Comprehensive Review on the Status of Implementation of Resolution 1540 (2004)

Background papers prepared by 1540 Committee experts according to the document on modalities for the consideration of a comprehensive review (S/2009/170)

Specific Element (b)

"Assess whether States have undertaken measures derived from the 1540 resolution, including through the establishment and enforcement of appropriate criminal or civil penalties for violations of export control laws and regulations."*

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^{*} This background paper was prepared by the group of experts at the request of the 1540 Committee. It does not necessarily represent the views of the Committee.

On 8 July 2008, the Chairman of the Committee established pursuant to resolution 1540 (2004) addressed to the Security Council the report on compliance with resolution 1540 through the achievement of the implementation of its requirements, as required by resolution 1673 (2006). In that report, the Committee showed a number of specific measures that States had in place to implement resolution 1540, using information from the reports received from States and otherwise identified from official governmental sources or from international organization websites.

The Committee concluded that Member States needed to take more intensive actions in the adaptation of their national legislative framework, including the prohibition of activities related to nuclear, chemical, and biological weapons and their means of delivery, developing new institutional bodies to facilitate the communication among different governmental authorities involved in the process of implementation, enhancing the accounting, security, and physical protection of related materials, improving the export control system over such materials, and, as important, enforcing these measures.

This background paper supplements the background paper that assesses the impact of the resolution. Since issuing its July 2008 report, the 1540 Committee can demonstrate qualitative and quantitative improvements in the process to achieve full implementation of the resolution. Keeping in mind the distinction contained in the matrix between "legal framework" and "enforcement" measures, based on the consideration that some legal systems prohibit and punish the *actus rei* with a single provision and others maintain the penalty separated from the descriptive part or include it in a different law, this paper elaborates the differences between the legal frameworks and the enforcement of such laws compared to the results of the 2008 report. The status of national implementation legislation in the three weapons categories is addressed in the following sections.

A. Operational Paragraph 2

Nuclear weapons

Compared to the measures in the July 2008 report, an increased number of States have provisions to prohibit activities and penalize violations. Only the number of States with prohibitions against use remained the same at 66 (see Table 1). Possible use, manufacture and acquisition of nuclear weapons continue to be among the prohibited activities most likely to be penalized.

Table 1 The Number of States Taking Measures on Prohibitions for Nuclear Weapons

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
manufacture/produce	107	80	55	40	23	74
acquire	103	78	56	36	20	80
possess	72	83	53	14	29	96
stockpile/store	47	59	32	9	22	129
Develop	46	54	28	12	19	133
transport	51	72	40	4	27	121
transfer	84	76	51	26	20	95
Use	66	87	52	13	33	94
participate as an accomplice	64	76	49	7	22	114
assist	77	80	49	15	26	102
finance	71	83	57	8	19	108
related to means of delivery	37	41	23	7	12	150
involvement of non-State actors	70	80	50	13	24	105

Chemical weapons

More States have national legislation measures on chemical weapons and their means of delivery for a wider range of obligations of the resolution than those do so for nuclear or biological weapons. Compared with the July 2008 report, the number of States taking measures has increased in every field. The prohibition of transport still has the lowest number of States taking measures: 44 States have the prohibition, while 68 have set penalties.

Table 2
The Number of States Taking Measures on Prohibitions for Chemical Weapons

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
manufacture/produce	113	98	80	24	16	72
acquire	111	93	74	25	15	78
possess	83	96	63	9	24	96
stockpile/store	116	88	71	29	10	82
Develop	109	78	63	33	7	89
transport	44	68	32	3	28	129
transfer	114	97	72	28	19	73
Use	120	111	82	25	20	65
participate as an accomplice	81	92	59	7	25	101
assist	115	98	70	26	19	77
finance	79	87	62	8	23	99
related to means of delivery	54	52	32	12	12	136
involvement of non-State actors	87	93	60	16	23	93

Biological weapons

The July 2008 report stressed that the issue of preventing the manufacture/production and acquisition of biological weapons, their means of delivery and related materials by non-State actors required more specific attention in the future. The figures in Table 3 indicate that the number of States taking measures has increased in every field since the report. In some instances, the increases have been considerable, such as the increase of States with measures prohibiting the storage of biological weapons rising from 81 to 97.

Table 3
The Number of States Taking Measures on Prohibitions for Biological Weapons

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
manufacture/produce	97	85	59	24	23	86
acquire	97	85	58	24	21	89
possess	71	81	49	10	25	108
stockpile/store	97	74	51	27	16	98
Develop	90	69	45	30	14	103
transport	45	62	31	6	26	129
transfer	99	81	55	29	16	92
Use	73	95	54	9	35	94
participate as an accomplice	72	85	55	6	22	109
assist	89	86	57	17	22	96
finance	69	83	52	11	21	108
related to means of delivery	91	50	33	41	11	107
involvement of non-State actors	73	83	47	16	30	99

B. Paragraph 3 (a) and (b)

Nuclear weapons and related materials

Since its 2008 report, the 1540 Committee has noted no significant increase in the number of States that have reported taking steps to develop and maintain appropriate effective measures to account for, secure and physically protect materials related to weapons of mass destruction in production, use, storage and transport. From the data of all States, the Committee notes that far fewer States have taken measures to secure or physically protect nuclear weapons related materials.

Table 4
The Number of States Taking Measures to Control
Nuclear Weapons Related Materials

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
Account for production	154	49	48	106	1	37
Account for use	155	52	51	104	1	36
Account for storage	155	49	48	107	1	36
Account for transport	60	45	42	18	3	129
Secure production	62	56	52	10	4	126

Secure use	71	64	57	14	7	114
Secure storage	72	65	60	12	5	115
Secure transport	92	85	76	16	9	91
Physical protection of facilities/materials/						
transports	61	49	44	17	5	126
Licensing of nuclear installations/entities/use of materials	83	62	57	26	5	104
Reliability check of personnel	35	19	17	18	2	155
Account for/secure/ physically protect means of delivery	18	10	8	10	2	172
National regulatory authority	96	76	76	20	0	96

Chemical weapons and related materials

The implementation process in the field of chemical weapons and related materials is continuously developing, with small increases in the number of States taking measures since the July 2008 report.

Table 5
The Number of States Taking Measures to Control
Chemical Weapons Related Materials

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
Account for production	70	55	52	18	3	119
Account for use	69	52	49	20	3	120
Account for storage	67	54	51	16	3	122
Account for transport	48	39	33	15	6	138
Secure production	59	26	39	20	6	127
Secure use	62	31	40	22	9	121
Secure storage	69	57	49	20	8	115
Secure transport	69	66	55	14	11	112
Physical protection of facilities/materials/						
transports	36	27	21	15	6	150
Licensing of chemical installations/entities/use						
of materials	73	57	52	21	5	114
Reliability check of personnel	21	14	12	9	2	169
Account for/secure/ physically protect means						
of delivery	20	12	9	11	3	169
National CWC or regulatory authority	166	160	157	9	3	24

Biological weapons and related materials

From the data available for all States, one can note that the number of States that have adopted legislation and regulations to administer certain activities with biological weapons related materials for commercial, industrial and public health purposes has increased only slightly if at all since the report of July 2008.

From the data available for all States, the Committee notes, in contrast to the data on nuclear and chemical weapons related materials, fewer States appear to have measures in place to account for biological weapons related materials, than States have measures in place to secure them. While this may indicate an increased awareness by States of the potential risk from the accidental release of biological weapons related materials, the data also indicate that fewer States reported having measures in place to undertake reliability checks of personnel working with sensitive materials or having physical protection of relevant facilities than securing materials, leaving considerable vulnerabilities for States to address.

Table 6
The Number of States Taking Measures to Control
Biological Weapons Related Materials

Measure	Legislative Framework	Enforcement	Taking both legislative and	Taking legislative	Taking enforcement	Taking no measures
			enforcement	only	only	
Account for production	38	35	30	8	5	149
Account for use	38	36	29	9	7	147
Account for storage	37	36	30	7	6	149
Account for transport	37	34	29	8	5	150
Secure production	53	44	39	14	5	134
Secure use	56	44	35	21	9	127
Secure storage	59	48	42	17	6	127
Secure transport	67	69	57	10	12	113
Physical protection of						
facilities/materials/						
transports	38	44	24	14	20	134
Licensing of biological						
installations/entities/use						
of materials	64	44	42	22	2	126
Reliability check of						
personnel	23	19	18	5	1	168
Account for/secure/						
physically protect means						
of delivery	14	12	9	5	3	175

C. Paragraph 3 (c) and (d)

Increased globalization and the development of world economies have simplified access to materials related to weapons of mass destruction and their means of delivery. Resolution 1540 (2004) underlines illicit trafficking in nuclear, chemical and biological weapons, their means of delivery and related materials as a new dimension of proliferation, one that poses a threat to international peace and security. While some countries have agreed to enforce regulations to prevent proliferation of related materials and technology through participation in or adhering to international non-proliferation export control arrangements, other countries have followed their own path, and the rest have yet to take any measures. It is acknowledged that States have

differing capacities to implement appropriate effective border and export control measures.

Even though the July 2008 report of the 1540 Committee to the Security Council on implementation shows that, since the first report of April 2006, some progress has been made especially in adopting legislative and regulatory measures as well as criminal and civil sanctions, the data below argue that UN Member States need to continue to work intensely in order to ensure the full and universal attainment of the goals laid out in the resolution, in particular in the adoption of lists and in their licensing process.

At present, 78 States reported having licensing provisions for nuclear and related materials), 81 reported having licensing provisions for chemicals and related materials (four more since the July 2008 report), and 73 reported having licensing provisions for biological weapons related materials (two more since July 2008). Details of the national implementation measures addressed in paragraph 3 (c) and (d) are specify in the tables that appear below.

Table 7

The Number of States Taking Measures for Border and Export Controls of Nuclear Weapons Related Materials

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
Border Control	123	118	106	17	12	57
Brokering	62	50	44	18	6	124
Export	104	97	90	14	7	81
Licensing	78	57	56	22	1	113
National Authority	89	63	62	27	1	102
Control List	72	32	30	42	2	118
Transit	88	55	50	38	5	99
Transshipment	67	42	39	28	2	123
Re-export	78	47	45	33	2	112

Table 8

The Number of States Taking Measures for Border and Export Controls of Chemical Weapons Related Materials

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
Border Control	129	122	111	18	11	52
Brokering	69	52	48	21	4	119
Export	115	111	98	17	3	74
Licensing	81	62	60	21	2	109
National Authority	102	77	76	26	1	89
Control List	83	38	37	46	1	108
Transit	89	62	58	31	4	99
Transshipment	74	50	47	27	3	115
Re-export	80	52	50	30	2	110

Table 9

The Number of States Taking Measures for Border and Export Controls of Biological Weapons Related Materials

Measure	Legislative Framework	Enforcement	Taking both legislative and enforcement	Taking legislative only	Taking enforcement only	Taking no measures
Border Control	130	121	113	17	8	54
Brokering	64	50	46	18	4	124
Export	98	91	86	12	5	89
Licensing	73	55	54	19	1	118
National Authority	87	70	68	19	2	103
Control List	71	31	30	41	1	120
Transit	89	55	52	37	3	100
Transshipment	72	42	41	31	1	119
Re-export	80	49	47	33	2	110

D. An option to consider

Although the resolution has had a positive impact on the overall number of measures taken by States to combat the proliferation of nuclear, chemical, and biological weapons, their means of delivery, and related materials to non-State actors, the data in this paper show that much remains to be done by all. As this background paper supplements another background paper, it does not contain a full range of options. However, the data here illustrates some of the differences between the number of legislative framework and enforcement measures taken, this focus argues for the consideration of at least one option. With a few exceptions, particularly regarding nuclear weapons prohibitions, States publish more on legislative than enforcement measures. To ensure that this is not an artifact of data collection, the 1540 Committee should consider requesting States to provide more information on enforcement.