

Definitions of concepts: Dual-use goods

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1. INTRODUCTION

The definition of any issue subject to regulation appears to be one of the first steps necessary to achieve an efficient regulatory framework. In international law, however, it is not unusual to find concepts that still lack a universally accepted definition. This is precisely the case of the notion this chapter deals with: dual-use goods. Although this notion is governed by relatively extensive international regulation, the lack of consensus when defining it entails some of the challenges set out below.

In the absence of a legally complete and homogeneous definition, which is intrinsically difficult to achieve at present, we should not disregard the fact that the different approaches contained in the treaties and agreements studied here have managed to be accepted by a considerable majority of states that agree on the way of identifying this type of goods. For this reason, the first section of this chapter focuses on the definitions available in the different rules and regulations currently in force. The second section, for its part, analyses two of the main challenges that specialised regulations must face: the growing relevance of intangible goods in the definition of dual-use goods, and the ongoing expansion of the limits of the notion under study.

2. DEFINING DUAL-USE GOODS

To date, the international community has been unable to agree on an exact definition of the term “dual-use good”, despite its relevance from both the commercial and the development angle, as well as the non-proliferation and security perspective. In fact, specialised books and articles are not particularly engaged with the mission of defining dual-use goods *per se*, in spite of dealing with such items with relative assiduity – a situation that, given their strategic and industrial importance, seems likely to increase. On the contrary, to define these intrinsically complex goods, relevant sources generally resort to one of the several dichotomous criteria which acknowledge the contrast between what might be referred to as *positive* and *negative* uses, from the perspective of the maintenance of international peace and security. Thus, the lack of a universal consensus on how to define dual-use goods does not seem to have been an impediment for the different legal instruments to proceed to regulate them and for scholars to discuss them. It is therefore interesting to contrast the different ways in which this term is approached by the diverse international norms and regulations.

In order to approach the notion of “dual-use good”, we have taken into account the most important instruments dealing with these items, and we have done so on the basis of current international practice and analyses of the various definitions of dual-use good in international legal texts. Something that is especially noteworthy when conducting this analysis is that the term “dual-use good” itself appears only in the framework of two export control regimes (namely the guidelines of the Nuclear Suppliers Group and the Wassenaar Arrangement). The remaining sources – that is, international treaties, normative acts of international organisations and soft-law instruments – opt to employ dichotomies, such as those that differentiate between *civil* and *military* uses or *peaceful* and *non-peaceful* ends to refer to the dual uses of certain materials. This review of the different criteria used in international regulation

sheds some light on the evolution that this term has undergone, an evolution that is still underway, as is pointed out in the second section of the chapter.

While the most usual dichotomy in conventional norms, when speaking of the two possible uses of a given product, is that which distinguishes between peaceful and non-peaceful ends, in the doctrine, the differentiation between civil and military purposes is also very common. Furthermore, due to the changes in the type of threats that are occurring in international society, mention should also be made of the criterion that distinguishes between *benevolent* and *malevolent* ends. This last criterion, explained below, must be understood as a consequence of the potential use of certain goods by non-state actors. These three forms of classifying “dual-use” are the most commonly used in the different international non-proliferation and arms control regimes. Consequently, and by way of establishing a principle, the notion of “dual-use good” can be delimited in relation to two parameters: the intrinsic technical characteristics of certain types of goods and the objectives underpinning their two possible (opposing) uses.

3. PEACEFUL AND NON-PEACEFUL

In reviewing the relevant international treaties in the field, it becomes evident that these legally binding texts require that the goods be used exclusively for *peaceful* purposes. Such a provision undoubtedly admits that a given item may be diverted or “misused” for *non-peaceful* purposes. This dichotomous criterion, which understands duality in terms of peaceful purposes and their opposite, is used by the Treaty on the Non-Proliferation of Nuclear Weapons(NPT)¹, the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological

1 Article III.1, NPT.

(Biological) and Toxin Weapons and on their Destruction (BTWC)², and the Convention on the Prohibition, Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC)³. None of these texts mention the term “dual-use good” *per se*; however, they all establish the conditions states must fulfill to guarantee that certain items with a potential double application are only used for peaceful ends.

This dichotomy is broad and somewhat vague in practice. What is to be understood by *non-peaceful*? Given the certainty that we are dealing with international conventions concerned with the proliferation of weapons of mass destruction (WMDs) - which is an obviously non-peaceful purpose - this vagueness and breadth of the term must be interpreted in connection with the wording of the treaties. Thus, *non-peaceful uses* shall be understood as any use intended to produce such a weapon. Consequently, while on the one hand the usefulness of this dichotomy may be called into question by its lack of precision, it can be justified and overcome by the context in which it is used.

This meaning of “dual-use” – in terms of peaceful and non-peaceful – also appears in UN Security Council Resolution 1540, which refers to such dual-use items as “related materials”⁴. The objective of this Resolution was very clear: to prevent the proliferation of WMDs, avoiding, in particular, their eventual use by non-state actors. The way in which the Resolution foresees fighting such proliferation is by deciding that states should control the transfer of the aforementioned “related materials”.

2 Article I, BTWC.

3 Article II.9.a), CWC.

4 Footnotes UNSC Resolution 1540: “materials, equipment and technology covered by relevant multilateral treaties and arrangements, or included on national control lists, which could be used for the design, development, production or use of nuclear, chemical and biological weapons and their means of delivery”.

4. CIVILIAN AND MILITARY USES

It is worth giving some consideration to the dichotomous criterion that identifies the two contradictory uses of a possible good as its *civil* and *military* uses, given its widespread use. Because of the context in which discussions about dual-use goods originate – in the framework of Cold War debates about technology transfers between the civil and military realms, where “dual-use” denoted a civil application that might be derived from military research⁵ – there are many doctrinal texts⁶, specific articles⁷ and even regulations and directives that define dual-use goods as those items “*that can be used for both civil and military purposes*”⁸. Not only the Wassenaar Arrangement, but also the EU dual-use goods Regulation uses this dichotomy in the first part of its definition when it establishes that “*dual-use items shall mean items, including software and technology, which can be used for both civil and military purposes, and shall include all goods which can be used for both non-explosive uses and assisting in any way in the manufacture of nuclear weapons or other nuclear explosive devices*”⁹.

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- 5 Malcolm R. Dando, “Did we make a huge mistake over dual use?”, *Bulletin of the Atomic Scientists*, 2011 <https://thebulletin.org/did-we-make-huge-mistake-over-dual-use>.
- 6 Sibylle Bauer and Ivana Mičić, “Controls on Security-Related International Transfers”, in *SIPRI Yearbook 2010: Armaments, Disarmament and International Security*, ed. by SIPRI Stockholm International Peace Research Institute (Oxford: Oxford University Press, 2010), pp. 447–66 (p. 447) Note 1; Katherine Prizeman and Daniel Fiott, “The Arms Trade Treaty and the Control of Dual-Use Goods and Technologies: What Can the European Union’s Export Control Regime Offer?”, *Institute for European Studies, IES, Vrije Universiteit Brussel (VUB), IES Workin* (2013), 24, p. 8.
- 7 Michael D. Beck, “Reforming the Multilateral Export Control Regimes”, *The Nonproliferation Review*, Vol. 7.No. 2 (2000), 91–103 (p. 93); Sibylle Bauer and Mark Bromley, “The Dual-Use Export Control Policy Review: Balancing Security, Trade and Academic Freedom in a Changing World”, *EU Non-Proliferation Consortium Non-Proliferation Papers*, No. 48 (2016), p. 1; Bruno Gruselle and Perrine Le Meur, “Technology Transfers and the Arms Trade Treaty: Issues and Perspectives”, *Recherches & Documents, La Fondation Pour La Recherche Stratégique*, 2012, p. 27.
- 8 The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use goods and technologies, WA-DOC (17) PUB 001 - *Public Documents: Volume I. Final Declaration and Guidelines, and Procedures, Including the Initial Elements*.
- 9 Council of the EU, *Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items*, OJ L 134, 29.5.2009, Art. 2.1.

In spite of just how widespread the system of categorisation which identifies dual-use as the dichotomous relation between civil and military uses is, this interpretation does not seem altogether adequate, especially nowadays. Affirming the *civil* uses of which an item of dual nature is capable as its *desired, legitimate* and *peaceful* ends, and, on the other hand, attributing its military quality to uses whose ends are *hostile, illegitimate* and *unwanted*, gives rise to confusion, since the word *military* today encompasses more than what it used to represent; and the same is true of the adjective *civil*. The term *military* is an express reference – direct and unequivocal – to the uses that an army could give to the development of certain goods and technologies. However, it should not be disregarded that, on occasion, the military may have a peaceful purpose and the civil a “paramilitary” use, and thus the application of this criterion to define the two potential uses of dual-use goods seems rather limited and inadequate. Hence, this criterion can easily be outdated, especially if we consider the increasing role and growing relevance of non-state actors in the area of international peace and security.

5. CRITERIA OF INTENTIONALITY

Historically, some export control regimes used the previous criterion (i.e. *civil vs. military*) to define the two potential uses of the goods they regulated, addressing in this way the risk of the proliferation of arms, weapon systems and war materials in the military context. However, since 9/11, a conceptual transition has been taking place, and these multilateral regimes have been adopting measures to address the terrorist threat as well¹⁰. With the emergence of new non-state groups and criminal associations and a greater role for terrorism, the *military* and *civil* terminology has

10 Disposition 1, Nuclear Suppliers Group Guidelines; Disposition 1, Australia Group Guidelines; Disposition I.4, Wassenaar Arrangement; Disposition 3.F, Missile Technology Control Regime Guidelines.

become insufficient, and as a result, a reference to the *malevolent* or *benevolent* purposes that such actors may give to dual-use goods has become necessary. In fact, the incorporation of the criterion of intentionality into the definition has been taking place throughout these last years. Such a shift enables acts carried out by non-state actors and alien to the military forces of a state to be taken into account when dealing with the term “dual-use goods”.

In our opinion, of all the dichotomies studied, the categorisation that most closely approximates to the essence of dual-use goods is that which refers to the intentionality of those that use them. Thus, dual-use goods are those that have the potential to produce positive or negative effects (the latter being linked to the production and/or use of WMDs), which will depend on the intentionality of those who possess them. However, we are aware of the highly abstract character of this definition, which is so essentialist and conceptual in nature, that, legally, it is very difficult – if not impossible – to regulate. In any case, nonetheless, it grasps the essential idea that the dual use of goods subject to international regulation will depend on their utilisation, that is, whether they are used for good or for evil.

6. CHALLENGES WHEN DEFINING DUAL-USE GOODS

6.1. Tangible and intangible goods and technologies

The notion of “dual-use goods” also includes intangible goods or what is known as “technology”. “Technology” is described by the multilateral export control arrangements as the specific information necessary for the development, production or use of a product. The information takes the form of technical data or technical assistance¹¹. Thus, software, publications or intangible knowledge

11 Samuel A. W. Evans, *Revising Export Control Lists*, (Flemish Peace Institute, 2014), p. 3.

are considered “items” of dual use. This, in turn, leads to changes in other concepts, such as the gradual replacement of “export” by “transfer”, which seems more appropriate for non-tangible goods.

Technological developments have led to substantial changes in export controls, as they have expanded beyond the mere export of goods to include the transmission of technology through intangible means (thus referring to the means of transport, export or transmission) and transfers of intangible technology (where the technology itself is not and has not previously been tangible, such as oral transmission, technical assistance or electronic exchanges). The speed at which technology is advancing augurs a greater difficulty in controlling transfers of intangible dual-use goods. Huge amounts of data are constantly being transferred through email attachments, shared virtual storage facilities, and uploads and downloads on electronic platforms. There are also new practices enabled by the Internet which could be englobed under the term “cloud computing”, which allows files to be stored without the “cloud” being geographically located anywhere. Obviously, the traditional control function based on physical borders and *in situ* supervision is no longer applicable, which poses an unquestionable challenge for all national authorities, from the public officers in charge of licensing to the law enforcement agents. Data transferred through electronic means is nearly invisible to customers officers, since they have historically dealt with tangible items¹². Perhaps only those authorities that have set out resources for business audits on dual-use transfer controls consisting in controlling computers and email transactions will have a clearer role in the implementation of controls on intangible items. In any case, and regardless of the kind of

12 Ian Anthony, “The Evolution of Dual-Use Technology Controls: A Historical Perspective”, in *Technology Transfers and Non-Proliferation. Between Control and Cooperation* (New York: Routledge, 2014), p. 33.

storage medium being used to keep and share strategic knowledge, it would be advisable to set an information security standard for all companies holding controlled technology in an electronic form¹³.

Some export control regimes have attempted to overcome this challenge - the first to cover intangible transfers in their Guidelines was the Australia Group, and the Wassenaar Arrangement provides us with a definition of “technology” that has come to be reflected in a number of national transfer control legislations¹⁴ - but for the time being, no workable and fully effective solution has been found to control transfers of intangible technologies associated with physical goods.

6.2. Expansion of the notion

Without having to go back to the Cold War times in which dual-use items started to attract attention in the international arena, we have seen that in the last decade this notion has expanded – or rather, has been expanded by legislators - in order to include other materials, substances and technologies not necessarily connected to the proliferation of WMDs. In recent years, the potential “undesired” use given to items with a possible dual nature does not seem to be exclusively linked to WMD. Indeed, a debate is underway in which those involved are considering regulating as “dual-use goods” certain items whose potential negative effects - although unrelated to WMD - could end up being detrimental to international peace and security, violating legally protected assets on a massive scale.

Non-conventional dual-use goods – that is, items related to WMDs – are regulated by the guidelines of the NSG, the Australia Group and the MTCR, as well as by the NPT, the BTWC, the CWC and Resolution 1540. However, the Wassenaar Arrangement uses the same term to refer to a category of goods that is quite distinct

13 Ian J. Stewart, *Examining Intangible Controls, Project Alpha* (London: King’s College, 2016), p. 16.

14 Quentin Michel, Odette Jankowitsch-Prevor et al., *Controlling the Trade of Strategic Goods: Sanctions and Penalties* (Liège: European Studies Unit – University of Liège, 2016), p. 74.

from the meaning employed by the other guidelines. This appears to be a relic of the past, when the dual nature of a good did not necessarily have to be related to WMDs to be recognised as a dual-use good. Reopening this door could lead to the emergence of new problems, as, indeed, we are beginning to see. What this evolution reflects is the criterion of subjectivity that underlies the delimitation of the notion of the dual-use good.

In recent years, an expansion of the notion of “dual-use goods” has taken place, and this is worth analysing. Under this broader definition of “dual-use goods”, products (besides WMDs) whose undesired ends are prejudicial to legally protected values or interests have begun to be identified. Thus, some export control regimes already include on their control lists goods that can be linked to the production of conventional weapons, to strengthening the military capabilities of third states or to facilitating terrorist attacks. Technological developments, the shift of the monopoly on strategic assets once held by governments to new actors (i.e. industry and the private sector), and the changing perception of what constitutes a threat are for Ian Anthony the “drivers”, that is to say, the main conditioning factors, of the change that is occurring (and that is going to occur) in the concept and what it encompasses. Thus, the scope of application of the lists of “dual-use goods” of export control regimes is being extended to include materials that “*are supplied to a programme of concern or that has a sensitive end-use – whether or not it has been rated as sensitive on the basis of its technical characteristics*”¹⁵.

An example of this extension of the concept can be found in the modification made in 2013 that affected the control lists of the Wassenaar Arrangement¹⁶. In the periodic updating of the lists of this export control regime for conventional weapons and dual-use goods and technologies, cyber-surveillance software was included for the first time, and since then it has remained a permanent fixture

15 Ian Anthony, p. 25.

16 The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use goods and technologies, *WA-LIST (13) 1 - List of Dual-Use Goods and Technologies and Munitions List*, 2013.

on subsequent revisions of the lists¹⁷. Taking its inspiration from this amendment to the Wassenaar Arrangement lists, the proposal that the European Commission adopted in 2016 to reform the EU Dual-Use Goods Regulation included cyber-surveillance technologies likely to commit serious human rights violations as controlled goods. If such a reform were to be approved - it was put on hold, and debate must be resumed by the new composition resulting from the EU elections in May 2019 - the hitherto unequivocal relationship between dual-use goods and means of combat would be broken, to encompass goods that have the potential to damage international peace and security in a way that differs from traditional WMD¹⁸. Indeed, by introducing a “human rights” perspective, the recast proposal attempted to strengthen the current regime of control of trade in dual-use goods, thus seeking to prevent violations caused in third countries through the software and strategic technologies of European companies¹⁹. Specifically, this broadening was aimed at including the aforementioned technologies that may be used by regimes with a questionable record of respect for fundamental rights, or that may pose a threat to international security and Europe’s own digital infrastructure. This possibility – the eventual requirement of the human rights benchmark – was and will probably always be met with reluctance by industry and exporters, due to the potential disadvantage that these administrative obstacles may entail compared to other technology suppliers who would not be forced to implement such controls. The stricter the controls, the weaker

17 The Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use goods and technologies, *WA-LIST (18) 1 - Public Documents: Volume II. List of Dual-Use Goods and Technologies and Munitions List*, 2018, p. 221.

18 European Commission, Proposal for a Regulation of the European Parliament and of the Council Setting up a Union Regime for the Control of Exports, Transfer, Brokering, Technical Assistance and Transit of Dual-Use Items (Recast) - SWD(2016) 315 Final (Brussels, 2016), 0295.

19 Mentions of human rights violations, particularly in the context of dual-use export control regimes, are not yet relevant or numerous. However, for more on the relationship between human rights and export controls, see: Mark Bromley, *Export Controls, Human Security and Cyber-Surveillance Technology: Examining the Proposed Changes to the EU Dual-Use Regulation* (Stockholm: SIPRI, 2017).

the competitiveness of the affected industry. Thus, it is difficult to imagine how a stricter export control regime would not be detrimental to the competitiveness of technology companies when faced with major exporting powers from other countries. In any case, that the notion may continue to undergo expansion reflects the fact that the initial definition was, in its origins, somewhat imprecise.

Before concluding this section on the different delimitation criteria used to define dual-use goods, it can be said that there could still be other dichotomies, such as, for example, one that is more ambitious than the aforementioned but which is less in line with concrete research schemes, consisting as it does in differentiating between *constructive* and *destructive* purposes. This distinction is essential and, although objections might be raised as regards exactly what it means to construct and destroy, its moral connotation is clear. Another dichotomy is that which distinguishes between *defensive* and *offensive* uses; or, that which differentiates between items that can be used in both *nuclear* and *non-nuclear* programmes, with the obvious limitations that the latter category entails.

7. FINAL CONSIDERATIONS

The notion of “dual-use goods” assembles a whole set of hard-law regulations, soft-law guidelines, actors and institutions which seem to have reached a shared understanding of what dual-use items are, despite the lack of a unique and universally accepted definition of them.

The analysis of prevailing international practice reveals the existence of three main criteria for the delimitation of the notion of dual-use goods: peaceful and non-peaceful ends (this terminology is used in legally binding rules), civil and military uses (this terminology is found in some export control regimes’ guidelines and in specialised doctrine) and benevolent and malevolent purposes (used by certain export control regimes in order to be able to address the terrorist threat in transfer control systems). The study carried out

also shows that all the sources that attempt to define dual-use goods do so on the basis of the following premise: they are goods which, on the one hand, have certain indisputable and objective technical characteristics and, on the other hand, are susceptible of having two opposing uses. The fact that the same good could be used for one of two opposite purposes leaves it to the free will of the person who will use it to decide whether the item will be employed for a peaceful, civil or benevolent purpose or, on the contrary, for a non-peaceful, military or malevolent purpose. Nonetheless, and in spite of all that follows this two-fold premise, different legal sources resort to different criteria to describe those two potential uses. In this sense, it should be stressed again that in the current context of international security, where threats are often posed by non-state actors, the criterion that best encompasses the two potential uses that may be given to these items is the dichotomy that differentiates between benevolent and malevolent ends, although we are aware that their marked abstract - and even moral - component makes legal regulation particularly difficult.

It should also be recalled that, as part of the evolution undergone by the term “dual-use goods”, two specific factors particularly stand out: the inclusion of the increasingly present intangible goods as dual-use items that must be subject to control - with all the difficulties that this implies - and the expansion of the traditional limits of the notion to cover certain materials not necessarily linked to nuclear, biological or chemical weapons. If the limits of the notion continue to be expanded, it will consequently imply new regulatory difficulties and new obstacles for actors interested in transferring, exporting and benefiting from the industrial side of dual-use goods. In such a case, the legislator will have to find a way to strike a new balance between the right to development and the obligation to control to ensure security.