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Global Governance Capacities in Health: WHO and Infectious Diseases[1]

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Introduction

Infectious disease accounts for around 26 per cent of all deaths worldwide (Global Health Council, 2006) and is one of the prime examples of a globalised issue requiring a global response. AIDS, for example, has contributed to more than 2.1 million deaths in 2007 alone (UNAIDS/WHO, 2007, p. 1). It has been estimated that a new influenza pandemic could kill up to 150 million people (Nabarro, 2005). With the various economic, demographic and technological changes which globalisation has brought the threat appears ever more acute (Saker *et al.*, 2004).

Infectious disease is not, of course, a new problem. Neither is interstate cooperation in this area a novel phenomenon – the first concerted attempt to coordinate international action was as long ago as 1851 (Fidler, 2001). Yet the global governance of infectious disease continues to generate controversy, and in doing so neatly encapsulates some of the tensions inherent in global health governance (GHG) more generally. In particular, any international system designed to reduce the threat posed by the international spread of infectious disease comes into direct conflict with two other sets of political and economic priorities which are central to the contemporary international system: the national interests of individual states (and in particular their concerns over security and sovereignty) and the desire to achieve a liberalise trade regime.

This chapter examines the development of the International Health Regulations (IHR) – and in particular the process of revising them which led to the agreement on a new version of the regulations in 2005, which came into force in 2007. In doing so it investigates the extent to which the regulations – the cornerstone of the contemporary global governance of infectious disease – succeed in reconciling effective global disease control, national interest and free trade. In keeping with the general approach and tenor of this volume, governance in this pressing area of international health can be viewed in terms of a tension or fault line at the heart of the

A. Kay et al. (eds.), *Global Health Governance*

broader political economy of global health. The state, national interests and security concerns in this instance clearly persist and confront the exigencies of free trade and economic globalisation (in which states also exercise a deal of agency). This results in a form of GHG for infectious diseases which may fail to meet manifest health needs in this critical area (see Kay and Williams in this volume). Questions as to which worldview or discourse 'governs' the relationship between health and globalisation (be it security, free trade or public health/bio-medical 'discourses') are largely implicit and unanswered, whilst generating concrete health policy outcomes. These questions and tensions are not only central to the formation of global health policies and regimes such as the IHR, but also reinforce the argument that contemporary GHG can accurately be represented as a system of governance which is presently inchoate and subject to competing interests and sites of agency and power (see Kay and Williams and also Labonté in this volume).

In this context it has been argued in recent years, most notably by David Fidler, that there has been a major shift in the global governance of infectious disease. Fidler cites the Severe Acute Respiratory Syndrome (SARS) outbreak of 2002–03 and the response of the international community to it as a watershed between the traditional framework (which had persisted since 1851) and a radically new 'post-Westphalian' health governance system (Fidler, 2003a, 2004). Whereas, Fidler argues, 'Westphalian' public health was characterised by the traditional principles of 'sovereignty, non-intervention, and consent-based international law' (2004, p. 47), he claims the new system – institutionalised by the revised IHR – represents a move away from such state-centrism. Non-state actors now play increasingly important roles and are widely recognised as legitimate governance actors (Fidler, 2004, Chapters 3 and 4). For some this is an important step forward in the fight against globalised disease threats. For others it is a potentially dangerous intrusion on state sovereignty (Mack, 2006).

This chapter questions whether the new IHR are indeed as much of a break from the state-centric past as Fidler and others claim. Whilst there is much that is new in the revised IHR many of the features of 'Westphalian Public Health' stubbornly persist. In particular, states and their borders remain central to international efforts to control infectious disease and concerns about the threat posed by infectious disease must always jostle for position with other political, economic and strategic interests. The World Health Organization (WHO) continues to be dominated to a large extent by its member states despite having seen its role increase under the new IHR.

In relation to the tensions between effective infectious disease control and the prevailing norms of liberal free trade, the chapter examines the extent to which the revised IHR are compatible with other international regimes – in particular the World Trade Organization (WTO) trade regime. Whilst strenuous efforts have been made to reconcile the conflicting demands of trade and health, it is not clear that the IHR 2005 has done so

successfully, and this offers insights as to how global health goals and needs are often subordinated to trade and other global economic agendas (see Barraclough, Harman and Labonté in this volume). Although the regulations are intended to respond to the negative health impacts of certain globalisation processes, they attempt to accommodate economic globalisation rather than challenge it. It is too soon to tell how this tension will play out over time, but there is a strong possibility that trade concerns will dominate public health, leading to sub-optimal health outcomes.

The negotiations over the revision of the IHR were a difficult process but they are unlikely to be the end of the issue. Whilst the IHR 2005 in many respects represent a significant advance over the previous regulations they are likely to be the starting point for a period of even fiercer international debate over the global governance of infectious disease.

The global governance of infectious disease

One of the key insights of a now established canon of literature on global governance is the necessity of looking beyond the traditional subjects of International Relations scholarship to understand new modalities of governance: to broaden the frame to encompass more than merely the actions of states and the formal International Organisations (IOs) which they create. As James Rosenau warned:

> understanding is no longer served by clinging to the notion that states and national governments are the essential underpinnings of the world's organization. We have become so accustomed to treating these entities as the foundations of politics that we fall back on them when contemplating the prospects for governance on a global scale, thereby relegating the shifting boundaries, relocated authorities, and proliferating NGOs to the status of new but secondary dimensions of the processes through which communities allocate and frame policies (Rosenau, 1999, pp. 287–288).

The concept of GHG has sought to respond to this problematisation of traditional approaches and to take account of the 'shifting boundaries' and 'relocated authorities' which characterise the post-Cold War world. One of the central distinctions that has been drawn is between 'International Health Governance' and 'Global Health Governance' (Loughlin and Berridge, 2002). The former term refers to the 'traditional' forms of inter-state cooperation on health through diplomacy, treaty-making and the creation of international institutions such as the WHO (activities which Fidler would define as 'Westphalian'). The latter refers to something which transcends this state-centric framework and which has the necessary descriptive and analytical purchase to take into account the new realities of the era of

globalisation. The marked linguistic shift away from 'international health' towards 'global health' in both the academic literature and policy pronouncements gives a clear indication of the impact of globalisation on both the conceptualisation of health as an issue and the willingness of bodies such as the WHO to collaborate with a broader range of international actors (Brown *et al.*, 2006). Thus, it has been widely noted that a range of non-state actors – including other IOs, private corporations and civil society groups – have increasingly come to play important roles in governing global health.

Yet, for better or worse, in many areas of international life, including important areas of health policy, states do remain the key actors and IOs represent the principal site for (and often important actors in) international cooperation. States and IOs create and legitimise the international rules, norms, principles and procedures which constitute the global governance of health. States may not always have the capacity to provide effective responses to global health problems, and they may recognise the need to collaborate with non-state actors in order to achieve their objectives, but their power to set the terms of the debate and to determine the framework within which health is conceptualised as a global issue remains unrivalled. This in many respects is also the case when one considers the capacity of core states to regulate (health) markets, or permit the liberalisation or commodification of specific (health) sectors. Notwithstanding a great deal of rhetoric on the need to respond more effectively to the challenges of globalisation, they are generally keen to oppose any dilution of their authority, especially in matters which inveigh on sovereignty and national security.

This tendency is particularly prevalent in the case of infectious disease. Undoubtedly this is a result of the fact that infectious disease more than any other health issue has historically been linked to notions of security, and in particular to the protection of the domestic population from external threats. Many of the clearest contemporary examples of this tendency originate in the US (for example National Intelligence Council, 2000; Cecchine and Moore, 2006), but such an approach has a long history. Quarantine measures aimed at protection from external threats have been a feature of international travel and trade since at least 1377, the year in which the Venetian Republic introduced an isolation period for ships and land travellers arriving at the port of Ragusa (now Dubrovnik) from plague-affected areas (Gensini *et al.*, 2004). Indeed, the protection of the domestic population and economy from the effects of infectious disease goes to the very heart of what a state is for. As international travel and trade increased a widespread recognition developed that states could not unilaterally defend their borders from the ingress of disease, at least not without isolating themselves from the global economy. The results of this realisation have been seen in a succession of international collaborative measures to

combat infectious disease, from the International Sanitary Conference of 1851 to the IHR of 2005.

Infectious disease is far from the only international issue with the potential to threaten population health. Yet in other areas, from the globalisation of food production to the liberalisation of health services, states have not seen their security as being at stake in the same way. So why is it that infectious disease has come to be framed in security terms when obesity or tobacco-related diseases (to take two globalisation-related health problems) generally have not? The answer to this question is a complex one, centred on the ways in which communities understand and assess risk, which in turn is a product of a number of different factors. McInnes identifies four: immediacy, normality, agency and mass communication (McInnes, 2005, pp. 16–17). Whilst agency ('the ability of an individual to control his/her exposure to hazards') and mass communication (which can either heighten or reduce the perception of risk) vary widely between different diseases, immediacy and normality are central to the construction of infectious disease as a security problem and, as we will see below, to the framing of the IHR. In this sense security and sovereignty are vital elements in understanding the contemporary political economy of health; they are countervailing forces to both unfettered globalisation and global health regulations that might impinge on a state's authority over immediate and severe security threats.

The 2007 World Health Report noted that 'an outbreak or epidemic in one part of the world is only a few hours away from becoming an imminent threat elsewhere' (WHO, 2007, p. 6). The potential consequences or major outbreaks are difficult to ignore. Neubauer (2005, p. 292) has noted that a disease may 'present itself with such threat and virulence that its consequences to existing society cannot be ignored. In the face of this manifest crisis … public health intervention will go to the top of the policy list'. Rapidity of spread and the potentially catastrophic consequences of major outbreaks are, therefore, central. But also important – and central to the IHR – is the fact that the diseases which are seen to constitute security threats are those which come from outside and which are not endemic within the state's territory. It is this combination of novelty, immediacy and severity which tends to lead to security-based responses to disease, and which drove the revision of the IHR.

In practical terms maintaining security is not straightforward. There is a widespread recognition that in a globalised world states cannot rely on creating a 'Maginot Line' to halt disease at their borders. Rather, states need to act collaboratively when outbreaks occur, necessitating both political will and the existence of robust public health mechanisms at international, state and sub-state levels. Security from disease – in so far as such a thing is possible at all – can only be achieved through sustained international cooperation, the coordination of surveillance mechanisms and, when outbreaks

occur, a system for putting in place measures to prevent local crises from becoming global crises. Inevitably this entails reconciling concerns over sovereignty and security with wider public health goals. By the same token, international trade and travel – both important vectors in disease transmission – are also the basis of the global economy.

As a product of these conflicting priorities, the aim of the contemporary infectious disease regime is to put in place rules, policies and processes to mitigate the undesirable disease-related effects of globalisation, and it is not concerned with challenging the status quo on a normative basis. Whilst it is universally recognised as desirable to limit the damage done by infectious disease, this remains only one of a range of competing international priorities and interests. The tensions between the competing priorities of state sovereignty and security, international trade and effective disease control came to the fore during the IHR revision process. Subsequently a further series of debates over the appropriate forms of global infectious disease governance, and the rights and duties of states and other actors engaged in that enterprise, have taken place. Whilst the IHR 2005 are undoubtedly a dramatic step forward as compared with their predecessors, what they ultimately represent is a compromise between the requirements of effective infectious disease control and the perceived interests of the states which created them. These two requirements were not always aligned, and in some instances the latter overrode the former.

Revision of the IHR: new threats, old problems

The immediate ancestry of the IHR lies in the International Sanitary Regulations (ISR) adopted by the fourth World Health Assembly in 1951. In 1969 the ISR were amended and renamed the IHR (WHO, 1983). The IHR 1969 subsequently remained more or less unchanged until the major revisions agreed in 2005.[2] These two versions of the IHR are very similar in the overall framework which they set out. The central purpose is to put in place rules and procedures to allow certain key tasks to be carried out effectively, namely: disease surveillance; outbreak reporting; dissemination of information and; structuring and managing international responses. Through this the IHR were specifically mandated to achieve the maximum possible degree of public health protection while – an important secondary requirement – causing the minimum possible disruption to international trade and transport (Article 2).

The IHR 1969 required the health ministries of member states to notify the WHO within 24 hours of being informed of any case of a disease subject to the regulations occurring on their territory (Article 3). For the purposes of IHR 1969 the only such diseases were cholera, plague, yellow fever and (until its removal from the regulations in 1981) smallpox. States affected by an outbreak of one of these diseases were required to keep the

Organisation informed on a weekly basis of the number of cases/deaths in the preceding week (Article 9). A further notification was required when the affected area was deemed to be free from infection (Article 7). Over time it became increasingly clear that this limited list of notifiable diseases was ill-suited to the proliferating disease threats characteristic of a globalised world economy.

To further compound the shortcomings of the IHR 1969, states did not always fulfil their treaty obligations. The WHO lacked any independent investigatory capacity or mandate, nor did it have sanctions at its disposal when states failed to report a notifiable outbreak, and was thus in Neubauer's terms a 'weak' program of governance relying on state compliance, as compared with 'strong' programs which have the capacity to directly regulate (and sanction) actors (2005, p. 290). Indeed, the lack of enforcement capacity formed the basis of many critiques of the IHR 1969 (see for example Plotkin and Kimball, 1997). Equally problematic were cases in which states did report outbreaks and other states responded in extreme ways prohibited under the regulations. Richard A. Cash and Vasant Narasimhan (2000) have examined two cases in which developing countries did report cases of the relevant diseases to the WHO: a 1994 outbreak of plague in Gujurat, India; and a cholera epidemic in Peru in 1991. In both cases the affected countries fulfilled their obligations under the IHR 1969. On both occasions, however, other states far exceeded the permissible responses, taking measures which included stopping food imports, cancelling flights and issuing travel advisories. Cash and Narasimhan cite estimated economic losses at approximately US$2 billion in the Indian case and US$770 million in trade alone in the Peruvian case (2000, pp. 1362–1363). The disincentives for compliance were obvious.

Despite this, most states did fulfil their obligations most of the time. Indeed, in some instances states went beyond what was legally required of them. At the time of the SARS outbreak of 2003 – an event recognised worldwide as a public health crisis requiring an exceptional response – the IHR 1969 were still in force. Under that regime SARS did not fall within the category of a 'notifiable disease'. Nevertheless, almost all member states willingly reported cases on their territories and cooperated fully with the WHO (Nicoll *et al.*, 2005, pp. 321–322). There was, of course, one exception to this: the People's Republic of China (PRC), which failed at first to report the outbreak and initially resisted international cooperation through the WHO. As Jonathan Watts noted at the time (2003, p. 1708), this was a product of the fact that 'the disease has honed in on the regions where China's political antibodies are least able to cope with criticism: Taiwan, government secrecy, an overemphasis on economic growth, and the gulf between the wealthy urban centres and the poor provinces'. As a result, despite a massive subsequent public health effort, China was the last state to bring the SARS outbreak under control.

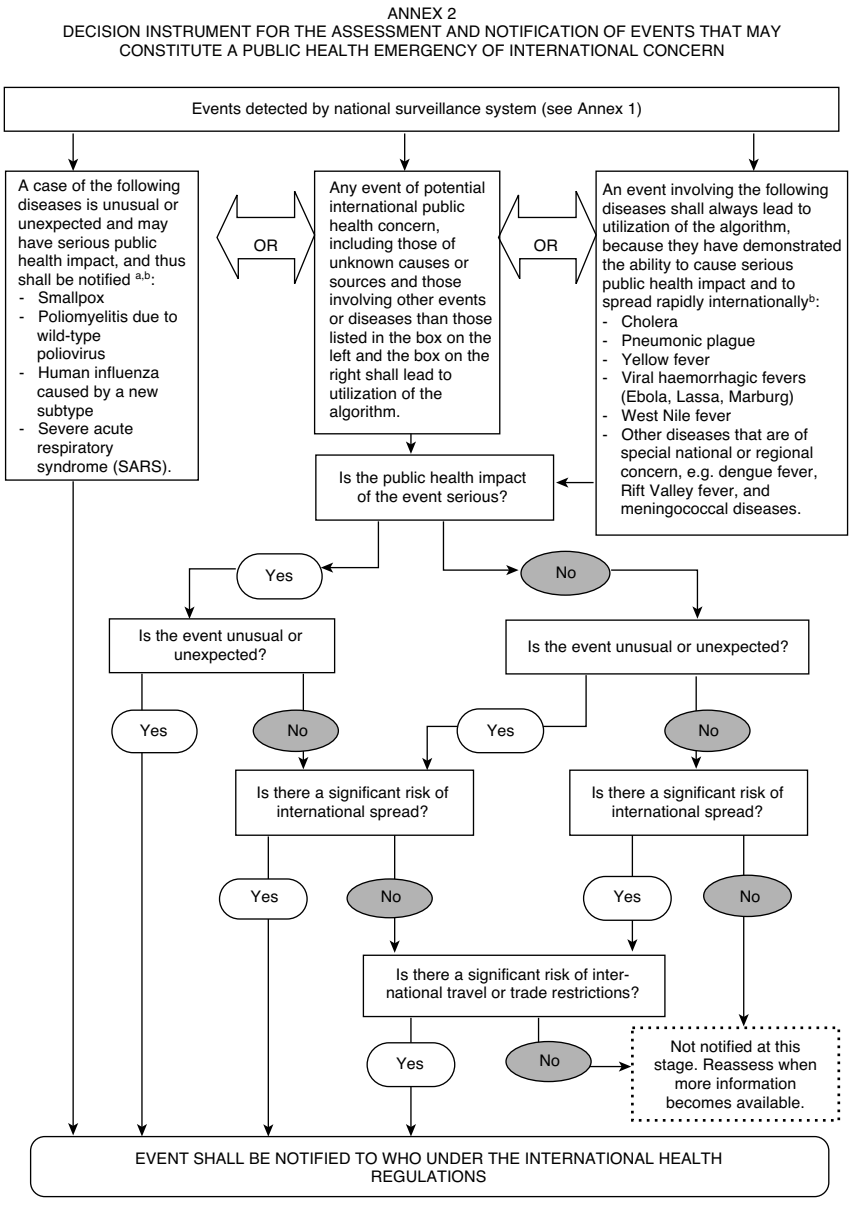
Clearly, then, the ways in which perceived national interests, economic and trade-related concerns and disease control combine and interrelate are highly complex. On the one hand, states have a clear vested interest in the functioning of the international infectious disease regime: but the system only works when states report cases occurring within their territories. As such, international cooperation effectively becomes a means of enhancing national security from disease threats. Nevertheless, under the IHR 1969 this did not always mean that compliance with the IHR overrode other interests, with states in some cases finding that disclosure of a disease outbreak – and the consequences of that disclosure – a threat to their wider political or economic interests (Calain, 2007).

New regulations for a new era

As a result of the widely-noted problems of non-compliance and the limited scope of the regulations, the most significant changes agreed during the revision process related to precisely these issues. The negotiations stretched out over more than a decade. In 1995 the World Health Assembly passed Resolution WHA48.7 calling on the Director-General to begin preparing a revised version of the regulations. A lengthy consultation ensued (for example WHO, 1996, 1998). The process was given a new impetus following the SARS outbreak of 2003 which underlined the deficiencies of the existing system and the need to introduce a more robust set of regulations. There followed a concerted period of regional consultations followed by negotiations within an Intergovernmental Working Group (IGWG) in November 2004 and February 2005. The eventual outcome was a set of regulations which represented a significant step beyond the IHR 1969 in important ways. In particular, meaningful advances were made over two key issues which will be briefly examined here: the range of diseases covered by the regulations and; the mandate given to the WHO to receive and act upon information from non-governmental sources.

During the negotiations it was generally agreed that it was necessary to expand the range of diseases covered by the IHR and to 'future proof' them by allowing them to retain their applicability in the face of future emerging or re-emerging infectious disease threats. Precisely how this should be achieved was a matter of some debate (Calain, 2007, p. 4). The eventual solution was to make all disease events which are classed as a 'public health emergence of international concern' (PHEIC) subject to the regulations. An algorithm was devised for states to employ in determining whether or not a particular event represents a PHEIC and therefore whether or not it is 'notifiable'. This 'decision instrument' divides infectious diseases into three distinct categories: those which are of international concern *per se* (including smallpox, new subtypes of human influenza and SARS); named diseases for which states are required to make a determination according to the decision instrument (including cholera, pneumonic plague and yellow

Figure 3.1 IHR 2005 Decision Instrument



Source: International Health Regulations, 2005, Annex 2.

fever); and other unnamed (and perhaps as yet unknown) disease events which may in future constitute international public health emergencies (see Figure 3.1). As can be seen from the decision instrument, in the latter two categories the affected state is required to give consideration to a variety of issues: whether or not the event is 'serious'; whether it is 'unusual or unexpected'; whether there is a 'significant risk of international spread' and; whether or not there is a 'significant risk of international travel or trade restrictions'.

As a result of this arrangement, states are required to exercise considerably more judgement than was the case with the 1969 version of the IHR. There is a *prima facie* case that the discretion granted to member states will lead to some inconsistency of reporting. Furthermore, states require a considerable amount of information on a disease outbreak in order to be able to utilise the decision instrument effectively. Not all states currently have the required infrastructure at all levels of government to fulfil this surveillance and data-processing requirement within the specified timescales, an issue which will be addressed further below. Significantly, under Article 12 it is not only member states but also the WHO's Director-General who has the power to determine whether a situation constitutes a PHEIC. This hands a considerable amount of authority to the WHO and, in theory at least, this measure has the potential to mitigate any inconsistency in the ways in which states apply the decision instrument.

Another novelty in the IHR 2005 – and the major attempt to circumvent the problem of states failing to fulfil their reporting obligations – is that the WHO is given the explicit authority to respond to information received from non-governmental sources (although in practice this had been happening on an *ad hoc* basis for some years).[3] As Guénaël Rodier – the WHO's director of IHR coordination – noted (2007, p. 428), 'Today, events are often initially reported, not by a Member State, but by non-official sources such as the media, NGOs …, our network of collaborating centres, laboratory networks and partners in the field'. Under the IHR 2005, the WHO is required to pass such information on to the state concerned and to seek verification. But even where the state refuses to cooperate it is in certain circumstances possible for the WHO to disseminate the information to other member states (Article 10(4)). It would therefore be possible for a situation to arise under the treaty where the WHO publishes information about a PHEIC even when the state on whose territory the outbreak has allegedly occurred does not acknowledge the existence of any such event. By the same token, international action can be taken even where states lack the capacity to fulfil their reporting obligations.

So what can we make of these new provisions for identifying and reporting disease events of international concern? The view of Fidler and Gostin (2006, p. 90) is clear: that 'the information and verification provisions privilege global health governance over state sovereignty'. This is certainly

true up to a point. There is now a legitimate basis for the WHO to take action in cases where a state has failed to notify it of an outbreak. Indeed to some extent the WHO has taken on a global surveillance function. Through the development of the Global Public Health Intelligence Network, a search engine developed by Public Health Canada and the WHO, and designed to find online news reports of unusual disease outbreaks, the WHO has begun making use of the internet – a truly globalised information resource – to glean information on significant public health events. And even where a member state disagrees with the Director-General's determination, the state is only given the right to make representations to the 'Emergency Committee', a body composed of experts selected by the Director-General (albeit sanctioned by the member states). The final decision remains with the Director-General (Article 49(5)). Thus the WHO bureaucracy and not the member states has the final authority to issue determinations and recommendations which formally bind member states, and can do so even where such actions are contrary to the expressed wishes of a member state. These provisions, Fidler and Gostin (2006, p. 90) suggest, may help to tilt the balance in favour of compliance with the IHR. In simple terms: if the likelihood is that the outbreak will be reported to WHO in any case, then there is a greater incentive for states to ensure that they are the ones who do the reporting.

There has certainly been a ceding of greater authority to the WHO. These changes also provide the WHO with a considerable degree of 'soft power'. Not only is the organisation both the hub of and a key actor in the global infectious disease surveillance system, it is also given the ability to define what constitutes a crisis, and as a consequence, to some extent at least, to play a part in setting the global agenda in relation to infectious disease. It also allows the WHO to mobilise other techniques (shaming and communicating directly with the domestic constituency of an errant state being two examples of methods found to be helpful in other international regimes (for example Moravcsik, 1995) to further encourage compliance and to bolster the effectiveness of the infectious disease governance system.

There is obviously something to be said for the claim that the IHR 2005 represent something genuinely new. And above and beyond the WHO's newly acquired role in carrying out its own surveillance activities and in deciding whether or not an outbreak falls under the IHR regime, it has been given the task of supporting states in developing the infrastructures necessary to implement the regulations, where necessary effectively 'teaching' states how to run a disease surveillance system.[4] On the flip side, the WHO's role is now far more explicitly defined than it had previously been with, arguably, less scope for it to act on an *ad hoc* basis as it did with the issuing of travel advisories during the SARS outbreak of 2003. The revised IHR therefore both enable and constrain the organisation.

In all of these ways the IHR is a significant break from the past. But does this equate to a fundamental change in the global governance of inter-

national health: has there really been a transition from a 'Westphalian' to a 'post-Westphalian' system? And have the potentially contradictory demands of sovereignty, free trade and effective disease control been reconciled?

It is tempting to get carried away in declaring the dawn of a new era, but it is easy to forget that it is precisely the Westphalian system on which the whole IHR regime rests. The regulations apply only to Public health Emergencies of *International* Concern. With the exception of the diseases specified as automatically notifiable, where there is no risk of international spread, nor a risk of international restrictions on travel or trade, then the outbreak is not classed as notifiable. It may be argued that the logic of globalisation dictates that significant disease events rarely have absolutely no potential international impact, but it remains the case that purely domestic public health events do not fall under the regulations. The IHR, then, are concerned primarily with pathogens crossing borders. Whilst the revised regulations have led states to cede a greater degree of authority to the WHO this has been done in the service of a rather traditional aim: the protection of the nation-state from exogenous disease threats. The IHR regime does not aim to tackle diseases at source. It certainly does not seek to address the economic and social determinants of ill health. Those who drafted the 1851 International Sanitary Conventions would have readily recognised the underlying purposes of the IHR 2005.

Stumbling blocks in the negotiation process: national interests, sovereignty and security

Although there was general agreement on the aims to be achieved, the revision process itself was highly contested with some very traditional *realpolitik* issues coming to the fore. It is worth reflecting on two of these which, taken together, suggest that states are far less willing to place international cooperation on disease control above their other interests than the heralds of the new dawn would suggest.

The question of sovereignty commonly arises in international negotiations, and again the need to balance cooperation with sovereignty became an issue in the revision of the IHR. Reminding his colleagues of this fact in addressing the Second IGWG meeting, the PRC's Ambassador stated that:

> It should be stressed that the WHO, as one of the UN Specialized Agencies, is formed of sovereign states. The negotiation for the revision of the IHR is a negotiation among sovereign states. The IHR can only be widely accepted and its universal applicability ensured when member states have reached a consensus on its revision. For a member state, sovereignty and territorial integrity is of fundamental and utmost importance. Therefore, respect for sovereignty and territorial integrity is the very basis of the IHR and the international cooperation on disease prevention. Nothing in the IHR should harm or compromise the

> sovereignty and territorial integrity of member states. My delegation can only consider to accept a consensus, provided this precondition is met (Zukang, 2005).

Perhaps predictably, the issue of Taiwan's inclusion in the revision process – and its status *vis-à-vis* the regulations themselves – was a major problem for China. This was the continuation of one of the longest-standing political disputes at the WHO[5] and was particularly prominent at the time of the negotiations over the IHR as Taiwan had been one of the territories most severely affected by SARS. In that case the PRC initially prevented the WHO from sending representatives to Taipei, although it ultimately relented. The resulting WHO delegation was the first to visit the island in 30 years (*Wall Street Journal*, 2003). Any hopes that this would lead to a breakthrough in the inclusion of Taiwan in the IHR process, however, were short lived. Taiwan's request to participate in the November 2004 and February 2005 meetings of the IGWG were rejected due to the opposition of the PRC (Chen, 2004). Taiwan is not a signatory of the IHR, and the issue of whether or not the IHR apply to Taiwan is a complex one (although in practice it has pledged to abide by the regulations). Article 3 states 'the goal of their universal application for the protection of all people of the world', but Taipei and Beijing differ in their view as to whether or not this gives Taiwan the right to be treated as a de facto signatory (Fidler and Gostin, 2006, p. 92).

The IHR rely on their universality in order to be effective. As *The Lancet* editorial argued in 2007, 'For the IHR to work, no territory – whether Taiwan or the occupied Palestinian Territory – can be excluded from the global surveillance system' (*The Lancet*, 2007, p. 1763). The obvious irony is that, as Taiwan's closest neighbour, and given the increasing flow of goods and people between the two territories, the PRC is perhaps most at risk from this hole in the global disease surveillance net (Hou, 2007). As such, this is a clear instance of the perceived political interests of one member state having a negative impact upon the development of effective GHG structures. It would seem that geopolitics can as much stymie responses to manifest global health needs as do economic interests and imperatives (see Kay and Williams for a comparison).

There was further controversy during the revision process over the security implications of the IHR, particularly as they related to non-natural PHEICs. In particular there were lengthy negotiations over the extent to which the regulations should apply to releases (whether deliberate or accidental) of biological, chemical and radiological agents. This is an area in which the WHO had a track record, with the first edition of its guidance on responding to biological and chemical weapons having been issued in 1970 (WHO, 1970). Nevertheless, it was one of the most politically controversial areas of negotiation. The inclusion of intentional releases of infectious diseases

under the IHR had the potential to embroil the WHO in some highly sensitive areas, potentially including the investigation of whether or not states were guilty of breaching the Biological and Toxin Weapons Convention. The US and its allies were strongly supportive of the idea that the WHO should take the lead in investigating suspected bio-terror events. This was resisted by developing nations who saw in this both a potentially troubling requirement to provide the WHO with sensitive security information, and a real danger of the organisation's role becoming politicised leading to the downfall of the overall surveillance system (Check, 2005, p. 686). As John Woodall argued in a letter to *The Lancet*, 'If countries should perceive WHO staff or consultants as intelligence agents with a dual responsibility to investigate treaty violations as well as health matters, the result could be unwillingness to report outbreaks at their onset and reluctance to request the help of WHO or permit its entry' (Woodall, 2005).

No agreement was reached. As a result, the WHO's mandate to investigate bio-terrorist incidents is uncertain under the revised IHR. In the event of future incidents of this kind it seems likely that the issue will arise again. In terms of the negotiations, however, the failure to make progress on this matter demonstrates the fact that the states involved were making conscious and deliberate trade-offs between their sovereignty and security concerns on the one hand, and the requirements of effective public health cooperation on the other. Whilst a strong regime for the global governance of infectious disease has certain security benefits for states, it does not automatically trump their other interests. Neither does it remove the potential for international suspicions and jealousies to come to the fore: another running theme through the negotiation process was disquiet about the close relationship between the WHO and the US (in particular the Centers for Disease Control and Prevention) which was seen as having privileged access to WHO's surveillance networks, with further potential security and intelligence implications (Calain, 2007, p. 6).

Reconciling free trade and global health security

As well as requiring the reconciliation of the tensions between sovereignty, security and public health, the revision of the IHR also entailed the striking of a balance between the requirements of an effective disease control system and the potential impact of such a system on international travel and trade. It is clear that these two things lead to potentially contradictory actions on the part of states and other international actors. As noted above, in both their 1969 and 2005 incarnations the overall purpose of the IHR was to maximise public health protection on the one hand, and avoid causing unnecessary interference to international travel and trade on the other.[6] As well as being a difficult tightrope to walk, this brings the WHO into a field in which it is far from the only actor. The WTO has an obvious importance here, perhaps most notably through the Agreement on the Application of

Sanitary and Phytosanitary Measures (SPS).[7] Indeed, Fidler argues that, prior to the revision process and during the IHR 1969's long decline into virtual irrelevance, the WTO became a more important agent in infectious disease policy than the WHO itself (Fidler, 2003b).

Perhaps inevitably, the IHR and the relevant WTO regulations approach the problem of infectious disease from opposite directions. The WTO's primary mission is the negotiation of trade liberalisation agreements. International disease outbreaks have historically interrupted the flow of free trade and thus fall within its remit. The key issue for the WTO – and central to the SPS Agreement – is allowing states the right to put in place measures to protect health but at the same time preventing that from being used as a spurious basis for protectionist trade measures (see Labonté in this volume). The WHO, by contrast, is charged with promoting health, although in the IHR it recognises that this should not be allowed to lead to overly restrictive travel and trade measures which have no scientific basis. There were concerted efforts from an early stage in the revision of the IHR to ensure the consistency of the IHR and the SPS Agreement and to minimise the potential for conflicts between the two. The different perspectives which underlie the two agreements may not, however, lead to agreement over their application to particular cases (Kimball *et al.*, 2004, p. 46).

Article 57(1) of the IHR 2005 provides that 'States Parties recognize that the IHR and other relevant international agreements should be interpreted so as to be compatible. The provisions of the IHR shall not affect the rights and obligations of any State Party deriving from other international agreements'. On the face of it this would appear to provide a legal basis for the primacy of the WTO trade regime over the IHR in cases where the two come into conflict. Furthermore, given the fact that the WTO has a significantly more advanced dispute settlement system in place than the WHO it seems highly likely that a member of the WTO which feels that unduly restrictive measures have been put in place in response to a PHEIC occurring on its territory (and, as we have seen above, such 'over-reactions' have been historically prevalent) would take its case to the WTO. In the past in disputes where health and trade collide the WTO has tended to privilege trade over public health. The case of the European Union (EU) ban on imported beef containing artificial growth hormones, in which the WTO dispute panel ruled against the EU on the basis of the absence of a scientific basis for the ban, was one notable instance of this trend.

Problems yet to come: implementing the IHR

The ongoing process of implementing the IHR will in many ways be as difficult as the revision process. A lack of clarity over the application of the new regulations in specific instances remains and this will undoubtedly be determined through future practice. As is often the case in such situations,

power – both political and economic – is likely to play an important role in structuring outcomes.

Although the regulations have been in force for only a short time there have already been indications that the contestation is beginning. At a meeting of the WHO Executive Board in March 2008, Brazil objected to the use of the term 'global health security' which has been frequently linked with the IHR (although the term does not appear in the regulations themselves). Brazil argued that there is no agreed definition of 'global health security' and that there was not a consensus of support for it within the World Health Assembly (Tayob, 2008). The US and the EU – both of which have strongly backed the concept – had seen a previous attempt (in November 2007) to include it in a draft statement on virus sharing blocked due to the similar concerns of developing countries over the implications of linking health to the concept of security (Tayob, 2008). This issue is indicative of a growing level of debate over who has the power to set the global health agenda, and whose interests mechanisms such as the IHR serve. In broader terms, competing worldviews of health and GHG can be seen to have real world manifestations with concrete health policy outcomes. For those promoting the term, 'global health security' means protecting the world from epidemics like SARS and pandemic influenza. Yet many states lack the ability to protect their citizens from everyday health threats and are concerned that the idea of global health security is being used to push through measures that benefit rich countries and corporate interests but do little for states which are struggling to provide basic health services for their citizens. The dispute between Indonesia and the WHO over the sharing of influenza virus samples showed how such conflicts have the potential to undermine global public health efforts in concrete ways (Fidler, 2008). Similar disputes are foreseeable in cases where the IHR 2005 are put into action.

There are also widely recognised issues surrounding the capacity of states to fulfil their obligations under the IHR 2005. Far more is required of national health authorities than was the case under the IHR 1969. The necessity for many member states, and particularly those in the developing world, to make significant investments in disease surveillance infrastructure was well-known during the negotiation of the IHR revisions and is recognised in the regulations: Annex A of the IHR includes details of 'core capacity requirements for surveillance and response'. The WHO has been given the task of assisting states with the development of the necessary domestic mechanisms without being given anything approaching the necessary resources to do the job. At worst this could lead to a situation where states are forced to divert resources from primary healthcare in order to meet their IHR obligations.

Question-marks also remain over the consequences of non-compliance with the provisions of the IHR. The WHO still lacks an effective enforcement

mechanism, although as noted above the WTO may offer states a more robust dispute resolution system in certain circumstances. There have been some suggestions to deal with this issue. The most concrete of these – which emerged from the Secretary-General's High Level Panel on Threats, Challenges and Change – was the proposal that the UN Security Council should be kept informed of 'any suspicious or overwhelming outbreak of infectious disease' and that, 'if existing International Health Regulations do not provide adequate access for WHO investigations and response coordination, the Security Council should be prepared to mandate greater compliance' (Secretary-General's High Level Panel on Threats, Challenges and Change, 2004, p. 47). Again, any such action could raise difficult questions about whose interests are being served, and whether 'global health security' in practice means ensuring the security of some at the expense of others.

It is worth making two points in this regard, however. Firstly, the new reporting arrangements reduce the reliance of the regime on the willingness of member states to comply and have the potential to lead to quicker notifications of disease events bringing, it is hoped, more timely responses. There is also good reason to hope that most states will abide by the IHR most of the time. Whilst it would be naïve to expect universal compliance the IHR 2005 has certain things going in its favour. For one, the regulations were created in response to a widespread perception of a need (heightened by the experience of SARS) to improve the existing arrangements. States thus have a vested interest in the success of the infectious disease regime, augmented by the increasingly high profile which such threats have gained in recent years. Secondly, states generally comply with their international commitments to a far greater extent than realists would predict, even in the absence of sanctions for non-compliance. States frequently exhibit a general preference for norm-compliant behaviour. The explanations for this vary. On the one hand it may be due to a concern with their international reputation, and as Chayes and Chayes have argued this is fundamental to contemporary understandings of sovereignty that, 'no longer consists in the freedom of states to act independently, in their perceived self-interest, but in membership in reasonably good standing in the regimes that make up the substance of international life' (Chayes and Chayes, 1996). An alternative explanation is that through their very participation in regimes, states internalise the norms which the agreement embodies. Compliance then becomes a routine act – often codified in domestic bureaucratic procedures – rather than a conscious decision.[8] Whichever explanation we favour it is reasonable to expect a relatively good level of compliance with the IHR 2005.

Squaring the triangle? Infectious disease, sovereignty and trade

The IHR 2005 is in many ways a much 'stronger' regime than its predecessor. It imposes more obligations on states and gives new rights and

competencies to the WHO. But this is not the same as saying that it has signalled a major shift away from state-centric approaches, still less that it is a radically new form of governance. States have been responsible for the creation of an enormous number of international regimes in a wide variety of issue areas. The IHR 2005 is a relatively highly developed regime (and, of course, it has the extra status of being an international legal instrument), but it is far from unique. Under the nuclear non-proliferation regime, for example, states give extensive powers to the International Atomic Energy Agency to carry out inspections of nuclear facilities on their territories. These powers are considerably more intrusive than the rights given to the WHO in relation to infectious disease. Govern*ance* without govern*ment* will always lead to disputes over authority, just as happened in the case of SARS where the PRC and others questioned the right of the WHO to issue advisories warning against travel to affected regions. It seems inevitable that similar disagreements will arise in future over the application of the IHR to particular disease events, and over the limits of the rights and duties of both states and the WHO under the treaty.

The negotiation process showed that the concerns of states about sovereignty and security in some cases overrode their interest in establishing an optimal disease control regime. The ways in which the IHR relate to international trade rules, norms and procedures is equally problematic. Neither of these tensions has been resolved, and neither is likely to disappear in the foreseeable future. We can expect more rather than less disagreement as the implementation process moves forward and new cases arise. Such disputes are nothing new for the WHO. Throughout its history its work has been hampered by the political manoeuvrings of states and by charges that it is itself a politicised body.

This should not be taken to mean that the IHR 2005 are not a significant step forward in the global governance of infectious disease. Recent years have brought a definite shifting of authority towards the WHO, and the infectious disease regime has been considerably strengthened. Yet states remain the most powerful agents in the governance of infectious disease, and are still fundamental to the broader political economy of GHG. What we have witnessed is not a revolution, but rather an attempt to adapt the current governance structures to better equip them to deal with the contemporary problem of infectious disease. Whether that attempt is successful, or whether a more fundamental embrace of GHG principles will be required, remains to be seen.

Notes

1 I am grateful to Adam Kamradt-Scott, Owain Williams, Adrian Kay and the participants in the conference on 'The Crisis of Global Health Governance: Challenges, Institutions and Political Economy' (Griffith University, Brisbane, 4–5 September 2007) for comments on earlier drafts of this paper.

2 There were slight amendments made to the IHR in 1973 (relating to cholera) and again in 1981 (which removed smallpox from the regulations following its eradication). However, the regime remained essentially unchanged.
3 The Global Outbreak Alert and Response Network (GOARN) was formally launched in 2000, and even before that the WHO regularly made use of non-state information sources.
4 Whilst this instance of an IO having a potential role in reforming the domestic structures of its own member states is a notable one, it is not unique. See, for example, Finnemore, 1993.
5 China has effectively excluded Taiwan from engaging in formal international health cooperation since 1972 despite the backing of the US for Taiwan's case. See Siddiqi, 1995, Ch.16.
6 The wording has remained almost the same. The purpose of the 1969 IHR was 'to ensure the maximum security against the international spread of diseases with a minimum interference in world traffic'. In the 2005 revision this was changed in only minor ways: 'to prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade' (WHO, 1983, p. 5; WHO, 2008, p. 10).
7 For a comparison of the provisions of the SPS and the IHR see: WHO, 1999.
8 The 'norm life-cycle' is the most well-developed model of this phenomenon. See Risse and Sikkink, 1999.

Bibliography

T. M. Brown, M. Cueto and E. Fee (2006) 'The World Health Organization and the Transition from "International" to "Global" Health' in A. Bashford (ed.) *Medicine at the Border: Disease, Globalization and Security, 1850 to the Present* (Basingstoke: Palgrave Macmillan).

P. Calain (2007) 'Exploring the International Arena of Global Public Health Surveillance', *Health Policy and Planning*, Vol. 22, 2–12.

R. A. Cash and V. Narasimhan (2000) 'Impediments to Global Surveillance of Infectious Diseases: Consequences of Open Reporting in a Global Economy', *Bulletin of the World Health Organization*, Vol. 78(11), 1358–1367.

G. Cecchine and M. Moore (2006) *Infectious Disease and National Security: Strategic Information Needs* (Santa Monica, CA: RAND Corporation).

A. Chayes and A. H. Chayes (1996) *The New Sovereignty: Compliance with International Regulatory Agreements* (Cambridge, MA: Harvard University Press).

E. Check (2005) 'Global Health Agency Split Over Potential Anti-Terrorism Duties', *Nature*, Vol. 434, 686.

M. Chen (2004) 'Officials Discover Resistance to IHR Bid in Geneva', *Taipei Times*, 9 November, 3.

D. P. Fidler (2001) 'The Globalization of Public Health: The First 100 Years of International Health Diplomacy', *Bulletin of the World Health Organization*, Vol. 79, 842–849.

D. P. Fidler (2003a) 'SARS: Political Pathology of the First Post-Westphalian Pathogen', *Journal of Law, Medicine and Ethics*, Vol. 31(4), 485–505.

D. P. Fidler (2003b) 'Emerging Trends in International Law Concerning Global Infectious Disease Control', *Emerging Infectious Diseases*, Vol. 9(3), 285–290.

D. P. Fidler (2004) *SARS, Governance and the Globalization of Disease* (Basingstoke: Palgrave Macmillan).

D. P. Fidler (2008) 'Influenza Virus Samples, International Law, and Global Health Diplomacy', *Emerging Infectious Diseases*, Vol. 14(1), 88–94.
D. P. Fidler and L. O. Gostin (2006) 'The New International Health Regulations: An Historic Development for International Law and Public Health', *Journal of Law, Medicine & Ethics*, Vol. 34(1), 85–94.
M. Finnemore (1993) 'International Organizations as Teachers of Norms: The United Nations Educational, Scientific and Cultural Organization and Science Policy', *International Organization*, Vol. 44(4), 565–597.
G. F. Gensini, M. H. Yacoub and A. A. Conti (2004) 'The Concept of Quarantine in History: From Plague to SARS', *Journal of Infection*, Vol. 49, 257–261.
Global Health Council (2006) 'The Impact of Infectious Diseases', http://www.global-health.org/view_top.php3?id=228
Hou Sheng-Mou (2007) 'Taiwan-China Health Partnership is Urgently Needed for All', *The Lancet*, Vol. 369, 1345–1346.
A. M. Kimball, B. J. Plotkin, T. A. Harrison and N. F. Pautlet (2004) 'Trade-related Infections: Global Traffic and Microbial Travel', *EcoHealth*, Vol. 1, 39–49.
Lancet (2007) 'International Health Regulations: The Challenges Ahead', *The Lancet*, Vol. 369, 1763.
K. Loughlin and V. Berridge (2002) *Global Health Governance: Historical Dimensions of Global Health Governance* (Geneva: WHO/Special Programme for Research and Training in Tropical Diseases).
E. Mack (2006) 'The World Health Organization's New International Health Regulations: Incursion on State Sovereignty and Ill-Fated Response to Global Health Issues', *Chicago Journal of International Law*, Vol. 7(1), 365–378.
C. McInnes (2005) *Health, Security and the Risk Society* (London: Nuffield Trust).
A. Moravcsik (1995) 'Explaining International Human Rights Regimes: Liberal Theory and Western Europe', *European Journal of International Relations*, Vol.1(2), 157–189.
D. Nabarro (2005) Press Conference, United Nations, 29 September, http://www.who.int/mediacentre/news/releases/2005/pr45/en/
National Intelligence Council (2000) 'The Global Infectious Disease Threat and Its Implications for the United States', NIE 99-17D, January.
D. E. Neubauer (2005) 'Globalization and Emerging Governance Modalities', *Environmental Health and Preventive Medicine*, Vol. 10, 286–294.
A. Nicoll, J. Jones, P. Savitsland and J. Giesecke (2005) 'Proposed New International Health Regulations', *The Lancet*, Vol. 330, 321–322.
B. J. Plotkin and A. M. Kimball (1997) 'Designing an International Policy and Legal Framework for the Control of Emerging Infectious Diseases: First Steps', *Emerging Infectious Diseases*, Vol. 3(1), http://www.cdc.gov/ncidod/eid/vol3no1/plotkin.htm
T. Risse and K. Sikkink (1999) 'The Socialization of International Human Rights Norms into Domestic Practices' in T. Risse, S. C. Ropp and K. Sikkink (eds) *The Power of Human Rights: International Norms and Domestic Change* (Cambridge: Cambridge University Press).
G. Rodier (2007) 'New Rules on International Public Health Security', *Bulletin of the World Health Organization*, Vol. 85(6), 428–430.
J. N. Rosenau (1999) 'Towards an Ontology for Global Governance' in M. Hewson and T. J. Sinclair (eds) *Approaches to Global Governance Theory* (Albany, NY: State University of New York Press).
L. Saker, K. Lee, B. Cannito, A. Gilmore and D. Campbell-Lendrum (2004) *Globalization and Infectious Diseases: A Review of the Linkages* (Geneva: WHO/Special Programme for Research and Training in Tropical Diseases).
Secretary-General's High Level Panel on Threats, Challenges and Change (2004) *A Safer World: Our Shared Responsibility* (New York: United Nations).

J. Siddiqi (1995) *World Health and World Politics* (Columbia, SC: University of South Carolina Press).
R. Tayob (2008) 'WHO Board Debates "Global Health Security", Climate, IPRs', *TWN Info Services on Intellectual Property Issues*, Jan 08/01, http://www.twnside.org.sg/title2/intellectual_property/info.service/2008/twn.ipr.info.080101.htm
UNAIDS/World Health Organization (2007) *AIDS Epidemic Update: December 2007*, UNAIDS/07.27E/JC1322E, http://data.unaids.org/pub/EPISlides/2007/2007_epiupdate_en.pdf
Wall Street Journal (2003) 'Let Taiwan into the WHO', *Wall Street Journal*, 7 May.
J. Watts (2003) 'China Takes Drastic Action over SARS Threat', *The Lancet*, Vol. 361, 1708–1709.
World Health Organization (WHO) (1970) *Health Aspects of Chemical and Biological Weapons: Report of a WHO Group of Consultants* (Geneva: World Health Organization).
World Health Organization (WHO) (1983) *International Health Regulations (1969)* (3rd annotated edn) (Geneva: World Health Organization).
World Health Organization (WHO) (1996) *Report of a WHO Informal Consultation: The International Response to Epidemics and Applications of the International Health Regulations*, WHO/EMC/IHR/96.1.
World Health Organization (WHO) (1998) *Revision of the International Health Regulations: Progress Report*, A51/8, March.
World Health Organization (WHO) (1999) 'Revision of the International Health Regulations: Public Health and Trade', *Weekly Epidemiological Record*, No. 25, 193–201.
World Health Organization (WHO) (2007) *World Health Report 2007. A Safer Future: Global Public Health Security in the 21st Century* (Geneva: World Health Organization).
World Health Organization (WHO) (2008) *International Health Regulations 2005* (2nd edn) (Geneva: World Health Organization).
J. P. Woodall (2005) 'WHO and Biological Weapons Investigations', *The Lancet*, Vol. 365, 651.
Ambassador S. Zukang (2005) 'Statement at the Opening Plenary of the Second IGWG Meeting on the Revision of the International Health Regulations', Geneva, 21 February, http://chinese-embassy.org.uk/eng/wjb/zwjg/zwbd/t187223.htm