

R&T CONFERENCE – IMPACT OF DISRUPTIVE TECHNOLOGIES ON DEFENCE (20 April 2021)

Speech by Portuguese Minister of Defence,

João Gomes Cravinho

Check against delivery

We live in unprecedented times. The world is experiencing a dramatic global pandemic, with vast human, social and economic effects. We are continuing to adapt to the impact of climate change, seeking to build more resilient and sustainable systems and to develop more human and effective responses to catastrophes. We are witnessing important global geopolitical shifts, with impacts for the North Atlantic security community. And we are deep-diving into the vast ocean of technological development, with exponential discoveries in fields with great disruptive potential.

This may seem like a dystopian future to some, putting our societies on a path of uncertainty and fear. The truth may be less dark than this picture suggests, but it certainly requires prudent planning, thoughtful and courageous decisions now. We must make sure Europe is in the vanguard of innovation in technology. We must make sure we take fully into consideration the impact of these new technologies for defence and security. But we must also make sure we defend the rights of our citizens, and follow a path that is environmentally sustainable. This a big challenge but an unavoidable one.

For Portugal, taking the discussions on Emerging Disruptive Technologies – EDTs – forward, in the context of the Presidency of the Council of the European Union, provides an opportunity to underline the importance we attribute to this issue for the future of European – and Euro Atlantic – defence.

This is why we are grateful to the European Defence Agency for suggesting this stimulating topic for this conference and for working closely with the Presidency in making this event a reality. We have put together a remarkable lineup of speakers and topics that will certainly make this day of work an important contribution for this discussion in the EU and among its Member States.

Ladies and gentlemen,

Allow me to generically address the EDTs and the areas of innovation that we believe have the greatest relevance for defence, and then address 3 key topics, which I believe should deserve our attention.

As we are engaging in discussions for the revision of NATO's Strategic Concept, and as the EU is developing its Strategic Compass, our defence policies have the opportunity – but also the responsibility – to ensure greater interoperability among allies, cooperation among institutions, the necessary human, technical and financial resources for innovation, and the necessary political, legal and social frameworks to change significantly the way that security and defence activities are developed today and in the future.

Innovation is, evidently, key for a better future. It has allowed us to live longer and better, and to do more. It is at the heart of global economic, political, and societal change and well-being. Innovation has led to extraordinary breakthroughs like the internal combustion engine or vaccination or the internet, just as it has led gunpowder and nuclear weapons, all of which proved disruptive in their own ways and for their specific time. In the digital age, it is not surprising that we are faced with a new set of emerging and disruptive technologies, perhaps without parallel in the past, in terms of intensity.

Emerging Disruptive Technologies, particularly the nexus between data, Artificial Intelligence and autonomous systems, promise to be enormously impactful. EDTs require constant monitoring of risks and opportunities, and we should not forget that some of our key strategic competitors have identified them as strategic priorities.

EDTs undoubtedly offer an opportunity for the development of military capabilities, but if their use is not regulated and controlled, it

can potentially also be a threat – as evidenced in the Joint Threat Analysis report developed by the EU INTCENT, last December. Therefore, it is only natural that ample discussion on this topic is taking place both at the EU and NATO levels.

Even more than in the past, many of today's technological innovations are taking place outside the defence sector, often driven by private actors. This will certainly result in asymmetries and volatility, as the development and use of these technologies may be used for unregulated purposes.

Such a scenario requires that we look at EDTs from the perspective of the security of our citizens, investing in innovation but also in regulation, in deterrence but also in partnerships; and requiring that we look at EDTs from the perspective of our contributions to global peace and stability, increasing the effectiveness of international missions and operations by improving our situational awareness and using technological development for reducing unwanted impacts of military action.

Thus, considering the financial and knowledge constraints with which we design our missions, this new competitive context requires that we pay particular attention to investing in the protection of our soldiers and equipment; this in turn requires that we make procurement processes more flexible and better suited for incorporating innovation, something that our European rules do not always facilitate.

In short, we must invest in the development of dynamic ecosystems around defence that mobilise the best resources of our societies. The

world is changing fast, our needs are changing fast, we have to ensure that our rules are appropriate for our times and not reflections of past circumstances.

I would like now to focus on three key aspects I believe should guide our policies regarding EDTs.

1. The first is deepening cooperation between the EU and NATO.

Artificial Intelligence and automated learning represent a real concern for us. The increasing amount of data available, and the increasing influence of new emerging powers and non-state actors in this field, make close collaboration between the EU and NATO a necessity, and Portugal actively supports this.

EDTs represent an urgent opportunity for this very much needed collaborative effort. In order to regain and maintain our technological edge, we must leverage existing and new instruments, while promoting further coherence and consistency, nationally and institutionally, between the EU and NATO.

At the EU level, we need to be more ambitious and reinforce the scope dedicated to EDTs in the context of the CSDP development, particularly on capability development, supported by PESCO projects and with the coming into force of the European Defence Fund. The Strategic Compass should point us in this direction.

As we see it, this is critical to assure a strong European Industrial and Technological Defence Base and to contribute to the EU's strategic autonomy.

Portugal has supported the allocation of 8% of the total European Defence Fund budget to investment in EDTs. We have also advocated that financial allocation mechanisms for EDTs need to be flexible, since this is vital to assure a quick and effective response to the fast-evolving context, as well as to ensure competitive advantages for Europeans. We must guarantee that bureaucratic processes are reduced, while assuring full monitoring and control.

The European Defence Agency is at the forefront of discussions on EDTs, as evidenced by this conference, but also by other initiatives such as the "Food For Thought paper on Emerging and Disruptive Technologies". Continuing and deepening this dialogue with EU MS is fundamental to understanding the impacts of EDTs on defence and how these should be integrated into Research & Development in military capabilities.

Increasing investment in research on EDTs will need to be based on a judicious and collaborative approach among EU Member States, in order to overcome financial constraints and to avoid duplication with NATO. Synergies between NATO, the European Commission and EDA will need to be stimulated, making the best of civil-military cooperation and the dual-use nature of technological development.

2. National Capabilities

The second aspect I would like to single out is the need to support EU Member States in developing their national capabilities in an even playing field.

We need to develop national skills on technologies, based on triple-helix ecosystems to take advantage of the best from industry, government, and academia. States should be encouraged to work with non-traditional defence sectors, and to create innovative partnerships with the drivers of EDT innovation.

Cooperative approaches and interoperability will be key to success. And as the civilian market is laying the foundations of these new technologies, it is, perhaps, time for change in how we define, manage, and leverage our national and European Defence Technology and Industrial Base. Our objective in this respect should be to allow closer dialogue and collaboration with our Industries, establishing common goals and potentially tackling the negatively disruptive side of the emerging technologies.

The EU needs to recruit and retain the brightest minds, and to maintain or increase the investment levels in Research & Development. In order for this to happen, addressing the opportunities and challenges presented by EDTs also requires the relevant financial resources and procedures.

This is a major effort, but one that we must commit to. For the effectiveness of our future defence capabilities, but also in order to promote a more innovative, more technology-driven European economy, which is in turn indispensable for the future prosperity as well as for the security of Europeans.

3. Synergies amongst societies

The third aspect I would like to highlight is that the development of EDTs and its incorporation into security and defence requires strong synergies across European societies as well as between Member States.

The COVID-19 pandemic has taught us many lessons. One of them is that we need to be agile and to rapidly adapt to new circumstances. This is a valuable lesson when it comes to EDTs. In this competitive field, we need new ways to enhance synergies between civil, defence and space industries, but we also need new procedures, involving the industry at an earlier stage of capacity development, linking experiments, tests, standards development and best practices.

The voices of industry and academia represent a wealth of expertise, talent, and competence that we should not ignore. We must continue to improve our access to comprehensive, state-of-the-art resources in science research, in the defence industry, and in strategic foresight, simultaneously and concurrently.

Despite the potential for large gains derived from EDTs, both in terms of impact and competitive advantages, they are still associated with the high risk of failure during development. In order to make this risk worthwhile, appropriate support and monitoring mechanisms need to be established.

Ladies and gentlemen,

There is a great opportunity for learning, for doing better and for ensuring more effective security and defence for European citizens and our partners, as well as for better protecting our military staff and making military operations more effective.

Above all, Europe needs to be bold when it comes to supporting EDTs, stimulating creative and innovative solutions which are crucial for the EU's strategic autonomy in defence, and which have direct and indirect benefits in the civilian domain.

Thank you for your attention and I wish you a fruitful day of work. I look forward to reading the conclusions of this event, which certainly will be an important contribution to the future of European Defence, and specifically to the ongoing strategic dialogue regarding the Strategic Compass and the NATO 2030 agenda.