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Regulating Technological Innovation through Informal International Law: The Exercise of International Public Authority by Transnational Actors

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4.1 Introduction

The relationship between law, innovation and technology has been studied extensively. Almost by nature a warm relationship, it seems inherently contradictory as more law would imply less innovation. Even if we would point to the advantages of regulation for technological innovation, the institutional setting may be too complex to handle. In the words of Roger Brownsword and Han Somsen: 'In the best of all worlds, the regulatory environment will support and prioritise technological innovation that promises to strengthen the conditions that are essential for human social existence, and it will guard effectively against the abuse of and inherent risks presented by particular lines of technological development. In the real world, however, regulators have limited control over the priorities set by either market or military and there are severe restrictions on what nation states can individually control beyond their geographical borders.'[1] The present contribution purports to add to the existing body of literature by focusing on one specific phenomenon, which may complicate the institutional setting even further: informal international law as a tool to regulate technological innovation.

From the outset, international organisations have played a role in the international regulation of technology. In fact, some of the oldest international organisations were established exactly to regulate and facilitate international technological cooperation. Thus, for instance, the International Telecommunication Union (ITU) was established in

1865 and its objectives already hinted at the regulation of innovation: 'to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunication services, increasing their usefulness and making them, so far as possible, generally available to the public' (Art. 1.1.c of the ITU Constitution). Another example of an international organisation with a direct substantive link to technology is WIPO, the World Intellectual Property Organization. At the same time, although perhaps more indirectly, the international regulation of technology has become part and parcel of the tasks of organisations in the fields of for instance the environment, food, health or security, where we see novel applications of emerging technologies.[2]

The increasing influence of international organisations in general revealed that 'law-making is no longer the exclusive preserve of states'.[3] Indeed, international organisations are engaged in normative processes that, *de jure* or de facto, impact on states and even on individuals and businesses.[4] Decisions of international organisations are increasingly considered a source of international law,[5] and it is quite common to regard them in terms of international regulation or legislation.[6] As far as regular formal international organisations are concerned, their competence to take binding decisions vis-à-vis their member states is undisputed. They may even exercise sovereign powers, including executive, legislative and judicial powers.[7]

In addition, and apart from formal international organisations, an increasing number of other fora and networks have been recognised as playing a role in international or transnational normative processes. As José Alvarez notes, more and more technocratic international bodies 'appear to be engaging in legislative or regulatory activity in ways and for reasons that might be more readily explained by students of bureaucracy than by scholars of the traditional forms for making customary law or engaging in treaty-making; [t]hey also often engage in law-making by subterfuge'. Students of international relations and public administration pointed to the fact that the absence of a world government did not stand in the way of an 'emerging reality of global governance'. Recently, Jonathan Koppell sketched, both empirically and conceptually, the 'organisation of global rulemaking'. Even in the absence of a centralised global state, the population of Global Governance Organisations (GGOs) is not a completely atomised collection of entities. 'They interact, formally and informally, on a regular basis. In recent years, their programmes are more tied together, creating linkages that begin to weave a web of transnational rules and

regulations'.[8] We now see a network of multiple GGOs consisting of a variety of governmental, non-governmental and hybrid organisations, which have as their main objective the crafting of rules and standards for worldwide application.[9]

The involvement of non-governmental actors in global rule making is far from new.[10] Even in the 'intergovernmental' ITU, private companies traditionally play an important role and some are even members of organs of the ITU (Art. 19 ITU Convention).[11] Nevertheless, we have increasingly become to realise that the global governance is in the hand of, what we term here, *informal* international bodies, which do not follow the traditional rules on international law making. In some issue areas, there is intense cooperation between state and non-state actors, such as in the regulation of the Internet by ICANN (the Internet Corporation for Assigned Names and Numbers). In some areas, states have even ceased to play a regulatory role, and transnational actors have taken over.[12] A prime example is the International Standardization Organization (ISO).[13]

While in most states the decisions of international organisations and bodies typically require implementation in the domestic legal order before they become valid legal norms, the density of the global governance web has caused some interplay between the normative processes at various levels. For EU member states (and their citizens), this can imply that the substantive origin of EU decisions (which usually enjoy direct effect in, and supremacy over, the domestic legal order) is to be found in another international body.[14] At the same time 'informal' rules often are adopted by regular international organisations, such as the World Trade Organization (WTO), which allows them to become part of 'formal' international decisions. However, informal decisions also may have an independent impact on domestic legal orders. The de facto impact of the – often quite technical – norms and the need for consistent interpretation[15] may thus set aside more sophisticated notions of the applicability of international norms in the domestic legal order.

Similar to the notion of multilevel governance as developed in political science and public administration, from a legal perspective the interactions between global, European and national regulatory spheres lead to the phenomenon of 'multilevel regulation'.[16] 'Regulation' is then defined in a broad sense, referring to the setting of rules, standards or principles that govern conduct by public and/or private actors. Whereas 'rules' are the most constraining and rigid, 'standards' leave a greater range of choice or discretion, while 'principles' are still more flexible, leaving scope to balance a number of (policy) considerations.[17]

In other words, 'regulation' refers to 'any instrument (legal or non-legal in its character, governmental or non-governmental in its source, direct or indirect in its operation, and so on) that is designed to channel behaviour'.[18]

In the following sections we will subsequently introduce the concept of informal international law making (section 4.2); analyse the importance of the 'exercise of public authority' by regulatory bodies (section 4.3); focus on a number of international bodies involved in the regulation of technology (section 4.4); and draw some conclusions on the relevance and the consequences of these forms of regulation (section 4.5).

4.2 Regulation through informal international law

The above analysis points to the recognition of norms that while being enacted *beyond* the state may nevertheless have an impact *within* the state. Indeed, domestic legal systems – traditionally, by definition, caught in national logic – increasingly recognise the influence of international and transnational regulation and law making on their development.[19] Legal scholars attempt to cope with the proliferation of international organisations and other entities contributing to extra-national normative processes.[20] Within this broader debate, a relatively new phenomenon has emerged: *informal* international law making. This type of law making is 'informal' in the sense that it dispenses with certain formalities traditionally linked to international law making. These formalities may have to do with *output*, *process* or the *actors involved*.[21] Pauwelyn defined informal international law making as: 'Cross-border cooperation between public authorities, with or without the participation of private actors and/or international organizations, in a forum other than a traditional international organization (process informality), and/or as between actors other than traditional diplomatic actors (such as regulators or agencies) (actor informality), and/or which does not result in a formal treaty or legally enforceable commitment (output informality)'.[22]

Informal international law making is novel in the sense that it goes beyond the 'law making by international organisations' debate[23] by focusing on other public authorities and normative outcomes, and differs from the more 'formal procedure-creating' approach of 'Global Administrative Law'.[24] At the same time, it shares some notions with the concept of 'multilevel regulation', both in terms of the actors involved and the effects that the normative output may have at different levels (global, regional (EU), domestic). Interestingly enough, informal international law making is based on the presumption that

international cooperation, albeit less formal, falls within the remit of international law, on the ground that international law has, even traditionally, been defined with reference to its subjects (e.g. inter-state relations) rather than its object (be it subject matter or the particular form or type of output).[25] In that sense, informal international law making may manifest 'an impact-based conception of international law'.[26]

For the purpose of the present contribution it is important that 'informal international law' reveals that the regulation of technological innovation has moved from traditional intergovernmental settings to a complex web of regulatory bodies (*infra* section 4.3). While more forms present themselves, two types of international bodies in particular seem to play a role in informal international law making: *trans*-governmental networks and international agencies. Trans-governmental networks have been defined by Anne Marie Slaughter as 'informal institutions linking actors across national boundaries and carrying on various aspects of global governance in new and informal ways'.[27] These trans-governmental networks exhibit 'pattern[s] of regular and purposive relations among like government units working across the borders that divide countries from one another and that demarcate the 'domestic' from the 'international' sphere'.[28] They allow domestic officials to interact with their foreign counterparts directly, without much supervision by foreign offices or senior executives, and feature loose structures and peer-to-peer ties developed through frequent interaction.[29] The networks are composed of national government officials, either appointed by elected officials or directly elected themselves, and they may be among judges, legislators or regulators.[30] According to Kanishka Jayasuriya, these new regulatory forms have three main features: (1) they are governed by networks of state agencies acting as independent actors rather than on behalf of the state but; (2) they lay down standards and general regulatory principles instead of strict rules; and (3) they frequently contribute to the emergence of a system of decentralised enforcement or the regulation of self-regulation.[31] A trans-governmental regulatory network is basically cooperation between regulatory authorities of different countries.

In addition, regulation may be in the hands of what we have coined 'international agencies': international bodies that are not based on an international agreement, nor on bottom-up cooperation between national regulators, but on a decision by an international organisation.[32] These bodies have also been referred to as 'transnational administrative networks' (TANs) and their composition may differ substantially from that of the 'mother' organisation, for instance through the participation

of experts from industry and from NGOs.[33] According to some observers, these new international entities even outnumber the conventional organisations.[34] International regulatory cooperation is often conducted between these non-conventional international bodies[35] and it is not unusual for international agencies to engage in international norm-setting. Here also, the tendency towards functional specialisation because of the technical expertise required in many areas may be a reason for the proliferation of such bodies and for their interaction with other international organisations and agencies, which sometimes leads to the creation of common bodies. International (regulatory) cooperation is often conducted between these non-conventional international bodies.[36] Whereas traditional international organisations are established by an agreement between states, in which their control over the organisation and the division of powers is laid down,[37] the link between newly created international bodies and the states that established the parent organisation is less clear. As one observer holds, this 'demonstrates how the entity's will does not simply express the sum of the member states' positions, but reformulates them at a higher level of complexity, assigning decision-making power to different subjects, especially to the international institutions that promoted the establishment of the new organization'.[38]

This leads to a large number of potential fora involved in informal international law making. First of all, what has been set out above already indicates that governance, and by the same token regulation, has become a multi-actor game; apart from intergovernmental organisations, non-governmental and transnational actors are playing an increasing role in global governance.[39] National agencies thus participate in global (or regional) regulatory networks as largely independent, autonomous actors and are, in turn, often required to implement international regulations or agreements adopted in the context of these networks at the national level.[40] As early as a decade ago, Anne-Marie Slaughter termed this phenomenon the 'nationalization of international law',[41] and because of the fast developments in technology and the specific expertise required in that sector, the phenomenon has presented itself clearly in particular in relation to the regulation of technology. As one observer held, this is 'governance by technical necessity'.[42]

4.3 The exercise of public authority through regulatory activities

The potential list of international bodies that are somehow involved in rule making is thus quite extensive. In our quest to look for regulatory

bodies that are somehow involved in informal international lawmaking, it may be wise to follow Jonathan Koppell's suggestion to focus on those organisations that are 'actively engaged in attempts to order the behaviour of other actors on a global scale'.[43] Only organisations devoted to normative, rule creating and rule supervisory activities would thus be GGOs.

However, as we are mainly interested in the 'public' dimension of regulation, we wish to be even more precise. Following the notion that 'governance' is about creating (public) order,[44] a good starting point may be to raise the question whether 'public authority' is exercised when we look at rule making. This notion was recently studied within the framework of a Max Planck project on the 'Exercise of International Public Authority'.[45] Large parts of international cooperation (including some of the forms mentioned above) could be considered as merely affecting the private legal relationships between actors. We would argue that the 'public' dimension is essential whenever we wish to study new forms of lawmaking; irrespective perhaps of the process, the actors or the instruments used. Armin von Bogdandy, Philipp Dann and Matthias Goldman define the 'exercise of international public authority' in the following terms: 'any kind of governance activity by international institutions, be it administrative or intergovernmental, should be considered as an exercise of international public authority *if* it determines individuals, private associations, enterprises, states, or other public institutions'.[46] 'Authority' is defined as 'the legal capacity to determine others and to reduce their freedom, i.e. to unilaterally shape their legal or factual situation'.[47] Also important is the fact that the determination may or may be not legally binding: 'It is binding if an act *modifies the legal situation* of a different legal subject without its consent. A modification takes place if a subsequent action which contravenes that act is illegal'.[48] The authors believe that this concept enables the identification of all those governance phenomena, which public lawyers should study. Irrespective of its focus on 'governance activity by international institutions', we feel that this definition may also be applied to the informal fora addressed in the present contribution and could thus be applicable to all GGOs, including the ones involved in the regulation of technological innovation.

Whereas the authors convincingly argue that that the capacity to determine another legal subject can also occur through a non-binding act, which only conditions another legal subject, we would limit the concept of 'regulation' to activities that do indeed modify the legal situation of a different legal subject. At the same time we wish to rule

out pure private authority exercised by transnational or international bodies (as well as companies). The 'publicness' of the international act therefore seems important and may be the most difficult element to establish. After all – as also noted by Von Bogdandy, Dann and Goldmann – it would be too easy to relate the 'publicness' of a legal act to an existing legal basis for the authority. We cannot exclude that (de facto) public authority is exercised by non-governmental or hybrid international institutions, which may only be indirectly based on a state's 'consent to be bound'.

The concept would thus cover not only (many, but not all) decisions by formal international organisations, but also forms of law making that because of the nature of the body, the process or the instrument may be more informal.

4.4 Examples of regulation of technological innovation through informal international law

In order to limit the size of this contribution, we will focus on bodies with activities that are directly relevant for technological sectors, more precisely the Internet sector. The Internet sector offers a number of examples of technological regulation and may serve as a good illustration of informal international law making.[49] This leaves out other bodies in the technical arena, such as ISO, as well as all bodies with powers to regulate technological innovation in areas such as the environment, food, health or security. We will also leave out the formal activities of traditional international organisations, as these are well described by others.[50] The descriptions below merely serve as illustrations of regulation of technological innovation through informal international law making. Obviously, a broader scope would reveal a larger number of involved regulatory bodies. The main purpose will be to find out when we can argue that 'international public authority' is exercised.

ICANN

ICANN is a non-profit corporation, with the mission of coordinating the global Internet's systems of unique identifiers. It coordinates the allocation and assignment of the three sets of unique identifiers for the Internet: domain names; Internet protocol (IP) addresses and autonomous system (AS) numbers; and protocol port and parameter numbers. ICANN is a non-profit corporation under Californian law and therefore is a striking example of a body that despite not being an international organisation seem to govern an entire technical sector on a global scale.

ICANN thus defies the traditional foundations of international law making: its main members are private corporations (with national governments in an advisory role only), it has no international legal status and it is not based on an international agreement in which its competences are laid down and restricted. Thus, formally, ICANN does not exist in international law. Yet, as argued by one observer, 'ICANN establishes rules which are of greater importance than most acts of international organizations and they are more widely and more strictly accepted and respected than binding decisions of most international organizations. One could make the argument that ICANN decisions are more authorative than those of the UN Security Council in the sense that ICANN decisions are less frequently violated'.[51] The reason is simple: ICANN's rules are necessary for the operation of the Internet.

The private law origin of ICANN is reflected in the composition of its main decision-making body, the Governing Board, which draws its members from interested organisations and groups. Governments do have an influence through one of the advisory bodies only, the Governmental Advisory Committee (GAC). The GAC is composed of representatives of (102) state governments, public authorities and (14) representatives of international organisations (such as the ITU and the WIPO). Since 2002 (following the terrorist attacks of 2001), the GAC's advises are duly taken into account by the Board of Governors (see Art. 1, sec. 2.11 Bylaws of 2002). The GAC has its own governance structure, secretariat and decision-making procedures and seems to have become an 'intergovernmental organisation within a non-governmental organisation'.

Another element pointing to its 'informal law' status concerns the 'output'. ICANN does not regulate on the basis of binding decisions. Rather, it concludes contracts with the registries in charge of the administration of Internet 'top-level domains' (TLDs). However, given the fact that Internet access is dependent on having a TLD name (such as .eu), one may argue that this comes close to 'de facto' bindingness. Indeed 'It seems quite logical that the uniformity of the rules is best guaranteed by a single "legislator"'.[52] It is this argument that seems to form the source of many more examples of the regulation of technology. Despite its informal, non-governmental, nature, ICANN fulfils a public task. It administers a scarce common good and decides on its assignment. In that sense it indeed can be said to exercise public authority.[53]

The Internet Governance Forum (IGF)

The 2006 World Summit on the Information Society (WSIS) led to the establishment of the IGF, with a view to better understanding issues

related to internet governance and to promoting dialogue among stakeholders in an open and inclusive manner. The mandate of the Forum is laid down in Paragraph 72 of the Tunis Agenda adopted by the WSIS, which was endorsed by the UN General Assembly in its Resolution 60/252.

Unlike ICANN, the IGF allows for more groups to participate in meetings: governments, the private sector, civil society, intergovernmental and other international organisations. In the 2010 meeting (in Vilnius), 1451 people participated (a total of around 2000 persons were present). The breakdown of participants shows that all the major stakeholder groups were represented almost equally, with 21 per cent of participants coming from civil society, 23 per cent from the private sector, 24 per cent comprising government representatives and 22 per cent made up of technical and academic communities. Institutionalisation took place on the basis of the creation of a de facto secretariat, the Multi-stakeholder Advisory Group (MAG). This MAG has 56 members, which are nominated by the different stakeholder groups taking into account geographical and gender balance. The MAG prepares the IGF meetings and meets three times per year; it is physically located within the UN Offices in Geneva.

Apart from the Chairman Submissions that are issued at the end of every meeting, IGF meetings have no formal binding output. Nevertheless, the IGF is believed to affect decisions that are taken elsewhere. Thus, the work of the IGF has been reflected in Ministerial Declarations of the Council of Europe and the OECD.[54]

While the IGF most certainly influences the political as well as technical governance of the Internet, it would be hard to argue that it exercises public authority itself. It does play its role in the regulation of the Internet and may in that sense have a public task. It does, however, seem to lack 'the legal capacity to *determine* others and to reduce their freedom, that is, to unilaterally shape their legal or factual situation'.

The Internet Engineering Task Force (IETF) and the Internet Society (ISOC)

ISOC is an organisation network for the groups responsible for Internet infrastructure standards, including the IETF. The latter is the principal body engaged in the development of new Internet standard specifications. Being a large open international community of network designers, operators, vendors and researchers, IETF is responsible for the resolution of all short- and mid-range protocol and architectural issues required to make the Internet function effectively. IETF is a network, formally

established by IAB (Internet Architecture Board). It is not a corporation and it lacks a definite legal status. It has no board of directors, no official members and no dues. ISOC is an independent international non-profit organisation, established in 1992 with the purpose of providing institutional framework and financial support for IETF, but it later expanded its objectives. ISOC is a corporation, incorporated under the District of Columbia Non-Profit Corporation Act. Its responsibilities are provided for in RFC 1602 (Revision 2 of The Internet Standards Process), a constitutive instrument that was adopted in 1992 and was later revised.

There is no membership in the IETF. Anyone can register for and attend any meeting. The closest thing there is to being an IETF member is being on the IETF or one of the Working Groups' mailing lists. The usual participants are designers, operators, vendors and researchers concerned with the evolution of the Internet. Government representatives can participate in the process; however their participation is at the same level as that of any private individual or expert. They are not accorded any special treatment; on the contrary, they only form a part of a large Internet community. The membership of ISOC is more structured – it is open to individuals and organisations. Today, ISOC's community has more than 26,000 individual members. Groups of people who live in the same area or share an interest in specific issues can form an ISOC Chapter. ISOC's Organisation Members include corporations; non-profit, trade, and professional organisations; foundations; educational institutions; government agencies; and other national and international organisations.

The Internet Standards Process starts at the IETF. A specification undergoes a period of development and several iterations of review by the Internet community and revision based upon experience. The standards developed through the IETF are considered by the Internet Engineering Steering Group, with appeal to the IAB, and promulgated by the Internet Society as international standards. Typically, a standards action is initiated by a recommendation to the appropriate IEFT Area Director by the individual or group that is responsible for the specification, usually an IETF Working Group (WG). WGs cooperate through the mailing lists. An important fact is that there is no formal voting in a WG. The general rule on disputed topics is that the WG has to come to 'rough consensus', meaning that a very large majority of those who care must agree.

Output takes different forms: proposed standards, draft standards, internet standards, best current practices documents, informational documents, experimental documents and historical documents. The

Internet Standards Process deals with protocols, procedures, and conventions that are used in or by the Internet, whether or not they are part of the TCP/IP protocol suite. The effect of Internet standards is not binding per se, but the purpose of the Internet standards making process is to get consent from end-users and their affirmation of the standard. This will result in actual use of the standards and therefore, a more unified and open use of the Internet. In effect, the Internet Standards Process has a very concrete and formal output and its standards are widely used by the Internet community.

This feature reveals the public authoritative nature of the process. It is hardly possibly not to accept the standards, which leads to an effective international regulation of this area through different, informal, means.

The Global Cybersecurity Agenda (GCA) of the ITU

GCA is a framework for international cooperation aimed at enhancing confidence and security in the information society. It was launched in 2007 by the ITU Secretary-General. Cybersecurity refers to protection against unauthorised access, manipulation and destruction of critical resources. The main problem is the lack of international harmonisation regarding cybercrime legislation. ITU's idea with GCA is that the strategy for a solution must identify those existing national and regional initiatives, in order to work effectively with all relevant players and to identify common priorities.

All members of the ITU – 191 member states and 700 sector members – can participate in discussion and initiatives of the GCA. The decision-making process depends on the decision taken. For example, recommendations are issued on the basis of a consensus of all participants. On the other hand, toolkits ('model laws') are prepared by lawyers and not by state representatives. Except from the formal establishment of the initiative there is no 'output' as such, the objective being to influence the practice worldwide. With its cybercrime legislation resources and material, the GCA under the ITU aims to assist countries in understanding the legal aspects of cybersecurity in order to move towards a harmonising of legal frameworks. Apart from many key security Recommendations, ITU has developed overview security requirements, security guidelines for protocol authors, security specifications for IP-based systems, guidance on how to identify cyber threats and countermeasures to mitigate risks. One of the most important security standards in use today is X.509, an ITU-developed Recommendation for electronic authentication over public networks.

Recently, ITU-T X.1205 'Overview of Cybersecurity' was approved. It provides a definition of cybersecurity and taxonomy of security threats. It discusses the nature of cybersecurity environment and risks, possible network protection strategies, secure communications techniques and network survivability.

Irrespective of their influence, the decisions taken do not have a binding force for the Members of the GCA. Again, however, one may argue that once the adopted recommendations in effect regulate a particular area for instance, by excluding other possibilities the GCA is exercising international public authority. Given the subject matter, however, this effect may only occur once market players or governments decide on a mandatory use of the adopted standards.

4.5 Consequences of the regulation of technological innovation through informal international law making and suggestions for further research

There is nothing new in arguing that 'regulation beyond the state' seems to have replaced traditional forms of legal governance. In legal science, however, the impact of this development is much larger than in, for instance, public administration. Lawyers tend to work with 'legal systems' that are neatly separated and have their own source of norms. While the debate on 'multilevel governance' can said to have taken place within the academic disciplines of political science and public administration, the phenomenon of 'multilevel regulation' challenges the very foundations of law itself.

The notion of 'informal international law making' aims to find a way out of the tension between traditional legal science (with its focus on 'sources', 'jurisdiction' and 'competences') and the factual reality of norms being enacted by actors and through procedures that are unfamiliar to the traditional lawyer. Yet, as the cases on the regulation of the Internet show, the impact – even in a legal sense – of these norms may be larger and more widespread than formal treaty law or decisions by international intergovernmental organisations.

While the transfer of competences to formal international organisations is a careful process guided by strict rules and principles (such as the 'principle of the attribution of powers'[55]), competences seem to have been transferred to or created by more informal fora in a parallel process. Again, this is not new,[56] but the extent to which large parts of society now seem to be regulated in 'informal' ways has triggered a debate on the consequences (in terms of legitimacy and accountability,

or more generally upholding the rule of law) and possible solutions (ranging from the introduction of constitutional principles at the global level, the development of global administrative law, or the acceptance of the plurality of legal orders and the fragmentation of international law).[57] These responses underline that we may indeed have to rethink certain traditional aspects of international law.

The regulation of technology is a prime example of an area which is already largely outside the direct influence of the traditional lawmakers, the states. At the same time, we have seen that in most cases we are not talking about small and select groups of actors. Many stakeholders are involved and the institutionalisation has shown a dynamic that is similar to traditional international organisations. Moreover, this is not about the private sphere of companies; in many cases international public authority is exercised. It is clear that there is no way back and that 'global governance' has developed either in the shadow of existing arrangements or simply 'bottom up' through cooperation between national regulators. The reason is obvious. The regulation of technology can only be done by experts ('governance by technical necessity').

Legal science is only at the beginning of accepting the reality of this development. At the same time this offers an opportunity to rethink the relationship between law, innovation and technology. More research on 'informal international law making' may assist in providing the necessary empirical data and conceptual notions to square the contradiction presented at the beginning of this contribution.

Notes

1. See Brownsword, R. and H. Somsen, 'Law, innovation and technology: before we fast forward – a forum for debate', *Law, Innovation and Technology* (2009), no. 1, pp. 1–73.
2. Ibid., p. 1.
3. Boyle, A. and C. Chinkin, *The Making of International Law* (Oxford: Oxford University Press, 2007), at vii. See for a non-legal approach: M. J. Warning, *Transnational Public Governance: Networks, Law and Legitimacy* (Basingstoke: Palgrave Macmillan, 2009).
4. See Føllesdal, A., R. A. Wessel and J. Wouters (eds), *Multilevel Regulation and the EU: The Interplay between Global, European and National Normative Processes* (Leiden and Boston: Martinus Nijhoff Publishers, 2008).
5. See also Dekker, I. F. and R. A. Wessel, *Governance by International Organisations: Rethinking the Source and Normative Force of International Decisions*, I. F. Dekker and W. G Werner (eds), *Governance and International Legal Theory* (Leiden and Boston: Martinus Nijhoff Publishers, 2004), pp. 215–36.
6. Whereas 'regulation' is the more comprehensive term used in this contribution, 'legislation' has a more narrow connotation, as 'legislative power' has

been said to have three characteristics: (1) a written articulation of rules that (2) have legally binding effect as such and (3) have been promulgated by a process to which express authority has been delegated *a priori* to make binding rules without affirmative *a posteriori* assent to those rules by those bound. See Oxman, B., 'The international commons, the international public interest and new modes of international lawmaking', in J. Delbrück (ed.), *New Trends in International Lawmaking – International 'Legislation' in the Public Interest* (Berlin: Ducker & Humblot, 1996), at pp. 28–30. Cf. Also the 'Comments' by T. Stein and C. Schreuder in the same volume. An even more distinguishing element, perhaps, is that such rules imply future application to an indeterminate number of cases and situations. See A. J. J. de Hoogh, *Attribution or Delegation of (Legislative) Power by the Security Council?*, *Yearbook of International Peace Operations*, 2001.

7. See Sarooshi, D., *International Organizations and their Exercise of Sovereign Powers* (Oxford: Oxford University Press, 2005).
8. Koppell, J. G. S., *World Rule. Accountability, Legitimacy, and the Design of Global Governance* (Chicago/London: The University of Chicago Press, 2010).
9. See for a recent survey of examples O. Dilling, M. Herberg and G. Winter (eds), *Transnational Administrative Rule-Making: Performance, Legal Effects and Legitimacy* (Oxford: Hart Publishing, 2011).
10. In fact, the current attention for transnationalism may remind us of the dominant debate in international relations theory in the beginning of the 1970s. See for instance R. Keohane and J. Nye, 'Transnational relations and world politics', *International Organization* (1971), p. 329. See also Chr. Tietje, 'History of transnational administrative networks', in Dilling, Herberg and Winter, op. cit., pp. 23–37.
11. Cf. Jacobson, H. K., 'ITU: A Potpourri of Bureaucrats and Industrialists', in R. W. Cox and H. K. Jacobson, *The Anatomy of Influence, Decision-Making in International Organizations* (New Haven: Yale University Press, 1973).
12. *See* Hartwich, M., 'ICANN – Governance by Technical Necessity', in A. Von Bogdandy, R. Wolfrum, J. Von Bernsdorff, Ph. Dann and M. Goldmann (eds), *The Exercise of Public Authority by International Institutions: Advancing International Institutional Law* (Heidelberg, etc.: Springer, 2010), pp. 575–605.
13. See Hall, R. B. and Th. J. Biersteker (eds), *The Emergence of Private Authority in Global Governance* (Cambridge: Cambridge University Press, 2002).
14. For a survey of the relations between the EU and other international organizations, see generally Hoffmeister, F., 'Outsider or frontrunner? Recent developments under international and European Law on the status of the European Union in international organizations and treaty bodies', *Common Market Law Review*, (2007), pp. 41–68. See also Chiti, E. and R. A. Wessel, 'The emergence of international agencies in the global administrative space: autonomous actors or state servants?', in White, N. and R. Collins (eds), *International Organizations and the Idea of Autonomy* (London: Routledge, 2011).
15. Cf. Cottier, Th., 'A theory of direct effect in global law', in Von Bogdandy, A. et al. (eds), *European Integration and International Co-ordination: Studies in Transnational Economic Law in honour of Claus Dieter Ehlermann* (The Hague: Kluwer Law International, 2001), at 109–10 (discussing the impact of the doctrine of consistent interpretation in relation to the domestic effect of WTO law).

16. See Føllesdal, Wessel and Wouters, op. cit. Cf. also N. Chowdhury and R. A. Wessel, 'Conceptualising multilevel regulation: a legal translation of multilevel governance?', unpublished paper, forthcoming 2012.
17. Wessel, R. A. and J. Wouters, 'The phenomenon of multilevel regulation: interactions between global, EU and National Regulatory Spheres', in Føllesdal, Wessel and Wouters, op. cit., pp. 9–47, at 11–12.
18. Brownsword and Somsen, op. cit., at 8. This description comes close to the widely accepted definition by Julia Black: 'the sustained and focused attempt to alter the behaviour of others according to standards or goals with the intention of producing a broadly identified outcome or outcomes, which may involve mechanisms of standard-setting, information-gathering and behaviour-modification.' J. Black, 'What is regulatory innovation?' in J. Black, M. Lodge and M. Thatcher (eds), *Regulatory Innovation* (Cheltenham: Edward Elgar, 2005), p. 11.
19. See generally Nijman, J. and P. A. Nollkaemper, *New Perspectives on the Divide between National & International Law* (Oxford: Oxford University Press, 2007).
20. See Jayasuriya, K., 'Globalization, law, and the transformation of sovereignty: the emergence of global regulatory governance', *Indiana Journal of Global Legal Studies* (1999), p. 425. In his book *International Organizations as Law-makers* (op. cit.), José Alvarez reveals that the role of international organisations in law making not only increased, but also that international law is not always well equipped to handle this development. Cf. Sarooshi, D., op. cit. For earlier examples, see J. Delbrück, op. cit. On the development of the (sub-)discipline of the law of international organizations in general, see J. Klabbers, 'The life and times of the law of international organizations', *Nordic Journal of International Law* (2001), pp. 287–317.
21. See Pauwelyn, J. 'Informal international law-making: mapping the action and testing concepts of accountability and effectiveness', in J. Pauwelyn, R. A. Wessel and J. Wouters (eds), *Informal International Lawmaking: Mapping the Action and Testing Concepts of Accountability and Effectiveness* (Oxford: Oxford University Press, 2012, forthcoming).
22. Ibid.
23. Alvarez, op. cit.
24. See Kingsbury, B. and L. Casini, 'Global administrative law dimensions of international organizations law', *International Organizations Law Review*, (2009) no. 2, pp. 319–56, as well as other contributions to the special issue of *IOLR* on *Global Administrative Law in the Operations of International Organizations*. Earlier: N. Krisch and B. Kingsbury, 'Introduction: global governance and global administrative law in the international legal order', *European Journal of International Law* (2006); as well as B. Kingsbury, N. Krisch and R. Steward, 'The emergence of global administrative law' *Law and Contemporary Problems* (2005), pp. 15–61, at p. 29; Harlow, C., 'Global administrative law: the quest for principles and values' *EJIL* (2006), pp. 197–214; B. Kinsgbury, 'The concept of law in global administrative law', *EJIL* (2009), pp. 23–57.
25. Pauwelyn, op. cit. Cf. also D. W. P. Ruiter and R. A. Wessel, 'The legal nature of informal international law: a legal theoretical exercise', in Pauwelyn, Wessel and Wouters, op. cit.

26. D'Aspremont, J., 'Informal International Public Policy Making: From a Pluralisation of International Norm-Making Processes to a Pluralisation of our Concept of International Law', paper presented at the workshop Informal International Public Policy Making, Geneva, 24–25 June 2010.
27. Slaughter, A. M. and D. Zaring, 'Networking goes international: an update', *Annual Review of Law and Social Science* (2006), p. 215.
28. Slaughter, A. M., *A New World Order* (Princeton University Press, 2004), p. 14.
29. Slaughter and Zaring, op. cit., p. 215; Raustiala, K., 'The architecture of international cooperation: Transgovernmental networks and the future of international law', *Virginia Journal of International Law* (2002–2003); Risse-Kappen, T., 'Introduction', in Risse-Kappen, T. (ed.), *Transnational Relations Back In*, 1995.
30. Slaughter, op. cit., pp. 3–4.
31. See Jayasuriya, op. cit., at 453. On the regulation of self-regulation in particular, see generally G. Teubner, 'Substantive and reflexive elements in modern law', *Law & Society*, (1983). Elements of this development are also addressed by Anne-Marie Slaughter, op. cit. Slaughter seems to use the term 'transgovernmental networks' to point to what we would call informal international law-making. Slaughter, op. cit., Chapter 6.
32. Chiti, E. and R. A. Wessel, op. cit.
33. Oeter, S., 'The openness of international organisations for transnational public rule-making', in Dilling, Herberg and Winter, op. cit., pp. 236–52 at 240.
34. See Shanks, C., H. K. Jacobson and J. H. Kaplan, 'Inertia and change in the constellation of international governmental organizations, 1981–1992', *International Organization*, (1996), pp. 593.
35. Cf. Tietje, C., 'Global governance and inter-agency cooperation in international economic law', *Journal of World Trade* (2002), p. 501.
36. Ibid., p. 501.
37. On the different dimensions of the relationship between states and international organizations cf. D. Sarooshi, op. cit.
38. Martini, C., 'States' control over new international organization', *Global Jurist Advances* (2006), pp. 1–25, at 25.
39. Anne-Marie Slaughter regards these networks as a better way of world governance than the traditional state-centric approach. See Slaughter, op. cit.
40. See Jayasuriya, op. cit., at 440. See also S. Picciotto, *The Regulatory Criss-Cross: Interaction Between Jurisdictions and the Construction of Global Regulatory Networks*, in W. Bratton et al. (eds), *International Regulatory Competition and Coordination: Perspectives on Economic Regulation in Europe and the United States*, 1996.
41. Anne-Marie Slaughter, 'The real new world order', *Foreign Affairs* (1997), p. 192.
42. Hartwich, op. cit.
43. Koppell, op. cit., at 77.
44. For example: Peters, B. G., 'Introducing the topic', in B. G. Peters and D. J. Savoie (eds), *Governance in a Changing Environment* (Montreal: MacGill-Queens University Press, 1995).
45. See Von Bogdandy et al., op. cit. See in the same volume also M. Goldmann, 'Inside relative normativity: from sources to standards instruments for

the exercise of international public authority', pp. 661–711; and A. Von Bogdandy, P. Dann and M. Goldmann, 'Developing the publicness of public international law: towards a legal framework for global governance activities', pp. 3–32.

46. Ibid., at 5.
47. Ibid., at 11.
48. Ibid., at 11–2.
49. Cf. also von Bernstorff, J., 'Democratic global Internet regulation? Governance networks, international law and the shadow of hegemony', *European Law Journal*, (2003), pp. 511–26.
50. Many examples are drawn from the case studies in the 'Informal International Law-Making' project (IN-LAW; see www.informallaw.org). The case studies used here were done by Ana Berdajs at the Graduate Institute in Geneva and credit is due to her work.
51. Hartwig, op. cit., p. 576.
52. Ibid., at 591.
53. Ibid., at 603. Cf. also B. Carotti and L. Cassini, 'Complex governance forms: hybrid, multilevel, informal', in S. Cassese et al. (eds), *Global Administrative Law*, 2008. Available at: http://www.iilj.org/GAL/documents/GALCasebook.pdf; visited on 22 September 2011).
54. Based on the data retrieved in the IN-LAW project by Ana Berdajs. See also Note of the UN Secretary-General, Prepared by UN Department of Economic and Social Affairs (May 2010). Available at: http://unpan1.un.org/intradoc/groups/public/documents/un-dpadm/unpan039074.pdf; visited on 22 September 2011.
55. See Schermers, H. G and N. M. Blokker, *International Institutional Law: Unity in Diversity* (Boston and Leiden: Martinus Nijhoff Publishers, 2003), p. 155: 'A rule of thumb is that, while states are free to act as long as this is in accordance with international law […], international organizations are competent only as far as powers have been attributed to them by the member states. […] International organizations may not generate their own powers. They are not competent to determine their own competence'.
56. Cf. the *Lex Mercatoria* governing transnational trade. See for instance L. M. Friedman, 'Erewhon: the coming global legal order', *Stanford Journal of International Law*, 92001), pp. 347–59.
57. See more extensively on this issue: R. A. Wessel, 'Reconsidering the relationship between international law and EU law: Towards a content-based approach?' in E. Cannizzaro, P. Palchetti and R. A. Wessel, *International Law as Law of the European Union* (Boston and Leiden: Martinus Nijhoff Publishers, 2011) (forthcoming).