



# 建设一个不使用核武器的世界

Build a World of

Non-use of Nuclear Weapons

清华国际安全论坛研究报告 No.1

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# 内容提要 ...

- ◆ 建立"无核世界"是国际社会的崇高理想,但在短期之内实现这一理想有很大的困难。不但既有的核国家不可能彻底销毁核武器,而且一些国家和非国家行为体仍在试图非法获得核武器。
- ◆ 自第二次世界大战结束以来,"不使用核武器"已经成为一种非正式的国际规范,并对核国家的对外行为产生过并仍在产生巨大的约束作用。国际社会更现实的目标是将"不使用核武器"规范法律化,努力建设一个"不使用核武器"的世界,作为通向"无核世界"的一个中间步骤。
- ◆ 报告建议由联合国主持制订《不使用核武器公约》,该公约的核心内容应当包括: 所有核国家均承诺互不首先使用核武器,承诺不对加入该公约的无核国家使用或威胁使用核 武器:

所有核国家均承诺停止研制和装备新的战役战术核武器,包括低当量核武器,并承诺在一定 期限内全部销毁战役战术核武器;

所有核国家承诺不向非政府组织转让军用和民用核技术:

所有核国家应自觉避免执行有可能导致另一核国家将常规武器误认为核武器的军事行动;加入该公约的无核国家承诺不对有核国家使用或威胁使用化学武器和生物武器;

所有国家承诺共同反对核国家在官方表态或文件中使用具有核威胁含义的语言,并有责任对 核国家使用核武器的意图进行揭露和谴责。

# 建设一个"不使用核武器"的世界

核武器的巨大威力使许多国家和非国家行为体试图非法获得核武器,因而核武器的扩散有可能 给国际安全带来巨大危害。建立"无核世界"仍然是国际社会的崇高理想,但在短期之内实现这一 理想还有很大的困难。更为务实的作法是将现存的"不使用核武器"规范法律化,作为通向"无核 世界"的一个中间步骤。当核武器成为不能使用的武器时,即使暂时不能完全消除核武器,国际社 会的安全程度也能得到较大的提高。

# 一、核扩散的基本形势

《不扩散核武器条约》把世界上的国家分为有核国和无核国两类,但后来事态的发展并不如条 约制定者设想的那么简单。根据各国的核技术能力和政治态度,我们可以把世界上的国家分为六种 类型: 1. 合法拥有核武器的国家,即美国、俄罗斯、中国、英国和法国等五国。2. 非法但公开拥 有核武器的国家,包括印度、巴基斯坦和朝鲜。3. 非法但秘密拥有核武器的国家,现在只有以色 列。利比亚和南非过去曾秘密发展核武器,但现在已经完成弃核。4. 有发展核武器意图但暂未全 面掌握核技术的国家,包括伊朗和叙利亚。5. 有核技术但不发展核武器的国家,包括乌克兰和日 本。6. 既无核技术亦无意发展核武器的国家,包括除前五类国家之外的所有国家。

## 印度

印度是第一个在《不核扩散核武器条约》生效后公开跨越核门槛的国家。印度早在 1946年就开始研究民用核技术,但尼赫鲁在世时一直坚持不发展核武器的政策。印度 在中印边境战争的失败以及中国1964年第一次核试验的成功极大地刺激了印度,使其 以中国未加入《不扩散核武器条约》为由拒绝加入该条约,并转而发展核武器。印度 在1974年5月18日进行了第一次地下核试验,但声称这是一次"和平的核爆炸试验"。 此后,印度的核武器研制工作走入"地下",重点加强浓缩铀与钚的提炼,核武器的 零部件研制以及核工业的配套设施。到1998年为止,印度已拥有核电站9座、重水工厂 6座、核反应堆7座、核燃料后处理厂2座和铀浓缩工厂1座。此外,正在兴建中的还有8 座核电站、6座重水工厂、1座核反应堆和1座铀浓缩工厂。据估计,截止1995年,印度 已拥有可生产70-90枚原子弹的钚,储藏的铀原料可制造20-50件核武器。1998年5月11 日和13日,印度公开进行五次核试验,从而正式跨过了核门槛。据美国卡内基国际和 平基金会核政策项目组估计,印度现在大约有50枚核弹头。

## 巴基斯坦

1971年印巴战争之后,巴基斯坦开始秘密实施核武器发展计划。1974年印度进行核装 置爆炸后,该计划明显加速,并在上世纪80年代中期取得了较大的进展。1998年5月 28日和30日,为了应对印度的核试验,巴基斯坦进行了6次不同当量的核试验,从而 也正式跨过了核门槛。巴基斯坦的核武器主要依靠浓缩铀,因而重点发展离心浓缩技 术,建立武器级铀的生产能力,同时也兼顾发展后处理技术生产和积累裂变钚。据美 国卡内基国际和平基金会核政策项目组估计,巴基斯坦现在大约有60枚核弹头。

#### 朝 鲜

从上世纪60年代中期开始,朝鲜就利用前苏联提供的研究用反应堆开始了核技术研 究。到20世纪80年代,朝鲜分别在泰川和宁边开始建设200兆瓦的反应堆和后处理设 施,并进行了中子轰击试验。迫于苏联的压力,朝鲜在1985年12月签署了《不扩散核 武器条约》。1994年10月,美朝双方签订了《美朝合作框架》,此后九年间,朝鲜没 有重新处理反应堆燃料或重启反应堆。2001年布什出任美国总统后,开始对朝鲜采取 强硬外交方针。朝鲜毫不示弱,于2003年1月10日宣布退出《不扩散核武器条约》,重 新启动宁边的核反应堆和后处理工厂,并于2006年10月9日和2009年5月25日进行了两 次核试验。 2009年9月4日, 朝鲜宣布铀浓缩试验和乏燃料棒再处理均进入最终阶段, 并正在有望获得武器级钚。现在尚不清楚朝鲜大概拥有多少枚核弹头。但国际防核扩 散专家表示,朝鲜拥有至少能够制造6-8枚弹头的核材料。

## 以色列

以色列核力量发展的历史可以追溯到20世纪50年代末。最初是由法国向以色列提供了 一个核反应堆,并援建了几处核设施。到1967年,以色列已经获得足够制造一件核武 器的钚。另外,它还从美国获得了100公斤高浓度铀,从美国、南非以及其他一些国 家获得了天然铀矿石或加工过的铀矿石,从挪威获得了重水,从法国取得了核武器设 计和制造的资料,以及从法国和美国获得了核武器试验的数据。各种迹象表明,在20 世纪60年代末,以色列已经造出第一颗原子弹。以色列对其核力量的发展过程与状况 讳莫如深,不承认(但也不否认)拥有核武器,不公开辩论核武器问题,不明确表示 在什么情况下会使用核武器。据美国卡内基国际和平基金会核政策项目组估计,以色 列可能拥有64-112枚核弹头。

#### 伊 朗

伊朗核能源开发活动开始于20世纪50年代,当时得到美国及其他西方国家的支持。 1980年美伊断交后,美国曾多次指责伊朗以"和平利用核能"为掩护秘密发展核武 器, 并对其采取"遏制"政策。2003年2月, 伊朗宣布发现并提炼出核电站用铀。美国 为此多次警告伊朗停止与铀浓缩相关的活动,甚至威胁将伊朗核问题提交联合国安理 会。2003年9月,国际原子能机构通过决议,要求伊朗尽快签署《不扩散核武器条约》 附加议定书,终止提炼浓缩铀试验。当年12月,伊朗签署了《不扩散核武器条约》附

加议定书,但同时强调保留和平利用核能的权利,并在暂停铀浓缩活动方面多次出现 反复。2006年1月3日,伊朗宣布已恢复中止两年多的核燃料研究工作。2009年4月,伊 朗副总统兼伊朗原子能组织主席阿加扎德说,伊朗已有5000多台离心机在运转。2010 年2月,伊朗宣布生产出20%纯度的浓缩铀。尽管伊朗尚未拥有武器级铀,也没有生产 出核武器,但西方国家高度怀疑伊朗仍在秘密研制核武器。

## 叙利亚

叙利亚1969年就已加入《不扩散核武器条约》,1984年又签署了《国际保障协议》, 并一直否认自己在进行任何秘密核活动。国际原子能机构和联合国核监查机构都表 示,没有证据显示,叙利亚已经拥有了核技术人才或者运作大规模核设施需要的燃 料。但是长期以来,美国和以色列的情报机构高度怀疑叙利亚在秘密发展核武器。 2007年美国声称,以色列的侦察卫星发现叙利亚正在秘密建设核反应堆,而且叙利亚 已经获得了一定数量的气体离心机,这种仪器可以用来提取浓缩铀。当年4月,国际 原子能机构把叙利亚列入核扩散监测名单,9月5-6日,以色列空军轰炸了叙利亚的可 疑目标。叙利亚虽声称以色列轰炸的是一座在建军工厂,但并未允许国际原子能机构 的核查人员进入被炸毁的设施废墟进行核查并采样。

# 二、核扩散的动因

自《不扩散核武器条约》签订以来,导致核扩散现象发生的原因既有技术原因,也有政治原 因。核国家和非核国家都要承担各自的责任。

## (一) 核技术的普及使核扩散变得容易

在1945年核武器诞生前后,核技术是科技王冠上的明珠,只有少数精英才能接触和掌握,而且 与核武器相关的技术均属于国家最高机密,受到政府的严格保护。然而,随着科技水平的发展和普 及,核武器的神秘面纱早已揭去,其基本原理早已为科技界所熟知,不少国家的科研人员通过各种 渠道掌握了一定的核技术,而且某些制造核武器部件的军民两用设备也可以在国际市场上买到。另 外,个别掌握核心技术的专家还会为金钱所惑铤而走险。比如,巴基斯坦原子弹之父卡迪尔•汗就 曾在1986-1993年间向伊朗、朝鲜和利比亚出售核技术。据国际原子能机构的调查和卡迪尔•汗向巴 政府的交代,他组织了一个包括产、供、销等一条龙服务在内的地下核黑市网络,出售用于铀浓缩 的高速离心机、核弹设计图纸以及相关的关键生产技术。所以,只要国内外条件合适,某些国家就 可能启动核计划,致力于获得核武器。

## (二)某些国家对获得核技术有浓厚的兴趣

国际社会中的某些国家因种种政治和安全原因而对获得核技术有浓厚的兴趣,它们是导致核扩

散的主要原因。朝鲜和伊朗两国是超级大国美国的敌人,长期受到美国的安全威胁,而获得核武器 可以在较大程度上缓解来自美国的军事压力,并增加手中与美国进行讨价还价的筹码。特别是,在 小布什执政时期,美国加强了核武器在国家安全战略中的作用。美国2002年的核态势评估报告不仅 规定要对能够经受非核攻击的军事目标进行核打击,对核武器、生化武器攻击进行核报复还击,而 且要对所谓的"流氓国家"及谋求大规模杀伤性武器的努力进行核打击。这实际上降低了美国使用 核武器的门槛,并刺激朝鲜和伊朗等长期受到美国军事威胁的国家下决心自行研发核武器。

印度研制核武器的动因有两个: 一是印度认为拥有核武器是自己成长为世界大国的重要标志之 一: 二是印度声称自己受到来自中国的安全威胁。巴基斯坦研制核武器是因为它是印度在南亚的竞 争对手,两国之间过去爆发过三次战争。当印度跨过核门槛时,巴基斯坦必须针锋相对。以色列是 中东地区惟一的非穆斯林国家,自建国以来已经与阿拉伯国家发生过四次战争。尽管以色列的军事 实力雄踞中东之冠,但仍然认为拥有核武器是保证本国终极安全的重要保证。

## (三)美国在防扩散问题上采取双重标准

尽管上述国家已经非法获得或正在致力于发展核武器,但美国根据亲疏有别的原则对这些国家 采取双重标准。对于自己的盟国或大国,美国就采取默认或承认的政策。比如,对于自己的亲密盟 友以色列发展核武器,美国从来就是"不闻不问"。对于世界大国印度,美国不得已承认了印度的 核地位,并与之签署《美印核合作协议》。根据这份协议,美印两国将展开全方位民用核能合作, 美国保证向印度提供核技术、核装置和核燃料,并帮助印度建立战略核能储备;同时允许印度在国 际原子能机构的监督下,对使用过的核燃料进行再处理。美国甚至还请求核供应国集团能够"网开 一面",解除对印度的核燃料贸易限制。反之,如果自己的敌人和对手企图发展核武器,美国则全 力打压。美国始终要求朝鲜以可核查、不可逆的方式弃核,而且对朝鲜要求改善美朝关系、签署互 不侵犯条约的要求置之不理。美国还要求联合国安理会制裁伊朗,而且从未放弃对伊朗核设施动武 的可能性。

美国根据敌友之分而在核扩散问题上采取双重标准实际上使某些国家的核武器合法化,不仅在 实质上违反了《不扩散核武器条约》,而且还使国际核不扩散机制的可信性遭到严重质疑。

## (四)《不扩散核武器条约》没有对核裁军进程提出明确的要求

《不扩散核武器条约》第六条规定:各缔约方应致力于谈判制定关于早日停止核武器竞赛与核 裁军的有效措施,以及在国际监督下普遍彻底裁军的条约。不过,相比于其他条款而言,这一条款 对核裁军进程的规定过于含糊,缺乏明确的要求和指南。四十年过去了,国际社会非但在全面核裁 军方面没有实质性进展,而且在何时达到这一目标上也无一致意见。全面核裁军的僵局会使某些国 家认为核武器是一个特别有效的外交和安全工具,因而不遗余力地发展核能力。

## (五)恐怖组织的介入使核扩散的后果更加危险

9 • 11事件的发生使国际社会突然警觉起来,万一恐怖组织获得了核武器怎么办?恐怖分子没 有领土和人民需要去保护,因而在决定使用核武器上不必有领土国家那么多的顾忌。卡迪尔•汗核 走私事件表明,恐怖分子从地下核黑市获得核技术与核材料的危险是存在的。

有专家分析指出,恐怖组织不会费尽周折地去盗取和抢夺完整的原子弹,也不会明目张胆、 费时费力地自行生产核材料。他们最可能做的是盗取几个关键的零部件和核心技术资料,并通过黑 市网络非法购得核材料,然后自行组装出一颗原子弹。自行组装现在已非登天之难事,因为原子弹 的技术原理和设计图纸甚至在互联网上就可以查到。还有专家设想过恐怖组织发动核恐怖袭击的四 种场景。一是恐怖分子将核武器偷运至某国海岸后引爆;二是恐怖分子在某国直接获得核武器并运 至人口中心引爆;三是恐怖分子袭击某国的核设施;四是恐怖分子散布放射性材料,即投放"脏 弹"。不论哪种场景,都会造成重大人员伤亡和严重的社会心理伤害。

# 三、"无核世界"还是"不使用核武器"的世界

2009年4月5日,美国总统奥巴马在捷克首都布拉格发表演讲,表示美国不仅要继续实施核裁 军,而且把根除世界上所有核武器作为美国核政策的中心目标之一。他指出,冷战虽然结束,但核 武器并没有消失:发生全球核战争的危险虽已大大降低,但发生核袭击的风险却大大增加。更多的 国家获得了核武器,试验仍在继续。制造核武器的技术已经扩散,恐怖主义分子决心制造、购买或 偷窃核武器。作为自由的象征和世界历史上唯一使用过核武器的国家,美国有"道德上的责任"实 行核裁军并发挥领导作用。

奥巴马还在演讲中提出以下五点措施:第一,"减少核武器在国家安全战略中的作用"并呼吁 其他核大国仿效。为此,美国将削减"核弹头和储存的核武器",年内与俄罗斯完成《第二阶段削 减战略武器条约》(Strategic Arms Reduction Treaty, START II)的谈判,大幅削减美俄核武器, 并以此作为进一步削减核武器的新起点。第二,积极推动美国国会批准《全面禁止核试验条约》。 第三,强化《不扩散核武器条约》,包括加强国际核查、强化对违反条约国家的制裁,敦促所有拥 有核武器的国家开始裁军与和平利用核能。第四,寻求达成一个可核查的《禁止生产裂变材料条 约》的国际新条约。第五,建立和平利用核能的新机制,包括建立国际燃料银行和其他建设性倡 议,使所有国家都能享受核能带来的便利,同时避免核武器和核技术的扩散,确保"在四年内实现 全球核材料的安全"。

作为世界惟一超级大国和世界上拥有核武器最多的国家之一,美国提出继续核裁军并最终建立 一个无核世界立刻在国际社会引起热烈反响。虽然奥巴马提出的几项措施令人鼓舞,值得所有核国

家的重视。但是,执行这些措施离建立一个"无核世界"的目标仍然相去甚远。

首先,即使未来美俄两国顺利签署并执行START II,在2018年前(如果今年两国能够签署这一协议的话)两国仍各拥有1500-1675枚战略核弹头,500-1000件战略运载工具,而其他核国家拥有的核弹头大概都不会超过350枚。也就是说,美俄两国的核武器数量至少仍为其他核国家的三倍左右。在此情况下,其他核国家很难自行削减本国的核武器。其次,奥巴马提出的"减少核武器在国家安全战略中的作用"的建议应从美国自身做起。自9·11事件以来,美国不仅在战略意图上降低了核武器的使用门槛,即主张对恐怖主义这种非生存威胁使用或威胁使用核武器;而且还在军事技术上力图使核武器可用于实战,即继续研发迷你核弹(mini-nuke)等低当量核武器。所以,美国未来应当率先提高核武器的使用门槛。第三,奥巴马提出的加强核不扩散机制的几项措施(上述第三、四、五点措施)固然很好,但是对于如何进一步避免现有核国家之间以及现有核国家对无核国家使用和威胁使用核武器却只字未提。

我们认为,在未来10-15年当中,人类不可能彻底销毁核武器,实现奥巴马提出的"无核世界"困难重重。在此情况下,国际社会可以考虑首先建立一个更有现实基础的 "不使用核武器"的世界。自二战结束以来,核国家大量生产核武器却从未使用它们。今后相当长一段时间内,我们应当致力于延长"不使用核武器"规范存在的时间。

# 四、"不使用核武器"规范的生成与延续

一些学者将65年来"不使用核武器"的规范称之为一种传统,一种禁忌,或一种非正式的国际规范。揆诸历史,我们可以发现,不使用核武器现象产生与延续的原因相当复杂,其中既有理性主义的冷静计算,也有建构主义的观念塑造;既有政治和军事上的考虑,也有决策者个人意志的注入,甚至还有一定的偶然性。当年的美苏都有数次运用核武器的考虑,但后来终因种种考虑和限制而作罢。我们认为,强调"不使用核武器"是一个传统固然正确,因为人类迄今65年未使用核武器,但传统一词不能体现其已经具备的某种规则性和法律性。强调"不使用核武器"是一种禁忌有点言过其实,虽然公开威胁使用核武器会遭到国际社会的猛烈批评,但它不像社会禁忌(乱伦或食人)那样已经固化在刑法条款当中,这意味着违反者将受到严厉的司法惩处。而且,国际法院1996年7月的咨询意见指出,没有国际法条款禁止国家在面临生存危机时不得使用核武器。强调"不使用核武器"是一个非正式的国际规范比较接近于事实。非正式是指它从未公开体现在某个国际公约或习惯国际法当中,而且美、英、俄等国还公开表明自己在必要情况下会首先使用核武器。

### (一) 美国

作为世界上第一个拥有核武器且具备使用经验的国家,美国对不使用核武器规范的形成和延续

曾经发挥过重要作用。杜鲁门是第一个认识到核武器毁伤效应的美国总统,并有力地促成了不使用 核武器规范的早期出现。1945年8月10日,即美国投掷原子弹轰炸长崎后的第二天,杜鲁门对内阁成 员说: "再消灭十万人的想法太恐怖,简直不能考虑。"1946年,他下令将核武器的控制权从军方 转移至由总统任主席的原子能委员会,并规定该委员会由文人控制。也就是说,使用核武器的权力 由美国总统一人掌握。杜鲁门还希望由联合国原子能委员会来控制所有核材料,并主张今后各国只 能和平利用原子能。1946-1950年,美国军方曾经先后制定了三项计划,准备对苏联的工业和军事目 标进行预防性核打击,以防止后者变成核国家。不过,这三项计划都被杜鲁门所否决,因为他始终 反对将核武器用于进攻性目的。他说: "你得明白这不是一件军用武器。……它是用来消灭妇孺和 平民的,不是用于军事目的。我们得把它和步枪大炮等此类一般性武器区分开来。"在朝鲜战争期 间,他虽然一度威胁要动用核武器,但出于国内外的反对以及对战争进程的考虑,最终还是顶住了 军方的压力,没有将威胁化为实践。另外,虽然美国在这段时期拥有核垄断地位,但美国军方的一 项研究表明,即使它对苏联发动核战争也达不到令后者屈服于己的目的。

杜鲁门的继任者艾森豪威尔上台伊始就一改前任的谨慎政策,主张将核武器"常规化"和"可 用化",为此他制订了"大规模报复战略",声称无论何时,只要军事上有需要就使用核武器,不 管美国面对的是全面战争还是有限战争。国务卿杜勒斯也多次在国内外场合鼓吹核武器和常规武器 的分类是不合理的,美国要逐步把核武器当作常规武器来用于战术目的。不过,"大规模报复战 略"很快遇到了难以解决的问题。首先,美苏间相互威慑的战略格局开始形成,从而动摇了这一战 略的基础。其次,"大规模报复战略"无法应付局部战争。美国在奠边府战役、第二次中东战争和 台海危机中均不敢动用核武器。上述两个原因使"大规模报复战略"流于空谈,却从另一角度延续 了不使用核武器规范的时间。艾森豪威尔当局主张"不打则已,要打就是核大战"的战略思想也遭 遇到空前的国际压力,特别是来自盟国的压力。这些压力也迫使美国政府审慎考虑核武器的使用问 题。到1957年5月,就连杜勒斯也承认,要是美国真的使用核武器,就会为世界所瞩目。我们会被 当作残忍的军事强权,就像以前的德国一样。总之,在艾森豪威尔时期,美国政府使用核武器的调 门一度很高,但实际上没有采取任何行动。不使用核武器的规范因此得以延续。

在肯尼迪一约翰逊时期,美国采取灵活反应战略,要求美军既能打核战争,也能打常规战争。 但在这一时期,由于美苏核均势的最终形成,两国在核战略层面上采取"相互确保摧毁"方针,使 两国间爆发核战争的可能性降至极点,而且使美国对苏联主动发起核攻击的可能性下降为零。在这 一时期,美国在古巴导弹危机、中印边境战争、中国获得核武器和越南战争等事件中都曾有使用核 武器的考虑或想法,但最终都没有实施。这里既有理性主义的成本一收益计算,也有决策者不愿破 坏先例和招致恶名的声望与形象考虑。另外,在这一时期,美苏两国也试图加强核合作,呼应国际 反核运动的要求。《部分禁止核试验条约》、《全面禁止核试验条约》和《不扩散核武器条约》都 在不同程度上有利于不使用核武器规范的延续。特别是《不扩散核武器条约》,它把不使用核武器

规范在一定程度上转化为国际法条款。根据这一条约,严格遵守该条约的非核国家将不会受到有核 国家的核打击。当然,核国家同时也声称,他们提供的被动安全保障是政治承诺,而非法律承诺, 从而削弱了把不使用核武器规范法律化的程度。

从尼克松到老布什时期,虽然我们还能找到一些美国企图动用核武器的案例,但幸运的是, 这些企图均未成真。从克林顿到小布什时期,美国在其卷入的数场地区冲突中均无意使用核武器, 因为这时美国已经成为世界惟一的超级大国,军事实力远胜于对手,因而只须动用常规武器即可获 胜。美国无论从哪个角度来说都没有必要破坏前辈树立的不使用核武器的先例。不过,这两位总统 从两个方面对美国不使用核武器的传统提出了挑战。首先,美国降低了核武器的使用门槛,允许对 拥有或致力于拥有大规模杀伤性武器的"无赖国家"和恐怖组织进行先发制人、预防性或报复性的 核打击。1996年2月,美国参联会通过了联合战区核作战条令。该学说允许美国使用核武器来对付 已经获得大规模杀伤性武器能力的恐怖组织,甚至将核武器的使用权下放至战区司令一级,默示其 可以对敌手采取先发制人式的核打击。2005年版的联合战区核作战条令再次重申了上述立场。这表 明美国部分修正了它以前给予非核国家的被动安全保障。其次,美国投入巨资研发和装备低当量的 核武器(钻地核弹和迷你核弹)。美国指望用钻地核弹来摧毁某些"无赖国家"的地下核设施和军 事设施。美国研制当量为0.01千吨的迷你核弹直接违反了1993年的Spratt-Furse修正案。根据该修 正案,美国不得研制当量低于5千吨的核武器。2005年11月,美国国会停止为此类迷你核弹拨款。

#### (二)俄罗斯

尽管苏联曾是世界上核武器数量最多的国家之一,但在冷战时期,苏联很少炫耀它的核实力, 或向对手威胁使用核武器。因此,苏联对不使用核武器规范的形成与延续做出过重要贡献。从二战 结束到上世纪50年代末,苏联一直鼓吹将核武器交由联合国控制,而且支持核国家承诺对其他核国 家和非核国家不使用核武器,支持《全面禁止核试验条约》和无核区建设,支持西方世界的反核组 织向美国等国家施压。

赫鲁晓夫主张与西方和平共存,如果苏联公开输出核技术或威胁使用核武器,反而会破坏这一 战略目标。因而在1957年10月,苏联拒绝向当时的盟国中国输出核技术,甚至不惜以破坏与中国的 关系为代价。赫鲁晓夫担心中国掌握核技术后会与美国发生冲突,而苏联又不能置身事外,从而破 坏其与西方和平共存的战略目标。1962年古巴导弹危机期间,当赫鲁晓夫认识到美苏双方有可能爆 发核战争而苏联又不具备足够的核实力时, 他让步了。

勃列日涅夫对核裁军的立场也十分积极。1966年,为促使非核国家加入拟议中的《不扩散核武 器条约》,苏联向联合国提议缔结一项不首先使用核武器公约。1972年9月,苏联外长葛罗米柯建 议永远禁止使用核武器。1982年6月,勃列日涅夫在联合国裁军特别会议上宣布,苏联承担不首先

使用核武器的义务。苏军将只在经受第一次核打击后才能实施核报复。苏联在阿富汗战争期间也没 有使用核武器,尽管在战争后期它面临极为不利的局面并最终撤出。当然从理性的角度来说,苏联 攻占阿富汗是为了扶植一个亲苏政权,使用核武器对付阿富汗人无助于这一目标的实现。此外,从 战术上说,用核武器对付以游击战擅长的阿富汗抵抗组织也不起什么作用。

苏联认为冷战是一场不同意识形态之间的竞争,因此十分乐意于把自己装扮成一个爱好和平并 支持第三世界反帝反殖斗争的国家。如果苏联对一个非核国家使用或威胁使用核武器,那就意味着 其数十年国际宣传的破产,绝对会伤害到自己一直在努力树立的国际形象和已经获得的国际声望, 最终导致其无法在道德和意识形态制高点上压倒西方国家。

戈尔巴乔夫上台后,把防止核战争和削减核武器当作苏联外交的一项重要任务。到他卸任之 时,两个超级大国之间签订了三个具有实质意义的核裁军和军控条约:包括1987年的《消除中程和 中短程导弹条约条约》,1988年的《弹道导弹发射通告协议》和1991年的《第一阶段削减战略核武 器条约》。

1993年1月,作为前苏联核力量继承者的俄罗斯与美国签署了《第二阶段削减战争武器条 约》,这是俄罗斯在核裁军道路上走得最远的一步。很快,俄罗斯就在坚守"不使用核武器"规范 上开始后退。由于俄罗斯国力特别是军事力量的衰退,叶利钦被迫重新审视核武器在俄罗斯国家安 全战略中的地位。1993年11月公布的《俄罗斯军事学说基本原则》指出,俄罗斯不会对《不扩散核 武器条约》的非核缔约国使用核武器,但会针对某个核国家的盟国或与某个核国家共同行动的国家 使用核武器。在上述两种情况下,俄罗斯的核武器会用于反击针对俄罗斯及其盟国的攻击。由此可 见,俄罗斯已经放弃了"不首先使用核武器"的承诺。为加强战略核武器的有效性,俄罗斯在1993 年以后放慢了核裁军的步伐,重点提高战略导弹的突防能力、命中精度和毁伤能力,加强其机动性 能和生存能力。为此,俄罗斯重点研制了陆基的白杨-M和海基的布拉瓦型洲际弹道导弹。

与此同时,俄罗斯突出战役战术核武器的作用。1997年,俄罗斯制定了《关于发展战役战术 核武器的指导原则》。这份指导原则要求将小型核武器,包括中子弹等污染比较小的核武器用于实 战。自1998年以来,俄军在演习中增加了主动使用战役战术核武器的训练内容,这说明俄已将使用 非战略核武器的思想开始运用到训练实践中,为实战做准备。为此,俄加紧研制中、近程导弹及小 型核弹头,包括研制携带核或者常规弹头的SS-X26战役战术导弹(射程400-500公里)以及用远程大口 径火炮发射的小型核弹头: 研制低当量(50-100吨TNT当量)的核弹头。据西方专家估计,俄目前仍 拥有1.8-2万件战术核武器。

2003年10月,俄罗斯国防部公布了题为《俄罗斯武装力量现代化学说》的文件,正式提出"先 发制人"战略,但并未明言俄是否会发动"先发制人"的核打击。据专家分析,即使俄发动"先发

制人"的核打击,也不会使用战略核武器,而是使用战役战术核武器。本文作者认为,俄罗斯的 "先发制人"战略更多地是做出一副威慑姿态。从前苏联在阿富汗的经历来看,俄罗斯先发制人使 用核武器的可能性并不大。

## (三) 其他核国家

英国

英国的核计划于1946年启动,1952年成功进行第一次核试验。长期以来,英国执 行最低限度核威慑政策,并且坚持不部署陆基核弹头。

朝鲜战争爆发后,当时的英国首相艾德礼非常担心美国滥用核垄断地位。1950 年12月,他亲赴美国,劝说杜鲁门总统不要对中国人民志愿军和朝鲜人民军使用核武 器。他主张只有必须孤注一掷的时候才能使用核武器,而朝鲜战争显然不属于这种情 况。英国公众也普遍认为,核武器是一种特殊的大规模毁灭性工具,使用它将超越人 类的政治和道德底线。1951年邱吉尔上台后,一反他在野时主张美国使用核武器阻止 苏联扩张的观点,敦促美国对已经获得核武器的苏联采取一定程度的和解政策,以防 止核战争的爆发。1956年苏伊士运河战争期间,英国没有对埃及威胁使用核武器,尽 管这场战争以埃及成功将运河收归国有而告终。在20世纪50-60年代,英国国内的反核 运动声势要比美国大得多,这迫使英国政府在20世纪60年代曾一度非常注重核不扩散 问题。据说在1982年的马岛战争期间,英国的特遣舰队携带了核武器,而且撒切尔首 相秘密致电法国总统密特朗,要求法国提供此前卖给阿根廷的飞鱼导弹的作战密码, 否则英国就要使用核武器。

冷战结束后,梅杰政府开始大幅度削减战术核武器,并于1998年完全销毁呢 177 核炸弹,从此英国不再拥有空基核力量,而只剩下海基核力量。到1998年,英国核 弹头减少到300枚左右,爆炸当量与20世纪70年代相比则减少了40%。布莱尔政府上台 后,决定将核弹头减少到不足200枚。2006年12月,英国国防部向议会提交了《英国 战略核威慑的未来》白皮书,提出将核武器数量进一步减少到160枚左右。2007年3 月,该白皮书在英国国会获得通过。尽管英国人更加坚定地把核武器当作"最后的手 段",但英国政府更关注大规模杀伤性武器扩散所形成的安全威胁。1991年海湾战争 前夕,英国首相梅杰宣称,如果伊拉克使用化学或生物武器攻击联军或美英的地区盟 国,英国将使用核武器。这是英国首次公开威胁使用核武器,也表明英国转向"首先 使用核武器"政策。1998年7月,布莱尔政府公布了《英国战略防御评估》报告,继续 坚持上届政府的首先使用核武器应对大规模杀伤性武器进攻的政策。

9•11事件之后,英国国防大臣胡恩数次公开表示,英国会在适当的时候对某些

拥有大规模杀伤性武器的国家使用核武器。此外,英国故意在使用核武器问题上实行 模糊性策略,以增加对手决策的复杂程度和难度。因此,英国2006年的国防白皮书指 出,英国不会规定或者排除首先使用核武器。

## 法 国

法国在1960年2月成为核国家。冷战期间,法国的核武器数量比较少,只能用于 报复,所以法国实际上执行不首先使用核武器政策,尽管它从来没有明示过这一点。 法国从未对非核国家使用或威胁使用核武器。尽管法国当年被迫撤出北非, 但戴高乐 总统没有考虑过动用核武器来阻止阿尔及利亚的独立。不过,法国实际上扮演过核扩 散国的角色,曾向以色列提供过一个核反应堆,而且一直拒绝加入《不扩散核武器条 约》和反对禁止大气层核试验。

冷战结束以后, 法国的核政策开始发生改变。1991年海湾战争时, 密特朗总统宣 布法国不会使用核武器来报复伊拉克,除非后者使用化学和生物武器。1992年8月,法 国加入《不扩散核武器条约》。1995年8月,法国率先在有核国家中第一个支持"零当 量"标准(即禁止任何当量的核爆炸),成为该条约谈判的一个重要突破。1996年9月, 法国签署《全面禁止核试验条约》,并于1998年批准该条约,同时关闭了太平洋上的 两个核试验基地。同年,法国总统希拉克宣布,停止军用钚和高浓缩铀的生产,同意 《禁止生产武器用裂变材料公约》的原则。在1991-1995年间,法国单方面削减了15% 的核武器。1996年9月,希拉克总统宣布,到1997年9月,法国将再单方面削减10%的核 武器。此外,法国还加入了各个无核区条约,这意味着法国将不会针对这些无核区内 的国家使用核武器。

9 • 11事件之后, 法国再次对核政策做出调整, 降低了核武器的使用门槛, 暗示 可能对拥有大规模杀伤性武器的国家使用核武器。希拉克总统在2006年1月的讲话中指 出,任何可能使用或考虑使用恐怖手段或大规模杀伤性武器的国家领导人都可能招致 法国坚决而适当的反击,这一反击可以是常规的,但也可能是另一性质的。外界普遍 认为,所谓另一性质反击,即是指核打击。

## 以色列

以色列是一个神秘的核国家。以色列的官员和媒体对本国的核武器和核政策讳莫 如深,外国只能通过间接证据来猜测该国的核力量发展状况。首先,以色列从不公开 进行核试验。它通常采取与别国合作的形式来获取有关核武器的各种数据,以避免公 开自己的核身份,逃避国际社会的舆论谴责。其次,以色列否认拥有核武器。以色列 政府宣称决不做"第一个将核武器引进中东地区的国家"。这一表态说明以色列不想 被世人认为是中东地区第一个拥有核武器的国家,但并未否认自己的核能力。第三,

以色列从不公开威胁使用核武器。由于不承认拥有核武器,所以它采用非常含蓄的方式 向对手传递信息。例如在海湾战争中,以色列总理警告伊拉克,如果以色列遭到无缘无 故的攻击,它将进行令人生畏的致命报复。第四,以色列不对有关核武器问题进行公开 辩论。在以色列,官方和媒体从不探讨任何与本国核力量有关的问题,相关讨论只能在 私下讲行。

## 印度

印度自1998年公开自己的核身份以来,经过五年的讨论,于2003年1月制定了核 战略原则如下:建立和维持可靠的最低核威慑力量;采取"不首先使用核武器"原 则,核武器只用于反击对印度领土和军队发动的核攻击;对非核国家不使用核武器。 然而,如果印度领土或印度军队遭受重大的生物和化学武器袭击,印度将保留使用核 武器反击的权利:继续严格控制同核、导弹相关的材料及技术的出口,加入削减核裂 变材料条约的谈判、继续终止核试验:继续通过全球可核实、一视同仁的核裁军实现 无核世界的目标。另外,为了显示自己"不首先使用核武器"承诺的真实性,印度平 时将核弹头与运载工具分开保存,这意味着即使印度要使用核武器,也得花上数天时 间将两者组合起来。

## 巴基斯坦

巴基斯坦是世界上少数未加入《不扩散核武器条约》的国家之一,也是目前世界 上唯一拥有核武器的伊斯兰国家。根据巴基斯坦总统、外长的讲话及一些研究材料,巴 基斯坦核战略的指导原则包括以下几点:发展核力量是为了自卫,因此巴基斯坦将保持 最低核威慑能力; 鉴于常规军事力量的明显劣势, 巴基斯坦采取"首先使用核武器"政 策;在战时,巴基斯坦将首先依靠常规力量进行作战,直到常规军力难以支撑时,才会 考虑使用核武器。在核裁军和核不扩散政策方面,巴基斯坦一直主张建立南亚无核武器 区。2003年5月,穆沙拉夫总统表示,如果巴印克什米尔争端能够得以解决,南亚能实 现和平与安全,巴印双方就可共同实现无核化。1998年5月进行核试验后,巴基斯坦宣 布单方面暂停核试验,并表示巴印双方应同时加入《不扩散核武器条约》。

通过回顾世界上主要核国家的核政策,我们可以发现, "不使用核武器"规范确实 存在,至少没有一个核国家宣称将把核武器用于进攻性目的,但是各国对其接受程度不 同。中国是"不使用核武器"规范最坚定的接受者,承诺在任何情况下不首先使用核武 器,不对无核国家和无核区国家使用核武器。巴基斯坦是"不使用核武器"规范接受程 度最低的核国家。由于巴基斯坦长期以印度为战略对手,而其常规军力又远逊于印度, 因此巴基斯坦有可能主动将常规战争升级为核战争。其余核国家对"不使用核武器"规 范的接受程度介于中国和巴基斯坦之间。相对而言,美国使用核武器对付拥有大规模杀 伤性武器的无赖国家和恐怖组织的可能性更大一些,因为美国面临的此类威胁比其他国 家更为严重。而且,由于美国在核武器小型化、微型化技术上比较领先,因此未来有 可能使用小型或微型核武器打击敌手。但是,在另一方面,由于美国拥有远韶对手的 常规力量,在各类武装冲突中获胜的几率很大,因此美国不会轻易动用战术核武器。

# 五、制定和签署《不使用核武器公约》

无核世界是人类的美好梦想,但在可预见的未来尚无实现的可能,有核世界的延续仍是国际社 会一切核裁军政策的出发点。设法延续和强化"不使用核武器"规范比高调提倡"无核世界"更有 现实性和可操作性。我们认为,国际社会今后应从国际法和国际政治两个层面采取措施,努力建设 一个"不使用核武器"的世界。为此,我们建议由联合国主持制订《不使用核武器公约》,开放各 国签署,而联合国安理会常任理事国应当带头签署。该公约的核心内容应当包括以下六点:

- 1. 所有核国家均承诺互不首先使用核武器,承诺不对加入该公约的无核国家使用或威胁使用 核武器。
- 2. 所有核国家均承诺停止研制和装备新的战役战术核武器,包括低当量核武器,并承诺在一 定期限内全部销毁战役战术核武器。
- 3. 所有核国家承诺不向非政府组织转让军用和民用核技术。
- 4. 所有核国家应自觉避免执行有可能导致另一核国家将常规武器误认为核武器的军事行动。
- 5. 加入该公约的无核国家承诺不对有核国家使用或威胁使用化学武器和生物武器。
- 6. 所有国家承诺共同反对核国家在官方表态或文件中使用具有核威胁含义的语言,并有责任 对核国家使用核武器的意图进行揭露和谴责。

国际社会应当将"不使用核武器"规范转化为由所有核国家背书的国际法,以扩大其适用范 围和接受程度。国际法虽然是"弱法",没有一个中央政府来强制执行,但法律化的"不使用核武 器"规范仍能对核国家的行为产生强有力的影响。至少,核国家的决策者在使用核武器前要考虑国 家形象和声望以及个人政治前途因之而受到的巨大损失。

历史证明,凡是得到大国特别是超级大国大力提倡和身体力行的国际规范或国际法规则,就容 易在国际社会扩散并得以遵守。凡是得不到大国特别是超级大国大力提倡和身体力行的国际规范或 国际法规则,其适用范围和效力就会大打折扣,甚至有可能随时间的流逝而渐渐消失。因此,加强 "不使用核武器"规范,有核国家是关键,有核国家中的五大国更为关键,而五大国中的美俄两国 需要发挥表率作用。在二战结束后的60年里,"不使用核武器"规范靠核大国的自我实施而得以生 成与延续,现在到了所有核国家联合努力将之法律化的时候了。

# Summary ...

- The international community has set itself the lofty goal of building a nuclear-free world. Many difficulties exist, however, in realizing this goal in the short term. Nuclear states will not eliminate their weapons, and many other state and non-state actors are still trying to acquire weapons illicitly.
- Since the end of WWII, the non-use of nuclear weapons has become an informal international norm that has had, and still does have, a constraining effect on the external behavior of nuclear states. A more realistic goal of the international community would be to legalize the non-use norm and build a world of non-use of nuclear weapons as an intermediate step towards a world free of nuclear weapons.
- We propose that the United Nations establish a Convention on Non-use of Nuclear Weapons. The Convention should include the following six key elements:

All nuclear state parties commit to no first-use of nuclear weapons against one another, and shall not use or threaten to use nuclear weapons against non-nuclear state parties to the Convention.

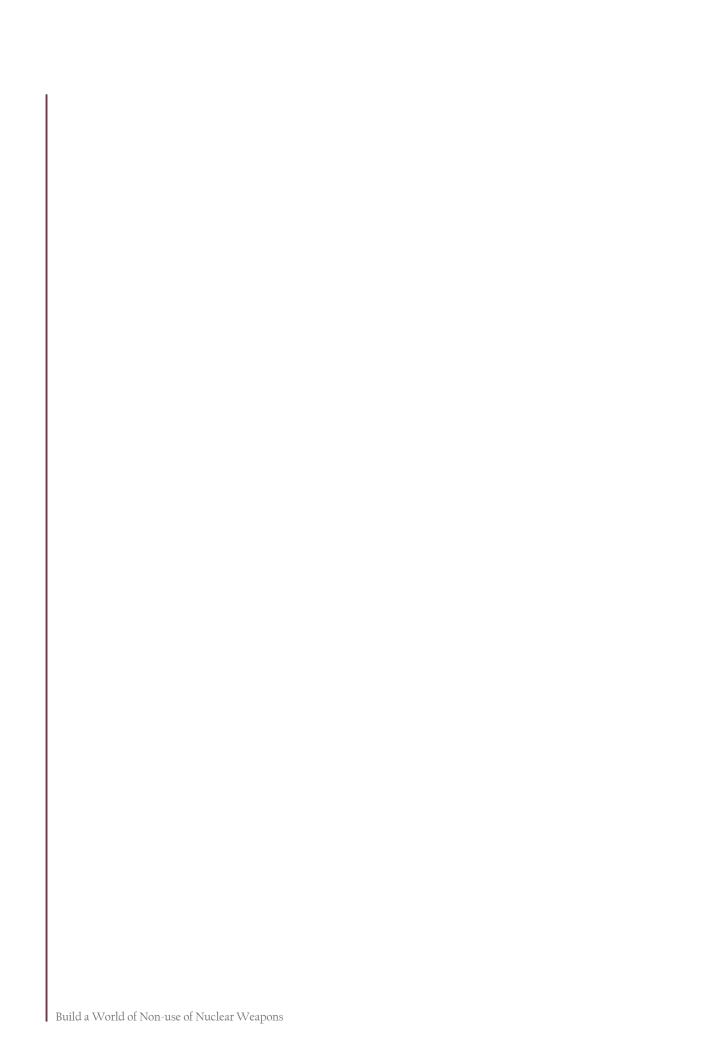
All nuclear state parties undertake to cease developing and deploying new combat-based tactical nuclear weapons, including low-yield nuclear warheads, and to destroy all tactical nuclear weapons within a specified period.

All nuclear state parties undertake not to transfer nuclear technology for military or civil use to non-governmental organizations.

All nuclear state parties refrain from military action that could result in another nuclear state party mistaking a conventional weapon for a nuclear weapon.

All non-nuclear state parties undertake not to use or threaten to use chemical or biological weapons against nuclear state parties.

All state parties undertake to oppose any implied nuclear threat by nuclear state parties in official statements or documents, and are obligated to expose and denounce any intentions of nuclear state parties to use nuclear weapons.



# Build a World of Non-use of Nuclear Weapons

The enormous power of nuclear weapons induces many state and non-state actors to acquire them illicitly. The consequent proliferation of nuclear weapons jeopardizes international security. The international community has set itself the lofty goal of building a nuclear-free world. Many difficulties, however, exist in realizing it in the short term. A more realistic course could be that of taking an intermediate step towards a world free of nuclear weapon by legalizing the contemporary norm of non-use of nuclear weapons. Even if nuclear weapons were not eliminated in the short term, rendering them unusable would considerably improve the security of the international community.

# I. Nuclear Proliferation

The signing of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) categorized states as nuclear-weapon states (NWS) and non-nuclear-weapon states (non-NWS). Later developments, however, made matters less simple than the initial parties had envisioned. We can now classify states under six categories according to their nuclear technological capabilities and political intentions. They are: 1) licit nuclear powers, including the United States, Russia, China, the United Kingdom and France; 2) illicit nuclear states, including India, Pakistan and North Korea; 3) illicit nuclear states in secret possession of nuclear weapons -- Israel alone (Libya and South Africa secretly developed nuclear weapons but have since relinquished them.); 4) states that have intentions to develop nuclear weapons but do not yet have a comprehensive grasp of nuclear technology, including Iran and Syria; 5) states that claim nuclear weapon capabilities but do not intend to develop them, including Japan and Ukraine; and 6) states that have neither nuclear weapon capabilities nor intentions, including all those that do not fall under any of these five categories.

**India** 

India was the first among the illicit nuclear states to cross the nuclear threshold after the NPT coming into effect, having started research into civilian nuclear technology as early as 1946. While Nehru was in power, India pursued "a peaceful nuclear program" of not developing nuclear weapons but providing energy for the people. Stung by defeat in the China-India Border War and unnerved by China's first successful nuclear test in 1964, however, India responded by refusing to sign the NPT, under the excuse that China had declined to sign the treaty, and by proceeding to develop its own nuclear weapons. On 18 May, 1974, India conducted its first underground nuclear detonation, which it called a "peaceful nuclear explosion". India's nuclear weapon development program thereafter went underground, focusing on uranium enrichment, plutonium production, R&D on nuclear weapon parts, and nuclear facilities. By 1998, India had nine nuclear power plants, six heavy water plants, one nuclear reactor and one uranium enrichment plant. It is estimated that by 1995 India had stored enough plutonium for 70 to 90 atomic bombs and enough uranium for 20 to 50 nuclear warheads. On 11 and 13 May, 1998, India openly conducted five nuclear tests which formally took it over the nuclear threshold. India now has about 50 nuclear warheads, according to estimates by the Nuclear Policy project at the Carnegie Endowment for International Peace.

### **Pakistan**

Pakistan started a secret nuclear weapons program after the 1971 India-Pakistan War. The program accelerated after India's nuclear test in 1974 and by the mid-1980s had made substantial progress. Pakistan conducted six nuclear tests of various TNT equivalences on 28 and 30 May, 1998, in response to India's earlier nuclear tests, thus also formally crossing the nuclear threshold. As Pakistan's nuclear weapons are largely dependent on enriched uranium, it has focused on developing centrifuge enrichment technology and building facilities capable of producing weapons-grade uranium, meanwhile developing post-processing technology to produce and stockpile fissile plutonium. Pakistan has about 60 nuclear warheads according to estimates by the Nuclear Policy project at the Carnegie Endowment for International Peace.

## North Korea

North Korea initiated research on nuclear technology in the mid 1960s, using a research reactor supplied by the former Soviet Union. In the 1980s, North Korea started to build 200 MW nuclear reactors and post-processing facilities in Taechon and Yongbyon, and conducted neutron bombardment tests. Under pressure from the Soviet Union, it signed the NPT in December 1985. In October 1994, North Korea and the United States signed the Agreed Framework. During the next nine years, North Korea did not reprocess its reactor fuel or restart its reactors. When President George W. Bush assumed office in 2001, however, his hard-line policies towards North Korea met with the DPRK's defiance. On 10 Jan, 2003, North Korea

announced it would guit the NPT and restart its nuclear reactor and post-processing plant in Yongbyon. The first nuclear test took place on 9 October, 2006 and the second on 25 May, 2009. On 4 September, 2009, North Korea announced that its uranium enrichment test was at the final stage and that it would obtain weaponsgrade plutonium by reprocessing spent fuel rods. It is unclear how many warheads North Korea actually has. Nuclear non-proliferation experts estimate that North Korea has nuclear materials enough for a minimum of six to eight warheads.

#### **Israel**

Israel's development of nuclear power can be traced back to the late 1950s. France originally supplied Israel with a nuclear reactor, and through foreign aid helped with its construction of nuclear facilities. By 1967, Israel had acquired plutonium enough for one nuclear warhead. It also obtained 100 kilograms of high-enriched uranium from the United States, raw and processed uranium from the United States, South Africa and other countries, heavy water from Norway, documents on nuclear weapon design and production from France, and nuclear test data from France and the United States. All these data attest to the generally held belief that Israel built its first nuclear weapon in the late 1960s. Ambiguous about its nuclear weapons development and status, Israel has neither admitted nor denied that it has nuclear weapons, has not publicly debated on nuclear weapons, and has not clarified under what circumstances it believes nuclear weapons should be employed. Israel has 64 to 112 nuclear warheads, according to estimates by the Nuclear Policy project at the Carnegie Endowment for International Peace.

#### Iran

Iran's development of nuclear energy began in the 1950s, with aid from the United States and other Western countries. After severance of diplomatic relations in 1980, the United States accused Iran on many occasions of secretly developing nuclear weapons under cover of "peaceful use of nuclear energy", and carried out a containment policy against Iran. In February 2003, Iran announced that it had produced enriched uranium for use on its nuclear power plants. The United States repeatedly warned Iran to stop all uranium enrichment activities, and threatened to take the matter to the United Nations Security Council. In September 2003, the International Atomic Energy Agency (IAEA) adopted a resolution calling on Iran to suspend all further uranium enrichment-related activities, and urging Iran to sign the NPT Additional Protocol. In December, Iran signed the Additional Protocol but reserved the right of peaceful use of nuclear energy. The suspension of uranium enrichment-related activities, however, later experienced several rollbacks. On 3 January, 2006, Iran renewed research on nuclear energy that had been suspended for more than two years. In April 2009, Iranian Vice President and Head of the Atomic Energy Organization of Iran (AEOI) Gholam Reza Aghazadeh announced that Iran was running 5,000 uranium-enrichment centrifuges. In February 2010, Iran produced first batch of 20 percent enriched uranium. Although Iran has not acquired nuclear weapons grade uranium or any nuclear weapon, Western countries have grounds to suspect Iran of still secretly developing nuclear weaponry.

## **Syria**

Syria signed the NPT in 1969 and the Safeguards Agreement in 1984, and has long denied any secret nuclear activity. Neither the IAEA nor the United Nations nuclear watchdog agency has found any evidence that Syria has either nuclear engineers or the fuel necessary to run large-scale nuclear facilities. American and Israeli intelligence agencies have nonetheless long suspected Syria of secretly developing nuclear weapons. In 2007, the United States announced that Israel reconnaissance satellites had revealed Syria's secret construction of a nuclear reactor, and that Syria might have acquired gas centrifuges that could be used for uranium enrichment. In April, the IAEA put Syria on its nuclear proliferation monitoring list. On 5 and 6 September, the Israeli air forces bombed a suspicious target in Syria. Syria claimed it had been a military plant under construction, but refused to let any IAEA personnel enter the facility for verification and sampling.

# **II. Causes of Nuclear Proliferation**

There are both technical and political reasons for nuclear proliferation since the signing of the NPT, for which nuclear states and non-nuclear states need to take their respective responsibilities.

## Dissemination of Nuclear Technologies Has Made Nuclear Weapons More Accessible

When nuclear weapons first appeared in 1945, nuclear technology was the jewel in the crown of science and technology, accessible only to the elite. Any technology related to nuclear weapons was hence top secret and jealously guarded. The development and dissemination of science and technology, however, has dispelled the mystique surrounding nuclear weapons, and there is fundamental nuclear knowledge throughout the science community. Researchers in different countries have grasped nuclear technology through various channels. One is dual-use equipment for building nuclear weapons, which is available on the international market. There are also certain nuclear experts who are prepared to proliferate for mercenary reasons. Abdul Qadeer Khan, known as father of Pakistan's nuclear weapons, for example, sold nuclear technology to

Iran, North Korea and Libya between 1986 and 1993. According to the IAEA investigation and Abdul Qadeer Khan's confessions to the Pakistan government, he organized an underground nuclear black market comprising production, supply and marketing, through which he sold highspeed centrifuges, blueprints of nuclear warheads and key production technologies. It is generally acknowledged that, when domestic and international circumstances allow, certain states go all out to acquire nuclear weapons.

### Certain States Show Great Interest in Acquiring Nuclear Technology

For various political and security reasons, certain states in the international community show great interest in acquiring nuclear technology. This is a main cause of nuclear proliferation. As enemies of the sole superpower, North Korea and Iran have long been under security threats from the United States. Acquiring nuclear weapons, however, can alleviate to a large extent the US military pressure on them and enlarge their bargaining chips. The Bush Administration strengthened the role of nuclear weapons in the US national security strategy through the 2002 Nuclear Posture Review, which stipulates that nuclear weapons can be employed against targets able to withstand non-nuclear attack, and that retaliatory nuclear strikes will be launched against nuclear, biological or chemical attacks. The review moreover states that nuclear strikes can be launched against "rogue" states that try to acquire weapons of mass destruction (WMD). The review effectively lowered the threshold for the United States' use of nuclear weapons. It hence alarmed countries under military threat from the United States, such as North Korea and Iran, sufficiently to strengthen their resolve to develop their own nuclear weapons.

There are two reasons for India's development of nuclear weapons. One is that India has long regarded ownership of nuclear weapons as signifying major world power status. The second is India's claim to be under security threats from China. Pakistan's nuclear weapons program is attributable to the rivalry between it and India in South Asia. The dyad has already fought three wars. When India crossed the nuclear threshold, Pakistan inevitably followed suit. The only non-Muslim state in the Middle East, Israel has experienced four major wars with the Arab countries since its founding. Although Israel's military power is unmatched in the Middle East, it nonetheless perceives nuclear weapons as fundamental assurance of its ultimate security.

### The United States Employs Double Standards when Dealing with Nuclear Non-proliferation.

Although the above-mentioned states have illicitly acquired or are developing nuclear weapons, the United States has employed double standards in its dealings with them, based on whether it regards them as friend or foe. Having adopted a policy of acquiescence and acceptance towards its allies or major regional powers, the United States has been indifferent to the nuclear weapons program of its close ally, Israel. And as India is a regional power, the United States had no choice but to accept India's status as a nuclear state and sign the US-India nuclear cooperation agreement. The framework for this agreement consisted of a joint statement under which the United States agreed to work towards full civilian nuclear cooperation with India, promised to make nuclear technology, facilities and fuel available and help it to build a strategic reservoir of nuclear energy. The United States went even further by requesting a waiver from the Nuclear Suppliers Group (NSG) for India which permitted the purchase of uranium for its existing reactors, as well as technologies to reprocess, under IAEA supervision, spent fuel.

If, however, a state that it perceives as an enemy tries to develop nuclear weapons, the United States exerts on it maximum pressure and intimidation. It has, for example, been demanding verifiable and irreversible dismantlement of North Korea's nuclear program while at the same time ignoring North Korea's request for improved bilateral relations and a non-aggression treaty. The United States has also been pursuing United Nations Security Council sanctions against Iran, and shown no sign of relinquishing the option of military action against Iran's nuclear facilities.

It is hence these American double standards based on the distinction between friend and foe that have legitimized the nuclear weapons of certain states. This practice essentially violates the NPT, and seriously questions the credibility of the international non-proliferation regime.

#### NPT Has No Clear Schedule of Nuclear Disarmament

Article VI of the NPT stipulates that all parties undertake to pursue, "negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament", towards a "Treaty on general and complete disarmament under strict and effective international control". Compared with other articles, however, Article VI is ambiguous about nuclear disarmament and does not stipulate any clear requirements or guidelines. During the forty years since it came into effect, the international community has made no achievement toward comprehensive nuclear disarmament or reached any consensus on a timetable. This deadlock has convinced certain states to actively pursue nuclear weapons in the belief that they are an effective diplomatic and security tool.

#### Existence of Terrorist Groups Has Made Consequences of Nuclear Proliferation More Perilous

The 9/11 attack made the international community all too aware that the scenario under which nuclear weapons fall into the hands of terrorist groups is no longer hypothetical. As terrorists have

neither territory nor people to defend, they have fewer scruples than territorial states about using nuclear weapons. The smuggling of nuclear technology by Abdul Qadeer Khan also attests to the fact that terrorists have access to nuclear technology and material at underground black markets.

Experts have pointed out that terrorist groups would not take the trouble of either stealing an assembled bomb or openly producing nuclear material. They would be more likely to steal certain key components and items of core technology and, with nuclear material obtained through black markets, build their own atomic bomb. Self-production is not that hard nowadays; the technology and blueprint for making an atomic bomb are accessible on the internet. Experts have hypothesized four scenarios under which terrorists might make nuclear attacks. They are: first, terrorists smuggle a nuclear weapon to a beach area of a certain state and detonate it; second, terrorists obtain a nuclear weapon directly from a certain state and transport it to a densely populated area for detonation; third, terrorists attack the nuclear facilities of a certain state; and fourth, terrorists spread radioactive material through dirty bombs. Any one of these four scenarios would cause heavy casualties and have devastating psychological impact.

# III. A World without Nuclear Weapons, or a World of Non-use of Nuclear Weapons

On 5 April, 2009, President Obama of the United States made a speech in the Czech capital of Prague. He announced that the United States would continue nuclear disarmament, and make global eradication of nuclear weapons a central goal of American nuclear policy. He pointed out that nuclear weapons did not disappear with the Cold War, and that although the risk of a global nuclear war is lower, the possibility of nuclear attack is now greater. More states have acquired and tested nuclear weapons. Nuclear technology has been disseminated, and terrorists are determined to buy, build or steal a bomb. As a nation that stands for freedom, and the only nuclear power that has used a nuclear weapon, the United States has "a moral responsibility" to play a leading role in enforcing nuclear disarmament.

President Obama made five proposals in this speech. They were: first, "to reduce the role of nuclear weapons in our [American] national security strategy" and urge other nuclear powers to do the same, the United States will reduce "warheads and stockpiles" and negotiate a new Strategic Arms Reduction Treaty (START II) with Russia by the end of the year. This will set the pace for further reductions of nuclear weapons. Second, President Obama's administration will actively pursue in Congress the ratification of the Comprehensive Test Ban Treaty (CTBT). Third, the NPT will be reinforced by strengthening international inspections, imposing greater

penalties on countries breaking the rules, urging countries with nuclear weapons to move toward disarmament, and making use of peaceful nuclear energy. Fourth, the United States will pursue a treaty that verifiably ends the production of fissile materials. Fifth, a new framework should be built for civil nuclear cooperation, including an international fuel bank and other constructive initiatives, to allow countries peaceful access to power without risking proliferation of nuclear weapons and technology. This will "secure all vulnerable nuclear material around the world within four years."

As the sole superpower and the largest nuclear power in the world, the United States thus proposed to further nuclear disarmament towards a world without nuclear weapons. These proposals were warmly endorsed by the international community and struck a chord with other nuclear powers. But although President Obama's proposals are encouraging, bringing them into effect will not bring us any closer to a world without nuclear weapons. First, even if the United States and Russia sign START II by the end of this year, by 2018 they will still each claim 1,500 to 1,675 nuclear warheads and 500 to 1,000 strategic vehicles. Each of the other nuclear powers has less than 350 nuclear warheads. As the United States and Russia will hence still have three times as many warheads as any of the other nuclear powers, there is no incentive for other nuclear powers to reduce their nuclear weapons. Second, in order "to reduce the role of nuclear weapons in our [American] national security strategy", the United States should play a leading role. Since the 9/11 attack, the United States has, in its avowed intent within strategic considerations to use or to threaten to use nuclear weapons against terrorist threats that are unrelated to its national survival, lowered the threshold for use of nuclear weapons. By continuing R&D on low-yield nuclear weapons such as the mini-nuke it has also made nuclear weapons technically more usable. The United States, therefore, should indeed be the first to heighten its nuclear weapon-use threshold. Third, the proposals by President Obama to strengthen nuclear non-proliferation (the second, third and fourth proposals earlier mentioned) do not touch upon exactly how the use of nuclear weapons between nuclear states, or by nuclear states against non-nuclear states can be avoided.

We believe that humankind will not see a complete eradication of nuclear weapons in the next ten-to-fifteen years. There are unmountable obstacles to a world without nuclear weapons as envisioned by President Obama. The international community should hence consider building a world of non-use of nuclear weapons as a first and more realistic step towards a world without nuclear weapons. After World War II, nuclear powers accumulated huge stockpiles of nuclear weapons that were never used. We now need to prolong the non-use of nuclear weapons norm for the long term.

# IV. Emergence and Prolongation of the Norm of Non-use of Nuclear Weapons

The different terms academics have used in reference to the norm of non-use of nuclear weapons, such as a tradition, taboo, or informal international norm, have been in use for the past 65 years. History reveals complex reasons for the emergence and prolongation of the non-use norm, including rational calculations as proposed by rationality theory, and idea construction as hypothesized by constructivism. These reasons may arise from political and military considerations, or individual decision making, or simply by coincidence. The United States and the former Soviet Union actually planned to use nuclear weapons on a few occasions, but ultimately abandoned the idea because of various considerations and restrictions. Since humankind has not seen any use of nuclear weapons in the last 65 years, it is correct to say that non-use of nuclear weapons has indeed become a tradition. The rule of law ethos that the norm conveys, however, implies far more than just tradition.

Referring to non-use of nuclear weapons as a taboo is an overstatement. Although an open threat to use nuclear weapons might prompt volleys of criticisms from the international community, their use is not illegal under criminal law, as are social taboos such as incest or cannibalism, whose violators face severe judicial punishment. The advisory opinion of the International Court of Justice in July 1996 was that "the Court cannot conclude definitively whether the threat or use of nuclear weapons would be lawful or unlawful in an extreme circumstance of self-defence, in which the very survival of a State would be at stake." It is hence perhaps closer to reality to call non-use of nuclear weapons an informal international norm. Informal means that the norm has not been written into any international convention or customary international law, and explains why states such as the United States, the United Kingdom and Russia have openly claimed to have considered a first nuclear strike when appropriate.

### **The United States**

As the first nuclear power and the first country to use nuclear weapons, the United States has played an important role in the emergence and prolongation of the non-use norm. Among the first to acknowledge the destructive effects of nuclear weapons, President Truman pushed for early adoption of the norm of non-use. On 10 August, 1945, the day after the United States dropped the nuclear bomb on Nagasaki, President Truman said to his cabinet, "The thought of wiping out another 100,000 people is too horrible." In 1946, he ordered that the command of nuclear weapons to be transferred from the military to the Atomic Energy Commission (AEC), a civilian agency whose chair is appointed by the President. The authority to use nuclear weapons

was thus in the hands of the President alone. President Truman also expected the United Nations Atomic Energy Agency to control all nuclear materials and proposed that countries use atomic energy only for peaceful purposes. From 1946 to 1950, the US military worked out three plans to wage a preventive nuclear attack on Soviet industrial and military targets to stop the Soviet Union from becoming a nuclear power. President Truman, who consistently opposed the use of nuclear weapons for offensive purpose, however, vetoed all three plans. As the President put it, "You have got to understand that this isn't a military weapon . . . It is used to wipe out women and children and unarmed people, and not for military uses. So we have got to treat this differently from rifles and cannon and ordinary things like that." He once threatened to use nuclear weapons during the Korean War, but the threat did not materialize despite urgings from the military, due to opposition at home and abroad and other tactical reasons. Moreover, although the United States retained its nuclear monopoly, a study by the military showed that a nuclear war against the Soviet Union would not make it succumb.

President Eisenhower, as President Truman's successor, changed his predecessor's cautious policy by trying to conventionalize nuclear weapons and make them more usable. He adopted the massive retaliation strategy, whereby nuclear weapons are used at any time deemed appropriate, irrespective of whether the war in question was an all-out war or limited one. Secretary of State Dulles advocated on a number of occasions, both at home and abroad, removing the distinction between nuclear and conventional weapons. He also called for the United States' gradual use of nuclear weapons as well as conventional weapons for tactical purposes. The massive retaliation strategy, however, soon encountered two enormous difficulties. First was the development of mutual deterrence between the United States and the Soviet Union, which undermined the strategy's whole premise. Second was that the strategy was not applicable to regional wars. The United States was reluctant to use nuclear weapons in the Battle of Dien Bien Phu, the Suez War and the Taiwan Strait Crisis. For those two reasons, the strategy degenerated into empty talk which, in effect, prolonged the norm of non-use. The Eisenhower administration's strategy of no-war-but-a-nuclear-one also faced massive opposition from abroad, especially from allies, which forced the administration to adopt a more cautious approach to nuclear weapons. In May 1957, Dulles admitted, "If we resort to such a use of nuclear weapons we will in the eyes of the world be cast as ruthless military power, as was Germany." Although the US government was generally willing during the Eisenhower years to use nuclear weapons, it took no such action, thus prolonging the non-use norm.

In the John F. Kennedy era, the United States adopted a strategy of flexible response, which gave the US military the capability of responding to aggression with both conventional and nuclear arms. During this period, the United States and the Soviet Union achieved balance of power to the level of Mutual Assured Destruction (MAD), which lowered the possibility of a nuclear war to a minimum and made an American nuclear strike on the Soviet Union impossible. The United States considered the use of nuclear weapons during the Cuban Missile Crisis, the China-India Border War, China's acquisition of nuclear weapons and the Vietnam War, but refrained from doing so. This was a result of rational cost-benefit analysis, but also to avoid breaking precedents and arousing adverse world opinion, according to the reputational considerations of decision-makers. The two superpowers also tried to strengthen nuclear cooperation in response to a global antinuclear movement. The Limited Nuclear Test Ban Treaty (LTBT), the CTBT and the NPT facilitated the prolongation of the non-use norm. The NPT in particular to some extent converted the nonuse norm into international law. There was a tacit understanding that non-NWS that exhibited good compliance with the Treaty would not be targeted by NWS. The NWS, however, declared that this security assurance was a political commitment rather than a legal one, which weakened legalization of the non-use norm.

From Nixon to George H. W. Bush we see instances where the United States might well have used nuclear weapons. Luckily enough, none of these attempts came to fruition. From Clinton to George W. Bush, the use of nuclear weapons in the few regional conflicts in which the United States participated was never raised. As sole world superpower with military capabilities easily surpassing those of all other states, conventional warfare was sufficient for the United States to achieve victory. Neither president hence had any reason to break the non-use precedent that their predecessors had put in place. Clinton and George W. Bush nonetheless challenged the nonuse tradition in two ways. The first was to lower the threshold for using nuclear weapons against "roque" states with WMD; the second to allow pre-emptive, preventive or retaliatory nuclear strikes against terrorist groups. In February 1996, the Joint Chiefs of Staff (JCS) adopted the Doctrine for Joint Theatre Nuclear Operations, which allowed the United States to use nuclear weapons against terrorist groups with WMD capabilities. The doctrine lowered the command of nuclear weapons to the level of local commanders, thus allowing pre-emptive nuclear strikes. The 2005 Draft Doctrine for Joint Nuclear Operations reiterated this position, which signified that the United States had modified the security commitment it had promised to non-NWS. Meanwhile, the United States made huge investments in development and deployment of low-yield nuclear weapons (Bunker-busting Nuclear Weapons and Mini Nuke weapons). Bunker-busting Nuclear Weapons were earmarked for the destruction of underground nuclear and military facilities in "rogue" states. The development of Mini Nuke Weapons of a yield lower than one hundredth of a kiloton was in direct violation of the 1993 Spratt-Furse Amendment, according to which development of nuclear weapons with a yield lower than 5,000 kilotons is prohibited. In November 2005, Congressed cut off funding for such low-yield nuclear weapons.

#### Russia

In spite of having one of the largest nuclear arsenals in the world, the Soviet Union rarely flaunted its nuclear force or threatened to use nuclear weapons during the Cold War, behavior that significantly contributed to the emergence and prolongation of the non-use norm. From the end of WWII to the late 1950s, the Soviet Union strongly recommended transfer of control of nuclear weapons to the United Nations, and backed the NWS commitment not to use nuclear weapons against other NWS or non-NWS. The Soviet Union also supported the CTBT, nuclear-free zones and anti-nuclear groups in the West in exerting pressure on the United States.

Khruschev pursued a policy of peaceful coexistence with the West. Any open transfers of nuclear technology abroad or threat to use nuclear weapons would have undermined this strategic goal. That is why in October 1957 the Soviet Union reneged on its agreement to transfer nuclear technology to China, albeit at the expense of diplomatic relations with China. Khruschev wanted to avoid the situation where China, once equipped with nuclear know-how, would try to involve the Soviet Union in confronting the United States and thus jeopardize the strategic goal of peaceful coexistence. When the 1962 Cuban Missile Crisis brought the United States and the Soviet Union to the brink of nuclear war, Khruschev conceded because he doubted the Soviet Union's military capability for such a war.

Brezhnev took an overtly positive stance on nuclear disarmament. In 1966, the Soviet Union proposed to the United Nations the establishment of a convention on no-first-use of nuclear weapons, in a move to encourage non-NWS to sign the proposed NPT. In September 1972, Soviet Foreign Minister Gromyko proposed a ban on the use of nuclear weapons. At the Second Special Session of United Nations General Assembly on Disarmament in June 1982, Brezhnev announced that the Soviet Union would commit to no first-use of nuclear weapons and that it would only use such weapons in retaliation against a nuclear first strike. The Soviet Union did not employ nuclear weapons during the Afghanistan War, even in the later stages when, in the face of overwhelming resistance, they finally pulled out. From a rational standpoint, the Soviet Union refrained from using nuclear arms against Afghanistan because its objective in fighting the war was to install a puppet government there. Moreover, from a tactical standpoint, using nuclear weapons would have been ineffective against the mujahidin freedom fighters, who were masters of guerrilla warfare.

The Soviet Union saw the Cold War as one between different ideologies, and was happy to support Third World anti-imperialist and anti-colonialist movements in the guise of a peace-lover. Any use of nuclear weapons or threats to use them would have clashed with the international public relations image of the Soviet Union, ruined its reputation, and lost it moral and ideological high ground vis-à-vis the West.

At the time Gorbachev came to power, strategic arms reduction and prevention of a nuclear war were the primary tasks of Soviet foreign policy. By the time he left office, the two superpowers had concluded three substantively significant nuclear disarmament and arms control treaties. They were: the 1987 Intermediate-Range Nuclear Forces Treaty (INF), the 1988 Ballistic Missile Launch Notification Agreement, and the 1991 Strategic Arms Reduction Treaty (START I).

In January 1993, Russia, as inheritor of the Soviet nuclear arsenal, and the United States signed the second Strategic Arms Reduction Treaty (START II), Russia's furthest step yet toward nuclear disarmament. Russia, however, reneged on its non-use position. The recession in Russia's national power, especially its military capabilities, forced President Yeltsin to reconsider the role of nuclear weapons in Russia's national security strategy. Hence, the Basic Provisions of the Military Doctrine of the Russian Federation were published in November 1993, which stipulated that Russia would not employ nuclear weapons against state parties to the NPT that did not possess nuclear weapons other than in the event of an attack against Russia or its allies by a non-nuclear state allied with a nuclear state, or of a joint attack by a non-nuclear state and a nuclear state. Russia thus broke its commitment to no-first-use of nuclear weapons and slowed down its nuclear disarmament. After 1993 it began to hone the effectiveness of its strategic arms by improving their penetration capabilities, accuracy, destructive capacity, mobility and survivability. This is evident in Russia's development of land-based Topol-M missiles and sea-based Bulava intercontinental ballistic missiles.

Russia has since laid more emphasis on tactical nuclear weapons, and has adopted new guidelines on their development, according to which small nuclear weapons such as neutron bombs might be put to battlefield use. Since 1998, the Russian military has run training programs during military exercises on the use of tactical nuclear weapons. This implies application of the concept of practicing with non-strategic nuclear weapons to prepare for real war. Russia has also expedited development of medium- and close-range missiles and small nuclear warheads, including SS-X26 tactical missiles (with a range of 400 to 500 kilometers) carrying both nuclear and conventional warheads, small nuclear warheads fired through long-range large-caliber artillery, and low-yield (50 to 100 kilotons) nuclear warheads. Experts in the West estimate that Russia has 18,000 to 20,000 tactical nuclear weapons.

In October 2003, the Russian Defence Ministry released a document entitled Modernization Doctrine of Russian Armed Forces, formally mentioning "preventive use of force" but without clarifying whether or not Russia would wage preventive nuclear strikes. Experts believe any preventive nuclear strike by Russia would involve the use of tactical nuclear weapons rather than strategic ones. We, however, believe that Russia's preventive strategy is more one of deterrence. Based on the military actions of the Soviet Union in Afghanistan, we believe there is low probability of Russia making preventive use of nuclear weapons.

#### Other Nuclear Weapon States

The United Kingdom The United Kingdom began its nuclear program in 1946, and successfully tested its first nuclear bomb in 1952. The UK has long since pursued a policy of minimum nuclear deterrence and non-deployment of land-based nuclear warheads.

Prime Minister Attlee was concerned after the outbreak of the Korean War that the United States would abuse its nuclear monopoly. In December 1950, he visited the United States and convinced President Truman not to employ nuclear weapons against the Chinese People's Volunteer Army or the North Korean Army. He insisted that nuclear weapons be used only in an all-out-war situation, to which the Korean War clearly did not belong. The British public regarded nuclear weapons as a specific tool of mass destruction whose use was beyond the political and moral pale. After returning to power in 1951, Churchill retracted his earlier support of US nuclear deterrence against Soviet expansion. In hopes of avoiding a nuclear war, he urged the United States to adopt a more reconciliatory approach towards the heavily nuclear armed Soviet Union. The UK made no threat to use nuclear weapons against Egypt in the 1956 Suez War, even though losing the war resulted in Egypt's successful nationalization of the Suez Canal. The anti-nuclear movement in the UK in the 1950s and 1960s far surpassed that in the US, and exerted pressure on the UK government to lay more emphasis on nuclear non-proliferation

After the Cold War, the John Major government began making substantial reductions in tactical nuclear weapons. By 1998 it had relinquished WE 177 nuclear bombs, thus ridding the UK of all air-based nuclear weapons and leaving it only sea-based nuclear weaponry. By 1998, Britain's nuclear warheads had been reduced to about 200, of total yields 40% lower than in the 1970s. When Tony Blair assumed office, the UK government decided to reduce its nuclear warheads to fewer than 200. The 2006 Defence White Paper "The Future of the United Kingdom's Nuclear Deterrent" presented to Parliament by the Ministry of Defence stated that nuclear warheads would be reduced to about 160. Parliament passed the White Paper in March 2007. The UK government took a firm stand on nuclear weapons as a last resort, and in this connection turned its attention to security threats stemming from the proliferation of WMD. Prime Minister Major declared before the outbreak of the 1991 Gulf War that the UK would use nuclear weapons if Iraq made chemical or biological attacks on the allied forces or the allies of the US and the UK. This was the first time the UK had ever threatened the use of nuclear weapons, and signified a turn in policy towards first-use of nuclear weapons. In July 1998, the Blair government published the Strategic Defence Review (SDR), which endorsed the 1991 policy on first-use of nuclear weapons in response to WMD attacks.

After the 9/11 attack, Defence Secretary Geoff Hoon publicly stated that the UK would, if appropriate, use nuclear weapons against certain "rogue" states that had WMD. The UK government had adopted a policy of ambiguity on the use of nuclear weapons to increase the complexity and difficulty of the opponents' decision making. The 2006 Defence White Paper hence stated that the UK government would neither permit nor exclude first-use of nuclear weapons.

France France became a nuclear state in February 1960. As during the Cold War it had limited warheads which could be employed for retaliation purpose only, the French government adopted a no-first-use policy, but without specific clarification. France neither used nor threatened to use nuclear weapons against non-nuclear states. Although forced to pull out of North Africa, President De Gaulle did not consider the nuclear option to prevent Algeria's independence. The French government, however, engaged in nuclear proliferation by providing Israel with a nuclear reactor. The French government did not join the NPT, and opposed the ban on atmospheric nuclear tests.

France's nuclear policy changed after the end of the Cold War. During the 1991 Gulf War, President Mitterrand declared that should Iraq use chemical or biological weapons against France, France would not use nuclear weapons in retaliation. It acceded to the NPT in August 1992. From 1991 to 1995, France unilaterally reduced its nuclear weapons by 15%, and also participated in various nuclear-free zone treaties, signifying that it would not use nuclear weapons against states in such zones. In August 1995, France became the first NWS to adopt a "zero-yield" nuclear test ban -- an important breakthrough towards the Comprehensive Test Ban Treaty (CTBT). France signed the CTBT in September 1996, and ratified it in 1998, and at the same time closed two nuclear testing bases in the Pacific. President Chirac announced a halt to the production of weapons-grade plutonium and enriched uranium in 1996. The same year the French government accepted in principle the Fissile Material Cut-off Treaty (FMCT). In September 1996, President Chirac announced that there would be a further 10% reduction by September 1997.

After 9/11, France changed its nuclear policy by lowering the nuclear threshold, hence implying its willingness to use nuclear weapons against WMD states. President Chirac stated in a speech in January 2006 that any state leader who used or considered using terrorist means or WMD against France would encounter a firm and appropriate counterattack of the conventional or of another type. By 'another' Chirac of course meant use of nuclear weapons.

Israel Israel is a dark horse nuclear state. As Israeli government officials and media are silent about nuclear weapons and nuclear policy, other states have only circumstantial information on the development and status of Israel's nuclear forces. This is first of all because Israel has never openly conducted a nuclear test. To avoid being identified as a nuclear power and hence gaining a bad reputation in the world community, Israel obtains nuclear weapon-related data through cooperation with other states. Second, Israel denies possessing any nuclear weapons, and the Israeli government has declared that Israel will not be the first country to introduce nuclear weapons into the Middle East. This statement implies Israel's unwillingness to be labelled as the first nuclear power in the region, but does not amount to a denial of possession of nuclear weapons. Third, Israel has never threatened to use nuclear weapons. As Israel does not admit to possessing nuclear weapons, however, it employs veiled means of communicating with its opponent on nuclear-related matters. During the Gulf War, for example, the Israeli Prime Minister warned Iraq that Israel would take formidable and deadly revenge for any unprovoked attack on it. Fourth, Israel has held no open debate on nuclear weapons. Neither Israeli government officials nor the media have openly discussed anything related to Israel's nuclear forces. These matters are discussed only in private.

India After five years of discussion since 1998, when India's identity as a nuclear state was made public, it adopted in January 2003 a nuclear strategy whereby India would build and maintain a reliable minimum nuclear deterrent force; adopt the no first-use policy of employing nuclear weapons only in retaliation against nuclear strikes on India's territories or armed forces; not use nuclear weapons against non-nuclear states except in cases of serious biological or chemical attacks on India's territories or armed forces; continue to restrict exports of materials and technology related to nuclear weapons and missiles, start negotiations on the Fissile Material Cut-off Treaty and continue to ban nuclear tests; and pursue the goal of a nuclear-free world by working towards global, verifiable and non-discriminatory nuclear disarmament. India emphasizes its commitment to the no-first-use policy by storing delivery systems and nuclear warheads separately, thus delaying use of the weapons for the few days necessary to assemble them.

Pakistan Pakistan is among the few states not to have signed the NPT, and the sole Islamic state with nuclear weapons. Based on the remarks of the Pakistani President and Foreign Minister and data gleaned from other research documents, Pakistan's nuclear strategy appears to be built on three main principles. They are: Pakistan maintains a minimum nuclear deterrent force for selfdefence; Pakistan adopts a policy of first-use of nuclear weapons due to its modest conventional military capabilities; and in times of a war, Pakistan is prepared to rely on its conventional forces to the point where it has no alternative but to turn to nuclear weapons. Pakistan's stand on nuclear disarmament and non-proliferation is manifest in its advocating of a South Asian Nuclear-free Zone. In May 2003, President Musharraf stated that were it possible to resolve differences over Kashmir and achieve peace and security in South Asia, Pakistan and India should work in unison towards denuclearization. After the nuclear tests in May 1998, Pakistan unilaterally announced its suspension of further nuclear tests and proposed that Pakistan and India jointly accede to the NPT.

This review of the nuclear policies of major nuclear powers in the world reveals that the norm of non-use of nuclear weapons truly exists; not one state claims that its nuclear weapons are for offensive purposes. The extent to which each state accepts this norm, however, varies. China is the most resolute, being committed to a no-first-use policy under any circumstances against non-nuclear states and states in nuclear-free zones. Pakistan ranks bottom as regards degree of acceptance of the non-use norm. Its long-term status as India's strategic opponent and its lesser armed capabilities than India's could motivate Pakistan to escalate from conventional to nuclear warfare. The degrees of commitment of other states to the non-use norm range between those of China and Pakistan. Comparatively speaking, the United States is the most likely to use nuclear weapons against "roque" states and terrorist groups because it faces more threats of this kind than any other state. Owing to its advanced technology in small and mini nuclear weapons, the United States might indeed employ these weapons against its opponents in the future. From another perspective, as the United States possesses conventional forces far superior to any other state and the probability of its winning various armed conflicts hence higher, the United States will not lightly resort to tactical nuclear weapons.

# V. Establishing the Convention on Non-use of Nuclear Weapons

A world without nuclear weapons is the dream of humankind, but not one that will be achieved in the foreseeable future. A nuclear world will continue to be the premise on which any international disarmament policy rests. It is more realistic, therefore, to prolong and strengthen the norm of non-use of nuclear weapons than to press for a world without nuclear weapons. We believe that the international community needs to build a world of non-use of nuclear weapons from the perspectives of international law and international politics. To this end, we propose that the United Nations establish a Convention on non-Use of Nuclear Weapons and that the standing members of the United Nations Security Council be the first to endorse the Convention. The Convention should include the following six key elements:

- 1. All nuclear state parties commit to no first use of nuclear weapons against one another, and shall not use or threaten to use nuclear weapons against non-nuclear state parties to the Convention.
- 2. All nuclear state parties undertake to cease developing and deploying new combat-based tactical nuclear weapons, including low-yield nuclear warheads, and to destroy all tactical nuclear weapons within a specified period.
- 3. All nuclear state parties undertake not to transfer nuclear technology for military or civil use to non-governmental organizations.
- 4. All nuclear state parties refrain from military action that could result in another nuclear state party mistaking a conventional weapon for a nuclear weapon.
- 5. All non-nuclear state parties undertake not to use or threaten to use chemical and biological weapons against nuclear state parties.
- 6. All state parties undertake to oppose any implied nuclear threat by nuclear state parties in official statements or documents, and are obligated to expose and denounce any intentions of nuclear state parties to use nuclear weapons.

The international community needs to convert the non-use norm into an international law which all nuclear states endorse, and to expand the scope of its application and acceptance. Although international law is weak because it is not enforced by a central authority, the non-use norm, once legitimized, would bring about significant and powerful effects on the behavior of nuclear states. The decision makers of nuclear states will at the very least weigh their potential use of nuclear weapons against the possible loss of national reputation and of political credibility such use would imply.

History has proven that international norms and international laws which are endorsed and practiced by powers, and especially superpowers, are likely to achieve wider application and acceptance. They are otherwise too limited in these two respects, and could easily be forgotten in passage of time. Nuclear states, therefore, especially the five nuclear powers, are the key to strengthening the non-use norm, with the United States and Russia taking the leading roles. The non-use norm emerged and was prolonged throughout the 60 years since WWII through its self-implementation by nuclear powers. It is now time for all nuclear states to work toward its legalization.





# Build a World of Non-use of Nuclear Weapons

建设一个不使用核武器的世界

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