



Group of Governmental Experts on Emerging Technologies in the Area of Lethal Autonomous Weapons Systems

Geneva, 27–31 August 2018

Statement by Estonia

Agenda Item 6(a). Characterisation of the systems under consideration

Thank you, Mr Chairman!

Permit me to begin by thanking you, Mr Chairman, for your effective leadership of this GGE. We also extend our thanks to the Geneva Branch of the UN Office for Disarmament Affairs for the preparatory work that has facilitated this meeting.

We also gratefully acknowledge the contributions made by other participants under this agenda item – both by way of working papers and statements – as these help us improve our collective understanding of the systems under consideration. Estonia has sought to contribute to building this collective understanding by submitting a joint working paper with Finland.

One of the observations that we make in that paper is that references to “fully autonomous weapon systems” are imprecise and potentially unhelpful. Allow me to expand on this point.

- For one, in all technological systems, autonomy relates to particular functions of the system, rather than the system as a whole. Accordingly, it would be more appropriate to talk about weapon systems having autonomous features or functions. The features and functions *most relevant* to this GGE are those directly involved in the application of force, specifically selecting and engaging targets. Having said that, it is important to acknowledge that we are dealing with multiple different functions, *each of which* could potentially have some degree of autonomy.
- Relatedly, autonomy is not an on/off phenomenon, nor does it have discrete levels. A number of different classifications of weapon systems have been proposed based on the extent of their autonomous functioning. Some distinguish between “semi-autonomous” and “fully autonomous” systems. Others classify systems as having a human “in-the-loop”, “on-the-loop” or “out-of-the-loop”. The difficulty, however, is that the boundaries between these categories are far from clear. While lists of criteria can be devised, Estonia takes the view that there is no principled

basis for distinguishing “fully autonomous” systems from other types of systems with autonomous functionality.

- The predictability of a system is sometimes invoked as a basis for this distinction. However, predictability is not so much a question about the degree of automation or autonomy, or even a question about the level of the sophistication of a system. Rather, the controlled and stable behavior of any complex system is something that must always be ensured by means of thorough systems design and rigorous testing.

Mr Chairman,

The ongoing discussion about the characteristics of systems with autonomous functions is helpful for understanding the technology under consideration. It also allows us to canvass the associated ethical and legal challenges. That said, we think that there are fundamental difficulties in defining autonomous weapons systems for regulatory purposes. The divergence between the working definitions put forward in this forum underscores this point.

Moreover, any definition that we might devise is only as good as our understanding of the technology. The technology changes and our understanding of the technology evolves as well. This also applies abstract technological notions such as autonomy. Consequently, Estonia considers that it would be productive to focus, in our search for policy options, on the desirable quality of human involvement, rather than an elusive technical definition.

Thank you, Mr Chairman!