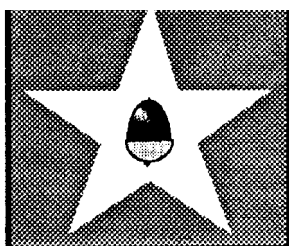


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**Regional (Non-) Proliferation:  
The Case of Central Asia**

**April 2000**



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# **Regional (non-) Proliferation: The Case of Central Asia**

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The Non-Proliferation Treaty (NPT) Review Conference in New York from April 24 to May 19, 2000 ought to be an incentive to look into regions which, because of various reasons, are in the heart of non-proliferation concerns. Central Asia is such a region. Recent times have seen a number of cases when individuals were trying to smuggle radioactive material through countries of Central Asia. These incidents might point to the risk the region is faced with, namely the proliferation of nuclear material. The context these countries are set in, direct neighbour of two nuclear weapons states (NWSs), a history of nuclear facilities including nuclear weapons production and testing sites, political and economic instabilities within their borders, and various conflicts right outside their territory, brings about a situation which should receive the close attention of the international community.

This paper aims to give an overview on nuclear (non-) proliferation and related matters in Central Asia in order to heighten awareness of the problem. Both progress in dealing with the issue and prevailing dangers will be addressed. I shall start with some general remarks concerning the position of Central Asian states towards the NPT in 1995 and also, as far as possible, towards this year's conference. This will be followed by a more technical introduction to the post-Soviet heritage of nuclear facilities in the region and the ongoing process of safeguarding these facilities, leading into an analysis of today's situation and the problems with which the affected states are confronted. Special attention will be drawn to the discussions on a nuclear-weapons-free-zone (NWFZ) in the region.

## **Central Asia and the NPT**

Shortly after gaining independence, all states within Central Asia joined the NPT Regime.<sup>1</sup> At the 1995 Review Conference, these countries were unanimous in their position during the discussions.<sup>2</sup> As far as they issued statements during the conference, they were all supportive of the unconditional and indefinite extension of the Treaty, regardless of whether they were members of a certain grouping or not.<sup>3</sup> Especially pivotal was the speech made by the Kazakh representative,<sup>4</sup> from one of the few countries that had been in the possession of nuclear weapons but had given them up or were in the last stages of doing so at the time of the conference. 'Unconditional', however, did not mean that the states did not urge the states parties community to make progress on other disarmament related issues. They reiterated the need for a cessation of the production of fissionable material, the conclusion of a test-ban treaty and negotiations among the NWSs to comply with the Article VI obligations of general and complete disarmament. Kazakhstan also called for negative and positive security assurances to be made legally binding, as it was in the peculiar position of neighbouring two NWSs and had itself until recently been a state with nuclear weapons on its territory.

Concerning the 2000 Review Conference, officials of Central Asian states shared, prior to start of the Conference, the gloomy expectations of a large number of states.<sup>5</sup> The hampering of the Comprehensive Test Ban Treaty (CTBT) through the negative vote in the US Senate in autumn 1999, the general deadlock at the

Conference of Disarmament in Geneva, the nuclear tests conducted by India and Pakistan, the plans for a deployment of nuclear missile defence (NMD) and various other problems leave the Central Asian states with not much of an expectation relating to a successful outcome of the Conference. Nevertheless, they are not planning on retreating on their commitment towards the 'unconditional and indefinite' nature of the NPT which they stated at the 1995 Conference. Kazakhstan especially recognises that it has some moral authority in the area of nuclear disarmament. But in the same way the other Central Asian states have every reason to see the NPT strengthened in order to prevent a sudden or creeping collapse.

### **Central Asia and the Post-Soviet Aftermath**

The collapse of the Soviet Union and the emergence of five independent states in Central Asia led to the complicated situation in which nuclear facilities and weapons were dispersed over several countries where before they were under the auspices of just one authority. To a dissimilar degree, the C5 had to deal with various forms of nuclear equipment, plants and material. An overview should be given at this point:

*Kazakhstan.*<sup>6</sup> Kazakhstan inherited by far the most extensive nuclear infrastructure. This included 1410 strategic warheads deployed on SS-18 intercontinental ballistic missiles (ICBMs) and on air launched cruise missiles (ALCMs) plus a number of tactical weapons. Early agreements among the Post-Soviet states, Kazakhstan's adherence to START I obligations and its accession to the NPT early in 1994 led to the withdrawal of these weapons to Russia by April 1995 without Kazakhstan ever having asserted control over them. In addition to these arms, Kazakhstan came into possession of various nuclear facilities. These are a fast breeder reactor at Aktau in the west of the country (closed down in April 1999), research reactors at the Almaty and Kurchatov (near the former test-site of Semipalatinsk), a branch of the Institute of Atomic Energy and a far-flung fuel fabrication unit in Ust-Kamenogorsk (Ulba Metallurgy Plant) in the north-east of the country. Weapons-grade HEU used to be stored on all of the sites mentioned. Currently, only the first three facilities hold weapons-grade HEU with all of them being under International Atomic Energy Agency (IAEA) safeguards. The safety in these facilities has been improved considerably in the past with both legal instruments put in place and an upgrading of physical protection systems sponsored by western governments like the US, Sweden and Japan.<sup>7</sup> On-site visits by experts, however, reveal that there are still some flaws in the safety of the sites.<sup>8</sup> In particular, the Aktau facility is regarded as vulnerable to removal of radioactive material including plutonium stored on-site.<sup>9</sup> In addition to the facilities mentioned, Kazakhstan is still at the forefront of global uranium mining,<sup>10</sup> with a multitude of mines being located in the southern and the north-central region of the country.

*Kyrgyzstan:* Kyrgyzstan's nuclear industry has been concentrated predominately on uranium mining and milling. The Kara Balta Ore Processing Combine is still active, processing uranium mined in neighbouring Kazakhstan.<sup>11</sup>

*Tajikistan:* There are no longer active mines in Tajikistan or any other nuclear facilities.<sup>12</sup>

*Turkmenistan:* No facilities or mines are known.

*Uzbekistan:* There are two small research reactors in Uzbekistan, both in or near to Tashkent.<sup>13</sup> One belongs to the Institute of Nuclear Physics and the other to the Photon Radioelectrical Technical Plant. Both plants are fuelled with HEU; however US officials determined that they would not constitute a proliferation risk, especially as the first site has seen physical upgrading sponsored by the US Department of Energy.<sup>14</sup> Additionally, Uzbekistan has numerous mines and leach facilities still in operation while other sites have been closed. These are located predominately in the east of the country. All these facilities are under the safeguard of the IAEA.

### **Current Security Situation**

As mentioned above, the recent past saw various incidents of smuggling of radioactive material in the region. So far, there has not been any hard evidence that proliferation of weapons-usable highly enriched uranium actually takes place. However, it is a not uncommon notion that a danger of serious smuggling remains. In most of the cases mentioned, the source of the material remains uncertain as do the likely recipients. Nevertheless, some indications shall be drawn at this point.<sup>15</sup> There seems to be a tendency for the material to head south out of Kazakhstan after it has been removed from a nuclear facility. In the first incident, a Russian officer tried to smuggle an unspecified amount of 'radioactive materials' over the Kazakh-Uzbek border. The material came from the Baykonur space centre in central Kazakhstan which is under Russian lease-ownership. Regarding the attempted uranium sale in Almaty earlier this year, the (not weapons usable) material was probably stolen from the Ulba Metallurgy Plant in Ust-Kamenogorsk. Although it is by far not possible from these incidents to paint a full picture, they may serve as indications that there are still safety leaks in the region's nuclear facilities, despite ample efforts to safeguard the sites and the implementation of national export controls in Kazakhstan and other Central Asian states.<sup>16</sup>

The interpretation of these events, although always remaining speculative, is crucial. One possible explanation would be that they are to be regarded as isolated incidents with individuals acting on their own behalf and not necessarily on specific orders.<sup>17</sup> In this case, countermeasures would include conventional safeguarding, policing, etc. Another, more pessimistic, possible explanation would be that the nuclear trafficking is in the process of establishing a sophisticated network, equal to the ones for drugs and weapons in the region or maybe even using the same routes and possibly the same infrastructure. Thus, the cases uncovered would be just the peak of an invisible market for nuclear materials. Whereas drugs and weapons are usually north-bound through Central Asia, this material is more likely to be south-bound with recipients within or beyond the southern borders of the area. The most affected areas in this scenario would then be the east of Kazakhstan and Uzbekistan and the territories of Kyrgyzstan and Tajikistan. The assumption, however, that Turkmenistan is exempt from proliferation dangers altogether is probably unrealistic.<sup>18</sup>

The situation is especially volatile as the region has seen an onslaught of terrorism in recent times. A group of up to one thousand armed terrorists had invaded Kyrgyzstan late last summer out of Tajikistan, aiming to break through to Uzbek territory, before retreating to Afghanistan in November after weeks of heavy fighting. There are serious concerns that these actions might be repeated this year as soon as the weather conditions will allow it. Although this conflict cannot be linked directly to nuclear proliferation, there is a serious possibility of terrorist groups like this attracting other illegal activities.<sup>19</sup> They are already heavily involved in the drug

and weapons trade linking Central Asia's southern tier with war-torn Afghanistan and other parts of South Asia.<sup>20</sup> As South Asia has been identified as a likely recipient for nuclear material, the use of the already existing north-bound drug and weapons traffic routes in the reverse direction, as indicated above, might be attractive for potential traders. In this respect, the 1998 nuclear tests of India and Pakistan, underlining those countries' willingness to expand their respective nuclear programmes, are considerably increasing the security concerns in the region with regard to nuclear proliferation.<sup>21</sup>

Although not necessarily bringing forth possible buyers for nuclear material, the war in Afghanistan is at the heart of the problem. It allows terrorist groups to flourish in the region, together with the unhindered transport of illegal material like drugs, weapons, and possibly also fissile material. As the situation in Afghanistan is not likely to improve in the near future,<sup>22</sup> the dangers of nuclear material smuggling heading south will remain for the time being. Thus, the Central Asian states see themselves sandwiched between two nuclear-weapons states to the north and to the east, where the safety of nuclear material cannot be absolutely assured, and states which might aspire to expand their nuclear capabilities in the south. Seen in this context, it must be their top priority to ensure the safety of weapons-usable fissile material through continuing upgrading of physical safeguards, training of security personnel, patrolling potential trafficking routes and the like. But also in the broad picture, stabilising the regional security framework is pivotal in order to minimise latent demand for nuclear material for whatever purposes.

### **Central Asia Nuclear Weapons Free Zone<sup>23</sup>**

One of the major projects to enhance regional co-operation in combating nuclear proliferation is certainly the proposed NWFZ in Central Asia, the Central Asia Nuclear Weapons Free Zone (CANWFZ). Such a zone has been discussed for several years now but the process has gained some momentum in recent times with around 95% of the treaty being completed.<sup>24</sup> The debate on the issue started in earnest with the February 1997 'Almaty Declaration' of the regional heads of state and the five foreign ministers' Joint Statement as a result of the high-level international conference on 'Central Asia - a Nuclear-Weapon-Free zone' in the Uzbek capital of Tashkent in September 1997, following a time of preparatory work including a working paper submitted to the 1995 NPT Review Conference by Kyrgyzstan.<sup>25</sup> Since the end of the same year, under General Assembly Resolution GA 52/38S, the UN has been involved in the discussion and sponsored five meetings, with the most recent one taking place in Sapporo/Japan from April 2 to April 6 2000. So far, agreement on 17 of 18 articles has been achieved, whereas some considerable stumbling blocks remain.<sup>26</sup>

The CANWFZ would comprise the C5, thus also including Turkmenistan which regards itself as neutral and has therefore not been an integral part of other regional co-operation agreements. As Central Asia is a landlocked entity, demarcation of the zone is straightforward with the exception of the Caspian Sea, though the problems relating to delineation there were solved during the meeting in October 1999 in Sapporo. Such a zone would not only encompass commitments by the five Central Asian states but also some sort of security assurances by the nuclear weapon states, especially the neighbouring Russia and China.<sup>27</sup> Since Russia has a considerable military force stationed in Central Asia, in particular in Tajikistan, the position of Russia to the proposed CANWFZ is pivotal as it probably does not want to see the zone infringe on its military options in the area. Russia and the other NWSs have been involved in the discussion process in a more

informal manner, especially during a meeting in Bishkek in July 1998. It is likely for them to re-enter the talks only after the C5 have agreed on a common position on all articles of the draft treaty. The nuclear weapons tests of India and Pakistan in 1998 further complicated matters in this regard with both countries not being recognised as official NWSs, thus not being expected to give any formal security assurances, but still with their nuclear weapons certainly able to reach well into the region.<sup>28</sup>

The issue of transit of nuclear weapons was solved during the most recent expert level meetings, the last one in Sapporo at the beginning of April. The article which has been drafted relates to any temporary presence of nuclear weapons on the territory of the C5 on ships or aircraft, however, without explicitly mentioning the details. The language of the article is more general and leaves space for some interpretation. It is nevertheless understood that any temporary presence would be restricted to only a very short period of time.<sup>29</sup>

The other issues on which agreement has been achieved and which will form part of the treaty are related to the peaceful use of nuclear technology, the physical protection of nuclear facilities, the future expansion of the prospective zone, institutional implementation of the treaty and co-operation in reversing environmental degradation of areas which had been adversely affected by Soviet nuclear activities, ie the test site in Semipalatinsk and numerous nuclear waste disposal sites, an issue which has been close to the hearts of all Central Asian states from the very beginning of the talks.<sup>30</sup> Formal aspects like deposition of the treaty and the withdrawal clause have also been agreed.

The most contentious issue, on which despite prolonged discussions during the recent meeting in Sapporo no common ground could be found, is the relation of the proposed treaty to other agreements; Article 12 of the draft treaty. Predominantly Russia's various co-operations in security matters with all of the C5 states, based in particular on the multilateral Tashkent agreement on collective security but also on other bilateral arrangements, serves here as a major stumbling block, in particular as it theoretically provides for the use of a nuclear umbrella.<sup>31</sup> The C5 themselves, especially Turkmenistan and Kazakhstan, remain divided on how to approach the problem. It will on the one hand be necessary to observe international practice by adherence to any previously decided agreements and equally necessary on the other hand to establish a genuine NWFZ. To complicate matters, some believe that Kazakhstan might be thinking of Russia's tactical missiles as a sort of positive security assurance in the case of any major threat originating from other regional powers. Consensus on this matter must be found before the discussions are to develop to the next stage, when the treaty will be discussed with the NWSs. One possibility could be to drop the article altogether, which would not necessarily make things easier depending on the future development of relations among the C5.

There have been some informal consultations among the Central Asian states including UN officials during the NPT Conference. There seems to be some real need for more high level discussions as the last meetings were predominantly on an expert level only. Thus, meetings lacked decision power. In addition, Turkmenistan was unable to send its experts to the last two meetings. The C5 issued a working paper dated on 5 May 2000 stating that they "remain firmly committed to the continuation of the work to implement the initiative for the establishment of a nuclear-weapon-free-zone in Central Asia (...)."<sup>32</sup> Nevertheless, some substantial progress soon is key for retaining the momentum in the process and bringing it to a close.

## Conclusion

It appears that in order to strengthen the non-proliferation regime in Central Asia, three points need considerable attention. Firstly, the NPT Review Conference must finish with some tangible results in order to restore global confidence in the treaty and the overall non-proliferation structure after some years of disappointment. The Central Asian states need assurance that the world around them is not falling into complete havoc, especially as the situation to the south of the area is already grim. Secondly, Central Asia must find adequate means to diminish the threat of terrorism within its own borders. This does not necessarily mean military action, as the resources of the countries are very limited, but might involve internal political adjustments and negotiations with the groups involved.<sup>33</sup> The establishment of effective border guarding and law-enforcement agencies is pivotal to fight terrorism involved in drug and weapons trafficking. In effect, this is to prevent nuclear proliferation from becoming part of the regional criminal network. And thirdly, the discussion concerning the CANWFZ should come to a positive conclusion soon. This zone is bound to lead to increased co-operation and trust among the states and would certainly be an effective preventive measure with regard to the challenge of nuclear proliferation.<sup>34</sup> It would hopefully also strike a positive note in other international disarmament related fora. In all this, the Central Asian states need all the genuine international assistance they can possibly get.

## Endnotes

<sup>1</sup> Uzbekistan in 1992; Kazakhstan, Kyrgyzstan and Turkmenistan in 1994 and Tajikistan in 1995.

<sup>2</sup> *1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons*; Final Document, Part III, Summary and Verbatim Records; New York, 1996.

<sup>3</sup> Uzbekistan and Turkmenistan are members of the Non-Aligned Movement (NAM).

<sup>4</sup> Ibid; p137-8.

<sup>5</sup> In private conversations with Kazakh, Kyrgyz and Turkmen officials.

<sup>6</sup> If not otherwise indicated, information in this section is taken from Rodney W Jones/Mark G McDonough/al (1998) *Tracking Nuclear Proliferation: A Guide in Maps and Charts*, Carnegie Endowment For International Peace, Washington DC, p79ff.

<sup>7</sup> Cf Timur Zhantikin (1999) *The Nuclear Infrastructure in Kazakhstan: Implications for Safeguards and Security*, in: *The Monitor: Nonproliferation, Demilitarization, and Arms Control* (online version), Vol 5, No 3.

<sup>8</sup> More details concerning cases of proliferation follow in later sections of this paper. Regarding the safety of facilities, cf Emily Ewell Daughtry/Fred L Wehling (2000) *Cooperative Efforts to Secure Fissile material in the NIS*, in: *The Nonproliferation Review*, Spring 2000, p97-111.

<sup>9</sup> Ibid. The plutonium is being transported to the more secure Semipalatinsk test site, a process likely to be finished by 2004/5.

<sup>10</sup> Kazakhstan is holding some 25% of the world's prospected uranium reserves; Jones/McDonough/al (1998).

<sup>11</sup> Cf [www.antenna.nl/wise/uranium/uoasi.html](http://www.antenna.nl/wise/uranium/uoasi.html)

<sup>12</sup> Ibid.

<sup>13</sup> Daughtry/Wehling (2000); p100/1.

<sup>14</sup> Ibid.

<sup>15</sup> Cf the following articles *Russian smuggling nuclear materials detained at Kazakh border*, Radio Free Europe/Radio Liberty (RFERL), 23/7/99; *Three Arrested in Uranium Sale*, RFERL, 2/2/00. The article headed *Kazakhs detain 3 in possession of 5kg of highly enriched*

*uranium* and published by the BBC on 3/8/99 refers to a case which seems to have involved only lowly enriched uranium according to Kazakh officials.

<sup>16</sup> Regarding export controls in Kazakhstan, cf Valeriy Korablev/Chingis Masenov (1999/2000) *Challenges and Solutions to Export Controls in Kazakhstan*, in: The Monitor: Nonproliferation, Demilitarization, and Arms Control (online version), Fall 1999/Winter 2000.

<sup>17</sup> Emily S Ewell (1998) *NIS Nuclear Smuggling Since 1995: A Lull in Significant Cases?*, in: The Nonproliferation Review, Spring-Summer 1998, p119-125. Relevant also in the following.

<sup>18</sup> A Turkmen official in private conversation stated that there was no problem of proliferation in Turkmenistan.

<sup>19</sup> Cf also Abdulaziz Kamilov (1997) *A Step Towards Regional Peace and Development*, in: Disarmament: A periodic review by the United Nations, Vol XX, No 1, 1997, p94-99.

<sup>20</sup> According to a Kyrgyz official in private conversation, the conflict in the south of the republic has arisen more because of drug and weapons trade related issues than anything else.

<sup>21</sup> In private conversation with Kazakh and Kyrgyz officials.

<sup>22</sup> Cf the 'Report of the Secretary-General' concerning the situation in Afghanistan, UN document S/2000/205.

<sup>23</sup> Part of the information in this passage was obtained through consultation with officials close to the talks. A draft treaty has not been issued yet, therefore there remains some vagueness concerning the precise content of the draft.

<sup>24</sup> According to officials close to the talks.

<sup>25</sup> 1995 Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons'; Final Document, Part II, Documents issued at the Conference, New York, 1995, p369.

<sup>26</sup> A text of the draft treaty has not yet been released.

<sup>27</sup> Such negative security assurances are most likely to be contained in a protocol to the treaty. A UN official in private conversation.

<sup>28</sup> Cf Oumirserik Kasenov (1998) *On the Creation of a Nuclear-Weapons-Free Zone in Central Asia*, in: The Nonproliferation Review, Fall 1998, p144-147. A Kazakh official in private conversation spoke of the same concerns.

<sup>29</sup> A UN official in private conversation.

<sup>30</sup> One of these sites is the former uranium mine and mill in Mailii Su, Kyrgyzstan, some 50 miles north of Osh and close to the Kyrgyz-Uzbek border in the Ferghana valley. A report in German language on the state of the facilities can be obtained from [www.oeko.de](http://www.oeko.de), entitled *Anlagenzustand und radiologische Bewertung der früheren Urangewinnungsanlagen am Standort Mailii Su (Kirgistan)*. As some of the tails are in a serious state, leaking cannot be excluded in the near to middle future. This would most certainly have disastrous effects on the agriculture industry and infrastructure in the Ferghana valley and further down the stream of the Syr Darja. The EU allocated Euro 500.000 for the restoration of the site, but this never went ahead.

<sup>31</sup> Kasenov (1998), p146.

<sup>32</sup> NPT/CONF.2000/MC.II/WP.15.

<sup>33</sup> A Kazakh official mentioned the second point in private conversation.

<sup>34</sup> A Tajik official in private conversation emphasised the preventive nature of the proposed CANWFZ.



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