Intervention of the Germany on Agenda Item

“Further Consideration of the Human Element in the use of Lethal Force”

1. Thank you, Mr. Chair, for giving us the opportunity to further explore the concept of human control, which Germany believes should be at the centre of our search for a regulatory response to the questions raised by lethal autonomous weapon systems.

2. It is our conviction that only weapons that are operated in compliance with international law are acceptable means of warfare. Humans must remain accountable for the weapons systems they use and this can only be assured as long as humans retain sufficient control over the critical functions of the weapons they operate. Humans also have to maintain the ultimate decision in matters of life and death.

3. The unique qualities of human judgement must not be replaced by the capacities of machines. Lethal autonomous weapons systems would depend in their operation on computational systems and subsystems, each of them with their own limitations and risks of failure. As these systems would operate in an interlinked way failures appearing in one system would invariably resonate through other parts of the weapons system thereby exacerbating the risks associated with the uncontrolled activities of lethal weapons.

4. This makes it necessary to ensure the human-machine interaction in future weapons systems is designed in such a way that the machine is subordinate to the human operating it. The human has to remain the essential element in this interaction bearing the overall responsibility. As part of this human-machine interaction the human has to take the decision and to coordinate those processes that might better be executed by artificially intelligent machines. This can be ensured by the appropriate design of future weapons systems including, for example, operational safeguards on a system’s operating environment, time frame of operation and extent of physical mobility.

5. Once a weapons system is in operation human control can only be assured as long as the respective accountable human has sufficient knowledge of the machine, of the operating environment and of the likely interaction between the two. Human control over the critical functions of weapons systems requires control over the entire life-cycle of weapons-systems.

6. Germany and France have jointly proposed a Political Declaration as a first concrete result of our work in this GGE. The commitment of states to uphold the principle of human control should be one of the central elements of such a Political Declaration.

7. We need to keep in mind that we are working under immense time pressure if we want this diplomatic process to provide relevant ethical and legal guidance. Given rapid advances in science and technology in the field of artificial intelligence we suggest we proceed with our work in the most focused way possible. In this regard any approach that helps us to work on concrete results and to narrow down on the truly relevant aspects should be pursued.