

Statement from the International Committee for Robot Arms Control

On Panel Challenges to IHL due to increasing degrees of autonomy.

Read by Dr Juergen Altmann

This discussion has been directed almost entirely to considerations of law derived from the principle of jus in bello. We appear to be overlooking, or excluding, considerations of jus ad bellum that arise from the use of autonomous weapons systems. It is in this context that those considerations also typically discussed as matters of international peace and security may be considered to have implications under the law of armed conflict.

We are concerned about the destabilization and chaos that may be introduced into the international system by arms races and the appearance of new, unfamiliar threats. In addition, we are concerned as scientists, about what may happen when nations with an uneasy relationship field increasingly complex, autonomous systems in confrontation with one another. We know that the interactions of such systems are unpredictable for two reasons.

The first is the inherent error-proneness of complex software even when it is engineered by a single cooperative team. The second is that, in reality, these interacting systems will have been developed by non-cooperating teams, who will do their utmost to maintain secrecy and to ensure that their systems will exploit every opportunity to prevail once hostilities are understood to have commenced or, perhaps, are believed to be imminent. Once hostilities have begun, it may become very difficult for humans to intervene and to reestablish peace, due to the high speed and complexity of events. Neither side would want to risk losing the battle once it had begun.

Do these considerations have no implications for the legality of autonomous weapons? Can we consider a war that has been initiated as a result of needless political or military instability, or due to the

unpredictable interactions of machines, or escalated out of human control due to the high speed and complexity of events, and not for any human moral or political cause, to be a just war?