



## Between Power and Justice: Current Problems and Perspectives of the NPT Regime

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## Between Power and Justice: Current Problems and Perspectives of the NPT Regime

Harald Müller

**Abstract:** The nuclear non-proliferation regime, despite being frequently criticised for an alleged lack of effectiveness, is in fact an amazing success story. The number of states which had conducted nuclear weapons activities in various stages but which have terminated them at one point surpasses the number of Nuclear-Weapon States (NWSs) by far. At the apex of its success, however, the regime is threatened by erosion from three different directions. A small number of rule-breakers and outsiders undermine its central objective: to stop the spread of nuclear weapons. The refusal of the official NWSs to fulfil their undertaking of nuclear disarmament violates the principle of justice enshrined in the treaty and thereby destroys its legitimacy, as does the perceived readiness by nuclear suppliers to impede the development of nuclear technology in developing countries. The Gordian Knot can presumably only be cut by a u-turn towards a world without nuclear weapons. This insight has meanwhile reached the mainstream security establishment of the United States, the president included. Whether this road will really be taken will determine the future of the regime—with far-reaching consequences for global security.

### The success of the Non-Proliferation Treaty: beyond all expectations

The nuclear non-proliferation regime, with the Non-Proliferation Treaty (NPT) at its core, can be called one of the most amazing international institutions. President Kennedy's famous nightmare in the 1960s, that within a decade 20 or even 30 Nuclear-Weapon States (NWSs) might emerge, has not come true. Even today, the number of nuclear powers or states with active nuclear weapons programmes stays at 10. Five of them are recognised as legitimate nuclear weapons possessors by the NPT, coinciding with the permanent five members of the UN Security Council (UNSC). Israel, India, Pakistan, and North Korea are credited with nuclear weapon status or have proven it by testing their designs. Iran has been strongly suspected of conducting a determined nuclear weapons programme.

In contrast, no fewer than 26 states, which once explored the idea of moving towards nuclear weapons, conducted feasibility studies, targeted weapon research or even development, or produced nuclear weapons (or inherited them after the decay of the Soviet Union), have renounced these activities or have been forced to do so. These countries make up almost the whole phalanx of middle powers. The miracle

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of non-proliferation becomes even greater when one considers that the Comprehensive Test Ban Treaty (CTBT) singles out 44 'nuclear capable' states whose ratification of that treaty is required before it can enter into force. Even more surprising is this mass renunciation of the most powerful weapon of the time in light of the North Korean example: Pyongyang has proven that a bitterly poor country, with the necessary perseverance, can move to the bomb through time. Measured by their gross national product at the outset of the programme, about 100 other states could take the same path. Nuclear weapons are by now an old technology. The barriers on the way to the bomb are not trivial, but they can be overcome. And yet, the NWSs and aspirants are a tiny minority within the international community—why?<sup>1</sup>

Nuclear weapons, first and foremost, have been procured out of security concerns. The most popular explanation why states have chosen the non-nuclear option is thus a security guarantee by others.<sup>2</sup> This proposition, though, opens more questions than it answers. First, it cannot explain why so many 'renouncers' come from the non-aligned camp or have no reliable guarantee as successors to the former Soviet Union. Together, these two groups make up 16 out of the 26 'convertees'. Many of the 'allied renouncers', moreover, gave up their activities at a time when the nuclear guarantee had been compromised. Most of the European countries dropped their nuclear ambitions after the Soviet Union had reached parity with the United States and the ambivalent 'flexible response' had replaced the unambiguous 'massive retaliation' as NATO's nuclear doctrine; serious doubts about the reliability of the US guarantee remained and were concealed only with considerable effort.<sup>3</sup>

We get some indication of the effects of international norms by comparing the 'before' and the 'after'. By far, the major part of the 'nuclear aspirants' started their nuclear activities before the NPT was concluded. Only Algeria, Libya, Iraq, Iran, Nigeria, and (possibly) Syria developed their programmes after the NPT had been opened for signature. Interestingly, none of these countries was a democracy when the treaty was negotiated. On the contrary, the large majority of the 'renouncers' stopped their programmes during the negotiations or when the negotiations had been completed. Thus, the NPT marked to most of them the magic line beyond which nuclear weapons aspirations lost their legitimacy. The increasingly strong non-proliferation norm shaped the discursive arena of domestic decision-making and changed the balance of influence between the proponents and opponents of a national nuclear option. The burden of proof that going nuclear was the right thing to do became ever stronger. Notably, during processes of democratisation, when young democracies struggled to prove their 'good citizenship' in order to attract international recognition and assistance, renouncing nuclear weapons appeared a particularly fit instrument to demonstrate good international behaviour. Domestically, it could be framed as correcting the misdeeds of the *ancien régime*. This applies to Spain, South Africa, Brazil, Argentina, Chile, South Korea, Taiwan, the three successor states to the Soviet Union, and Romania. In Egypt and Indonesia, the policy shift went hand in hand with important changes in the political systems and foreign policy strategies; in Egypt, in the course of Sadat's succession to Nasser and in Indonesia, after the coup against the nuclear-minded President Sukarno.<sup>4</sup>

In the light of these data, it is clear that the NPT norm, finally established in 1970, exerted a considerable influence on the decision of states to terminate nuclear weapons programmes (or not to start them at all). In addition, democratisation processes helped in this regard, but non-democracies were also accessible to the effects of the norm. The most spectacular non-proliferation success of the last 10 years was the end

of the Libyan ambitions, a result of a drawn-out negotiation process between Tripoli, London, and Washington; though Muammar Gaddafi, the autocrat, remained firmly in power.<sup>5</sup> Democracy, without a previously established norm, is no sufficient condition for renouncing; the majority of today's NWSs are democracies (the United States, the United Kingdom, France, Israel, and India). But all of them, India included, had taken decisive steps and firmly entrenched pro-bomb bureaucracies existed before the norm was given legal form.

### The causes of the present regime crisis

The NPT is thus the essential basis for a world order in which there are only a few NWSs and which contains the hope that the number might decline to zero over time. However, the state of the NPT is alarming. It rests on the assent by the parties, and these parties are motivated by the utility—in terms of security and economic gains—and by the normative satisfaction which they can derive from abiding by the rules. Containing the spread of nuclear weapons reduces the *security* dilemma for all, diminishes the risks of conflict escalation into the nuclear spectrum and of 'accidental nuclear employment', and the chances of access by terrorists to nuclear arms.<sup>6</sup> *Economic* gains can accrue from the unimpeded access to the peaceful uses of nuclear energy. *Normative* satisfaction emerges from the promise of the NWSs to move towards complete nuclear disarmament. These three elements—non-proliferation, peaceful uses of nuclear energy, and nuclear disarmament—constitute the 'bargain' on which the NPT rests. Only this bargain creates a balance of interests, which validates the justified claims of Non-Nuclear-Weapon States (NNWSs) for fairness.<sup>7</sup> Revisionist attempts to devalue the disarmament component of the bargain in relation to the non-proliferation component<sup>8</sup> miss the reality of the politics of the non-proliferation regime. This was already visible in the efforts of the Bush administration to emphasise America's nuclear disarmament efforts<sup>9</sup> and has become the gospel under President Barack Obama, as his landmark speeches in Prague (April 2009) and at the UN General Assembly (September 2009) indicate.

Under the 'realist' theory, the most likely development, driven by international anarchy, is that states feel compelled to strive for absolute security. Nuclear weapons promise fundamental, ultimate deterrence as the 'great equaliser'. It is thus individually rational to procure these weapons; however, the common good of global security is undermined by the realisation of everybody's individual preferences. The promise of the NWSs to disarm—as part of the bargain—provided breathing space for the international community, during which numerous states with nuclear ambitions gave up their plans. The NWSs calling off their bargain, if sustained, will logically promote the opposite trend.<sup>10</sup> Such erosion will be slow but steady. The possible revival of nuclear energy around the world will support it; whoever masters the civilian energy possesses the basics for a nuclear weapons option as well. Only the political decision to renounce, verified through the International Atomic Energy Agency (IAEA), draws a distinction between civilian and military use. The idea of a 'technological fix' that will permit civilian use but be proliferation-proof will probably remain elusive. The time span between a decision to 'go nuclear' on the basis of a civilian programme and the moment when the threshold is crossed can possibly be prolonged through proliferation-resistant technologies, but an absolute barrier will remain a dream. The global diffusion of technical capabilities in all fields stands in the way of such a technical fix.

The issue rests on politics, not on technology; this makes the ‘justice problem’ highly relevant. If the regime is perceived as unfair, it will fail in the long run. The erosion will accelerate if attempts to solve the current crisis around North Korea and, even more salient, Iran in a regime-friendly way fail. Should these attempts succeed, however, new breathing space will be opened. Nevertheless, unless this space is used, the erosion will continue. Medium powers will increasingly ask themselves why they should not follow the Indian, Pakistani, and Israeli path. This question has already become louder as a consequence of the US–Indian nuclear deal. Should this deal trigger future collaboration between India and the NPT community, including a strong move by all towards nuclear disarmament, all the better. If it is no more than a licence to have nuclear arms, its impact will be negative.

### Objections from a realist perspective

Some scholars from the realist camp believe this pessimism to be wrong. As long as the security parameters for the said states do not change, the argument goes, there is no reason for a change in their nuclear policies.<sup>11</sup> These critics, however, underestimate two crucial factors.<sup>12</sup>

The first factor is the impact of Western interventions after the Cold War, including military action without a proper UNSC mandate, on other states’ security dilemmas. The claim of the West, notably the United States under George W. Bush, to substitute for the United Nations in deciding and executing forced regime change creates a virulent threat against any non-democratic government.<sup>13</sup> Moreover, the change of doctrine of several NWSs has widened the spectrum of contingencies in which nuclear weapons might be used, including against NNWSs. This undermines the negative security guarantees of not to threaten or use nuclear weapons against the have-nots, those given in the context of UNSC resolution 984 (1995) as well as those undertaken through the protocols to be Nuclear-Weapon-Free Zones (NWFZs). Nuclear retaliation or pre-emption against biological or chemical arms is meanwhile the routine content of nuclear doctrines. In the US doctrine of ‘global strike’, the barrier between nuclear and conventional employment shrinks down to opportunistic deliberations on military utility.<sup>14</sup> It remains to be hoped that the current US nuclear posture review leads to a change. As long as the United States, France, the United Kingdom, and Russia retain the option to use nuclear weapons first, a robust assurance for the have-nots is lacking.

Moreover, the politics towards individual countries might enlarge their pro-nuclear motivation. Neither North Korea’s nor Iran’s nuclear ambitions are explainable without the security concern caused by past superpower policies. North Korea has been confronted since the 1980s with an ever more powerful alliance made up of the United States, Japan, and South Korea. The United States had deployed tactical nuclear weapons on the Korean peninsula. The crisis between 1992 and 1994 led to a tangible *détente* between Washington and Pyongyang. This included the withdrawal of US nuclear weapons from South Korea and the termination of North Korea’s nuclear weapons programme. However, the communist leadership read Presidential Directive 60 of 1997, which named the country as a potential target, as an indicator for a continued nuclear threat and re-started its nuclear activities.<sup>15</sup> The Clinton administration took great pains to re-establish communication with the paranoiac ‘communist monarchy’. However, the complete ‘incommunicado’ chosen by the Bush administration in its first years nullified these gains. When President Bush placed North Korea on the ‘axis of evil’ in January 2002, the path to North Korea’s nuclear tests

was preordained. It was only the renewed change of attitude in Washington—under considerable pressure from Beijing and Seoul and confronted with the complete failure of its previous policy—which made new negotiations possible.<sup>16</sup>

Iran's nuclear programme with the dual objectives of providing nuclear energy and a military option started under the late Shah. Ayatollah Khomeini terminated these activities as contrary to Islamic norms. The Iranian government revived it when it was completely isolated in its long struggle against Iraq, although Baghdad was the aggressor and used, in breach of the Geneva Protocol, chemical weapons against the Iranians. This was a shameful failure of the international community. Rather than condemning Iraq, the West and the Soviet Union supplied Baghdad with civilian and military goods, including components ending up in Saddam Hussein's weapons of mass destruction (WMD) programmes. At the height of the war, the US Navy destroyed an Iranian civilian airliner, killing more than 200 people; even today, Iranians do not believe this was by accident. Several battles between the US and the Iranian navies resulted in the near destruction of Teheran's sea power in the Gulf. While the two wars against Iraq eliminated the Islamic Republic's regional rival and thus helped Iranian security, the ubiquitous US military presence created a new menace in the immediate neighbourhood; President Bush made this explicit when he placed Iran on the 'axis of evil' as well.<sup>17</sup>

Neither the North Korean nor the Iranian regimes live up to international standards of good governance or proper external behaviour. Iran has become an extreme force under President Ahmadinejad. His call for eliminating Israel can be well read in Tel Aviv as a deadly existential threat, with all the possible consequences for an Israeli reaction. Nevertheless, the *genesis* of Iran's nuclear programmes rests on threat perceptions that are not uncommon and which have motivated the acquisition of nuclear weapons by others. France and the United Kingdom, for example, point just to 'future uncertainties' to justify their nuclear weapons, an argument which will justify the acquisition of such weapons by Tonga and Botswana as well. Either NWS is located in a much more secure environment than Iran.<sup>18</sup>

The second factor, neglected by realist critics, is the model effect of the world's leading powers. They serve as a 'beacon' for ambitious medium powers. Successful states influence the attitudes and behaviour of others, because their success is suggestive.<sup>19</sup> The NWSs had the best opportunity after the end of the East–West conflict to implement their undertaking as per Article VI of the NPT to disarm. The early 1990s gave reason for hope, as a series of nuclear reduction treaties indicated a steady march by the United States and Russia towards ever smaller arsenals. The refusal of the Republican-dominated US Senate to assent to the ratification of the CTBT brought these hopes to a halt. The Bush administration did not take the NPT obligation seriously at all. The Moscow Treaty of 2002 was a parody, lacking any stipulation about reduction timetables or verification measures. These reductions were compensated by technical improvements in the arsenal and plans for new warheads which, however, did not come true due to Congressional resistance. The policies of the other four official NWSs have been hardly more heartening. The United Kingdom quietly followed the US example to enhance the types of contingencies in which nuclear use might be considered. France announced that even her provision with strategic resources fell under her 'nuclear umbrella'. Russian doctrine reserved the option to use nuclear weapons whenever mother Russia is attacked by whatever means. China stuck faithfully to its no-first-use policy, but enlarged its nuclear arsenal, though at an unexpectedly low speed. Rhetorics and practices of the five demonstrated to all ambitious powers that

they believed in the military and political utility of their nuclear weapons. India, a country that had for long seen herself on an equal level with them, but would have preferred their disarmament to her own armament, was the first country to decide to emulate them.<sup>20</sup>

'Realist' critics object that proliferators are primarily motivated by regional security problems, pointing frequently to both Israel and Pakistan. Israel is indeed a special case; its nuclear arms owe their existence to the need of the post-Holocaust generation to enjoy absolute security in a hostile and quantitatively superior environment.<sup>21</sup> Pakistan, in contrast, is nothing other than the end of a proliferation chain, which stretches from the United States through the USSR (1949), China (1964), to India (1974). This reaction would not be explainable without the enduring regional conflict with India; but that Pakistan would play the nuclear card was contingent on a nuclearised world politics. Without the model behaviour seen in the proliferation chain—and the ensuing threat emerging from India—Pakistan might possibly have pursued its security by other means.<sup>22</sup>

### **The nuclear taboo and justice concerns**

The present crisis has been explained by the elimination of the basis of the 'nuclear taboo', which was effected through the infinite extension to the NPT in 1995.<sup>23</sup> However, this new permanence of the non-nuclear status was compensated by delineating much more specific steps the NWSs undertook to embark upon. At the NPT Review Conference of 2000, new measures were added in the '13 steps' of nuclear disarmament. The crash occurred when the Bush administration and France treated these commitments as null and void at the 2005 Review Conference. Russia and China, in turn, declared themselves free of these obligations because Bush had withdrawn from the Anti-Ballistic Missile (ABM) Treaty on which, they argued, their consent with the '13 steps' was based. The spectre of a fully fledged national missile defence system did not only violate the clause in the '13 steps', which required 'strengthening the ABM Treaty', but also the principle of 'equal security' inscribed in their preamble. The United Kingdom had no troubles with the '13 steps', but would not take any move to counter the interests and preferences of its US ally. The NNWSs were thus confronted with a rejection front of the NWSs. US non-nuclear allies took this with grinding teeth, while the non-aligned countries revolted by refusing all improvements in the non-proliferation toolbox of the treaty and demonstrated solidarity with Iran, which was already the target of Western accusations, even though many of them looked at Iranian nuclear activities with a suspicious eye.<sup>24</sup> As a consequence of 2005, many a NNWS in the non-aligned world is reconsidering the costs and benefits it derives from the NPT.<sup>25</sup>

Thus, it was not the infinite extension to the NPT as such, but the refusal of the NWSs to implement the specified disarmament duties emerging under Article VI that led to disunity among the treaty community. William Walker has labelled the NPT a 'Kantian project': parties have entrusted their security interests, rather than embarking on an unfettered pursuit of power, to a joint legal instrument.<sup>26</sup> Kant, in fact, did not believe that his morally founded and logically cogent legal principles for world order would come true just by human insight in the common good. Rather, he entrusted the realisation to an evolutionary process, which men and their states would enter, at first by their narrow interests. They would agree to law as the only way out of their existential survival problem. Here, he was arguing just like Thomas Hobbes. Other than

Hobbes, however, Kant expected an incremental transition from the interest-driven 'realm of necessity' to the morally ruled 'realm of freedom'. This transition would become possible through the beneficial effects of the law-based institutions, which men and their states would create on the basis of nothing more than their most basic interests.<sup>27</sup> Lawful institutions, he believed, would exert a strong educational effect on humans living in them and having their daily practices guided by them. This consideration appears to fit nicely the experiences with the NPT. As Kant suspected, most states acceded, because of utility calculations, to a new contractual mutual relationship, the NPT. The institutionalisation and internalisation of this contractual relationship and the norm it embodies—as this hopeful prognosis will have it—was to induce them in the end to internalise the norms that are inscribed into that contract as the rightful standards of their behaviour, eventually without any sanctioning force. This process had been well underway until the early 21<sup>st</sup> century.<sup>28</sup>

The problem is, however, that this acceptance rests on specific conditions. In order to cause socialisation effects, the institutions and their norms must be capable of attracting consent by all who are affected by them. This consent, in turn, rests on two prerequisites. The norms must enjoy sufficient legitimacy, and the practice of governments must be perceived by other parties as in conformity with the norms—otherwise, the stampede into the 'state of nature', that is unregulated anarchy, will ensue. Legitimacy is linked to the feeling of parties that values (here: security and status) are distributed fairly among the participants and that the opportunity to participate in crucial decisions is distributed sufficiently equitably. This perception of general fairness is the moral pillar of international legal orders.<sup>29</sup> Fairness or justice is a pillar of international stability that must not be underrated.<sup>30</sup> However, its meaning is being ignored by simplistic rationalist theories of international relations, which still dominate the United States scholarly discourse. The longing for, and the perception of, justice is hard to divorce from what states believe are their interests. Interests and justice amalgamate into a sense of what is just and useful.<sup>31</sup> Parties to conflicts have a particular idea about what their appropriate share of a contested good should be.<sup>32</sup> This appropriateness rests on cultural and historical factors. International norms have the useful function to synchronise, over time, such particularistic standards for fairness. If this synchronisation fails, the stability of the related regimes is seriously in question.<sup>33</sup> Only the feeling that the established order is just will create the normative community, which secures the survival of a normative order, including international regimes and thus creates the prerequisite for this community to collectively defend against attempts at breaching the norms and to adapt the normative system to cope with new challenges.<sup>34</sup> Therefore, it is indispensable to insert elements of justice in the substantial as well as procedural norms of a regime.<sup>35</sup> Distribution patterns, which are perceived by many or crucial partners as deeply unjust, can eventually open the roads for violent conflict.<sup>36</sup>

In either respect—justice, and practice in agreement with the established norms – the fundamentals of legitimacy in the non-proliferation regime look brittle.<sup>37</sup> While the NPT distinguishes legally between nuclear weapon and non-nuclear weapon states, with different rights and duties, the obligation of the NWSs to disarm offers the perspective of elimination of inequality within the treaty community, and thus of the intuitively unjust order. The practice of the NWSs blocks this prescribed path to greater justice. They feel comfortable in their (allegedly) privileged existence and in their domestic politics; 'nuclear weapons entrepreneurs' are well placed and endowed with bureaucratic resources. The normative expectations by the majority of the



membership are being consistently frustrated. This frustration threatens to trespass the border line beyond which the endurance of the non-proliferation norm may vanish.

The claims for justice uttered by the majority must not be underrated. They are being mobilised at three levels. The first one is the non-proliferation regime itself. Its inherent inequality calls for compensation. The second level is implementation. In the NWSs' practice, strong pressure is exerted against the few rule-breakers among the NNWSs. At the same time, the faithful parties are subjected to ever more stringent obligations, for example, in verification and export controls, in order to improve the chances of early warning against instances of rule-breaking. There is no equivalent burden on the NWSs and their reluctance to live up to their undertakings is treated (by themselves!) with the greatest possible complacency. This establishes a second justice problem at the level of implementation; it is aggravated by the ironic fact that the five NWSs, as permanent members of the UNSC, are simultaneously the judges and prosecutors of breaches of the NPT by NNWSs. This enhances the feeling of injustice inside the regime. The third justice claim emerges from the historical experiences of a majority of states with Western (and to some degree Russian) imperialism. For them, the nuclear order appears as the continuation of Western claims to world rule. Nuclear weapons, with their inherent potential for political blackmail and their value as a symbol of power, appear as a signifier of the continued Western will for universal dominance. It is precisely the Indian discourse on nuclear weapons which has expressed in great clarity these frustrated claims for justice, which could have been satisfied (apart from India's going nuclear) solely by credible efforts at disarmament by the established nuclear powers.<sup>38</sup>

### Conclusion: a silver line of hope?

The non-proliferation regime is at a watershed. Its counter-intuitive success shows that nation states can decide to renounce the most powerful weapon of their time even without the coercive power of a universal 'Leviathan'. The continued growth of a law-based order, regulating the nuclear realm is the prerequisite of this renunciation, as the renunciation is the condition for this growth. Without correcting the inequalities within the regime, as required by Article VI of the NPT, that is, by the unequivocal move of the NWSs towards disarmament, the regime will not grow for much longer. The vision of President Obama of a Nuclear-Weapons-Free World (NFWF), the UNSC embracing that lofty goal and, not least, the clear confession by the Indian government to strive for the same objective give reasons for hope. Among the great powers, India has probably the longest tradition of envisaging a NFWF as the only viable basis for a safe future. It is to be hoped that it will offer the leadership to move us in that direction.

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### Appendix 1: Countries with Nuclear Weapons Activities, 1945–2005

Sources for this list cf. Jo/Gartzke 2004 <sup>1</sup>	Additional cases researched by Müller/Schmidt 2009 <sup>2</sup>
USA	Norway <sup>3</sup>
Soviet Union/Russia	Germany (Postwar) <sup>4</sup>
France	Japan (Postwar) <sup>5</sup>
China	Italy <sup>6</sup>
Israel	Canada <sup>7</sup>
India	Australia <sup>8</sup>
South Africa	Libya <sup>9</sup>
Pakistan	Chile <sup>10</sup>
Germany (Wartime)	Spain <sup>11</sup>
Japan (Wartime)	Switzerland <sup>12</sup>
Sweden	Egypt <sup>13</sup>
Yugoslavia	Indonesia <sup>14</sup>
Taiwan (1970s only)	Nigeria <sup>15</sup>
South Korea (1970s only)	Syria <sup>16</sup>
Iran	
Iraq	
Argentina	
Brazil	
Romania	
North Korea	

**Appendix 2: Starts and Stops of Nuclear Weapons Activities**

Period	Start (Cum)	Stop (Cum)	Total NWA
1945	US, UK, CA, SU		4
1946–1950	IN, SE (6)	CA (1)	5
1951–1955	AR, CN, IL, FR, YU, NO, EG (13)		12
1956–1960	AU, BR, DE, IT, CH (18)		17
1961–1965	CL, ID, PK (21)	NO (2)	19
1966–1970	KR, TW, JP (24)	DE, SE, ID, IT (6)	18
1971–1975	IQ, IR, ZA, ES (28)	AU, JP (8)	20
1976–1980	NG, KP (30)	EG, CH (10)	20
1981–1985	RO, LY (32)		22
1986–1990	DZ (33)	YU, TW, RO, ES, KR (15)	18
1991–1995	KZ, UA, BY (36)	DZ, AR, IQ, CL, KZ, UA, BY, NG, ZA (24)	12
1996–2000	SY (37)	BR (25)	12
2001–2005		LY (26)	11

**Abbreviations:**

<i>AR</i>	Argentina
<i>AU</i>	Australia
<i>BR</i>	Brazil
<i>BY</i>	Belarus
<i>CA</i>	Canada
<i>CH</i>	Switzerland
<i>CL</i>	Chile
<i>CN</i>	China
<i>DE</i>	Germany
<i>DZ</i>	Algeria
<i>EG</i>	Egypt
<i>ES</i>	Spain
<i>FR</i>	France
<i>ID</i>	Indonesia
<i>IL</i>	Israel
<i>IN</i>	India
<i>IQ</i>	Iraq
<i>IR</i>	Iran
<i>IT</i>	Italia
<i>JP</i>	Japan
<i>KP</i>	North Korea
<i>KR</i>	South Korea
<i>KZ</i>	Kazakhstan
<i>LY</i>	Libya
<i>NG</i>	Nigeria
<i>NO</i>	Norway
<i>PK</i>	Pakistan
<i>RO</i>	Romania
<i>SE</i>	Sweden
<i>SU</i>	USSR/Russia

<i>SY</i>	Syria
<i>TW</i>	Taiwan
<i>UA</i>	Ukraine
<i>UK</i>	United Kingdom
<i>US</i>	United States of America
<i>YU</i>	Yugoslavia
<i>ZA</i>	South Africa

### Appendix 3: Political System and Nuclear Weapon Activities (Belarus, Ukraine and Kazakhstan Excluded)

State	Political System Start	Political System Stop/Continuing
USA	Democracy	Democracy
UK	Democracy	Democracy
India	Democracy	Democracy
Israel	Democracy	Democracy
France	Democracy	Autocratisation
Pakistan	Semidemocracy	Autocratisation
North Korea	Autocracy	Autocratisation
Iran	Autocracy	Democratisation
China	Autocracy	Democratisation
USSR/Russia	Autocracy	Democratisation
Syria	Autocracy	Democratisation
Canada	Democracy	Democracy
Norway	Democracy	Democracy
Sweden	Democracy	Democracy
Australia	Democracy	Democracy
Germany	Democracy	Democracy
Italy	Democracy	Democracy
Switzerland	Democracy	Democracy
Japan	Democracy	Democracy
Brazil	Semidemocracy	Democratisation
Chile	Semidemocracy	Democratisation
South Korea	Semidemocracy	Democratisation
South Africa	Semidemocracy	Democratisation
Argentina	Autocracy	Democratisation
Yugoslavia	Autocracy	Democratisation
Taiwan	Autocracy	Democratisation
Egypt	Autocracy	Democratisation
Nigeria	Autocracy	Democratisation
Spain	Autocracy	Democratisation
Romania	Autocracy	Democratisation
Algeria	Autocracy	Democratisation
Indonesia	Autocracy	Autocratisation
Iraq	Autocracy	Autocratisation
Libya	Autocracy	Autocracy

#### Notes on Appendices

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