under Hin-Yan Liu’s category of circumstantial challenges in the sense that they would depend on the particularities of the specific case; see section 3 above.

On a practical level, the fundamental issue in civil tort cases concerns the question of establishing proof that the conditions for the claim are met. As a main rule, the onus is on the person claiming compensation. When operating within the scope of human rights treaty standards, however, Norwegian courts must apply the rules concerning the burden of proof under human rights law, derived from the fact that the claim for compensation is an extension of the right to remedy. Under human rights law, the burden of proof may vary depending on the specific circumstances, because not all cases ‘lend themselves to a strict application of the principle … that the burden of proof lies on the person making the allegation in question’. This is usually the case where the victim is in the custody of

95. Hassan v the United Kingdom (n 46) § 49.
the State, where the information is in the exclusive knowledge of the authorities.96 It is less clear how the division of the burden is in relation to allegations of arbitrary deprivations of life outside custody cases in the context of armed conflict. A similar uncertainty concerns the rules concerning burden of proof at the domestic level outside the context of human rights treaties. The difficulty of proving the case will also be influenced by whether liability is based on fault or whether strict liability applies. Such difficulty is highlighted by the difference between, for example, proving the causal relation between the act attributable to the State, and the violation of the rights of the victims; or between the negligent act/omission of the individual, and the decision by the weapons system to produce the damage to the individual.

How difficult this will be in practice for the victim must be understood in the context of the general framework regulating the establishment of the facts of the violation. The general duty to investigate potential violations of IHL and IHRL has been held to be the sine qua non for the fulfillment of the rights of victims, including the right to substantive remedies.97

5.2 AUTONOMOUS WEAPONS AND THE DUTY TO INVESTIGATE

The duty to investigate follows from the general duty to ‘respect, ensure respect for and implement international human rights law and international humanitarian law’.98 It is a duty of means and not one of result.99 Under IHL, it has acquired the status of customary law.100 A distinction must be made between the general duty to investigate all possible breaches of IHL and IHRL, and the duty to conduct effective investigations.101 Under IHL, a duty to conduct effective investigations arises in cases of ‘gross violations of … humanitarian law constituting crimes under international law’.102 Regarding the threshold of application under the ECHR, the ECtHR has stated that ‘there should be some form of effective official investigation when individuals have been killed as a result of the use

96. ibid.
97. International Commission of Jurists (n 10) 57.
99. See Jaloud v the Netherlands (n 42) § 166.
100. See e.g. ICRC, ‘Customary IHL – Rule 158. Prosecution of War Crimes’ (ICRC) https://www.icrc.org/customary-ihl/eng/docs/v1_rul_rule158 accessed 23 October 2017, UNGA, Basic Principles (n 54) no. 3 (b) in conjunction with no. 1 and Turkel Commission (n 46) 93.
101. Turkel Commission (n 46) 102, 103 and 112.
102. UNGA, Basic Principles (n 56) no. 4; Turkel Commission (n 46) 82; and ICRC (n 100).
of force’. That this threshold applies in the context of law enforcement is uncontroversial. The duty applies extraterritorially in situations of armed conflict: ‘[T]he obligation under Article 2 to safeguard life entails that, even in difficult security conditions, all reasonable steps must be taken to ensure that an effective, independent investigation is conducted into alleged breaches of the right to life’.

The duty of effectiveness implies that the investigation must be able to lead to a ‘determination of whether the force used was or was not justified in the circumstances and to the identification and punishment of those responsible’. It is inherent in the investigation on whether or not the use of force was ‘justified’ that the duty also involves a determination of the question of State responsibility for the violation. Effective investigations entail a duty of effectiveness, thoroughness, impartiality, and transparency. States have a certain margin of appreciation in their implementation of the obligation, but must ‘act of their own motion once the matter has come to their attention’.

This raises the question of whether the duty to investigate could entail a limitation on the use of AWS if it would render it virtually impossible to achieve the purposes of investigations in cases where violations might have occurred. Framed in another way, the question is whether the State has a duty to ensure that it would be possible to ascertain whether a violation has occurred and to identify and persecute perpetrators of the violation.

The need to be able to trace and monitor the acts of AWS has been raised by several authors, as discussed above in section 3. Indeed, traceability is crucial in order to distinguish the illegitimate from the legitimate uses of lethal force. This entails, first, a possibility to ascertain the activities of the system ex post facto, in order to determine what happened. Second, understanding the ‘reasoning’ behind decisions taken by the system, particularly because rules of IHL, such as the duty of proportionality and the duty to take precautionary measures, presuppose complex and context-sensitive evaluations. In cases where the use of lethal force was illegitimate, the system must be able to disclose information that could be relevant for the purpose of establishing individual responsibility. This could entail distinguishing actions that are the result of system errors from actions that are the result of the normal operation of the system. This could in turn help identify violations that are the result of hacking, malfunction, inadequate maintenance, and so on. In other instances, distinguishing decisions that are the direct consequence of developer programming or

103. Al-Skeini v the United Kingdom (n 37) § 163.
104. Turkel Commission (n 46) 103.
105. Al-Skeini v the United Kingdom (n 37) § 164. This will nevertheless influence the determination of how substantial the obligations are, see Jaloud v the Netherlands (n 42) § 226.
106. Al-Skeini v the United Kingdom (n 37) § 166.
107. ibid § 163.
108. UNGA, Basic Principles (n 56) no. 3 (b); UNESC (n 98) no. 19; Al-Skeini v the United Kingdom (n 37) § 167; and Turkel Commission (n 46) 137-138.
109. See e.g. UNGA, Basic Principles (n 56) no. 4. Under the ECHR there is a duty to undertake ‘some form of official investigation’, see Al-Skeini v the United Kingdom (n 37) § 163.
110. Al-Skeini v the United Kingdom (n 37) § 166 and Aksoy v Turkey (n 35) §§ 98-99.
specifications of the particular operation (based on Rules of Engagement) could direct further investigations into developer or commander/operator responsibility. In addition, self-learning function of systems with high levels of autonomy could necessitate the identification of system behaviour that have developed as a consequence of training, testing or previous deployment.

It is likely that the positive obligations of the State to investigate violations would entail obligations such as these as the contrary solution would risk rendering the substantive rights ‘ineffective in practice and it would be possible in some cases for agents of the State to abuse the rights … with virtual impunity’.\textsuperscript{112} The procedural obligations of States under Arts. 2 to 4 of the ECHR entail, on an abstract level, arranging conditions \textit{ex ante} that permit the retrieval of necessary information to conduct effective investigations \textit{ex post} following allegations or suspicion of violations.\textsuperscript{113} In the case of AWS, this could be translated to ensuring that the system permits the retrieval of necessary information to fulfil the purpose of the investigation of alleged violations. The role of the State in the development process of weapons systems favours this conception, as it maintains control over the end result of a weapons system through the development process, in the product specifications and requirements, testing procedures, and so on.

6. CONCLUSIONS

This article has attempted to identify and examine in what way the accountability concerns identified in section 3 apply also in the context of compensation claims under domestic Norwegian law. The use of AWS has the potential to influence the fulfilment of rights of victims of violations of human rights and humanitarian law. Although compensation cases before Norwegian courts for violations committed during military operations remain rare, understanding the potential legal issues that arise in this context is of paramount importance for discussions about a possible future development of AWS. In a wider perspective, the topic addressed by this article illustrates that the use of AWS can have a series of discrete effects influencing the implementation of international law in domestic legal systems that may not be readily apparent. This illustrates the importance of international legal standards concerning the protection of victims for the debate on the future of AWS.

In the Norwegian legal system, monism in regard to human rights guarantees secures conformity with international standards, and the expansive extraterritorial approach of human rights instruments ostensibly grants strong protection in domestic law for violations committed during international military operations. However, the conceptual challenges outlined could prove a thorny issue outside the scope of application of human rights treaties. Here, AWS may potentially prevent the right of victims to compensation claims

\textsuperscript{112} Al Nashiri \textit{v} Poland, Application no 28761/11, § 485, ECHR 2014.
\textsuperscript{113} This finds support in that the procedural limb of Articles 2-4 go further than the duty to investigate in the strict sense, encompassing also the obligation to put an effective judicial system in place; see Jean-François Akandji-Kombe, ‘Positive obligations under the European Convention on Human Rights: A guide to the implementation of the European Convention on Human Rights’ (2007) 32.

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at the domestic level. In addressing accountability gaps in domestic law, developments in IHL concerning the right to compensation should be reflected also at the domestic level. This article has attempted to explore avenues in which such a right can be implemented, either by drawing on existing grounds for strict liability under domestic Norwegian tort law, or by interpreting the Norwegian constitution on the right to life in a way that closes the potential accountability gap. The circumstantial challenges outlined may also prove difficult to overcome, posing particular challenges for victims seeking to litigate their claims. Here, the article proposed to draw on the positive obligations of States to investigate alleged violations in order to address key concerns for establishing the fact of the violation.