

**Research Group for
Biological Arms Control**



2016 Reader on Publicly Available CBMs

November 2016

About this Reader

The exchange of information under the Biological Weapons Convention (BWC) in the form of the Confidence Building Measures (CBMs) remains the only permanent transparency building tool of the BWC.

This Reader, as its forerunners, presents information on CBM-related developments and the data provided in the openly available CBMs of the current year. The CBM Reader aims to underline the importance of participating in the CBM data exchange as the only established permanent transparency tool for the BWC and to highlight the particular efforts of an increasing number of states to foster transparency by making their CBM submissions available to the public. The CBM Reader series is prepared as part of our efforts to increase transparency around bioweapon relevant activities globally. Such transparency is indispensable for building confidence in compliance with the BWC and must extend to all stakeholders including civil society. For more information please visit www.biological-arms-control.org/projects_improvingthecbms.html.

Development of the CBM regime in 2016

On the 7th Review Conference in 2011 BWC States Parties decided to address CBMs in the 2012 and 2013 the Meetings of Experts and the Meetings of States Parties. As result of the discussions in the actual ISP a possible update of the CBM forms (that date back to the year 1992) could be envisaged. Figures showed in this reader illustrate also the need for a debate how a better participation in the mechanism could be reached. The debates in the precedent ISP meetings show that these issues still have some potential for development. Decisions can, however, not be taken before the 8th Review Conference in 2016.

Facts about the BWC and its CBMs

BWC States Parties: 175

New BWC States Parties in 2016: 1

States Parties with national contact points: 77

CBMs submitted in 2016: 80 as of 31 October 2016

First-time CBM submissions in 2016: 1

**Number of states having participated in the
CBM data exchange in 25 years:** 116

CBM-specific publications in 2016¹

- Trust & Verify/October-December 2015/Issue Number 151 - Estimating the costs of compliance options for the BWC - Published by Vertic.
- BWC/CONF.VIII/PC/3 - History and operation of the confidence-building measures - Background information document - Submitted by the Implementation Support Unit.
- BWC/CONF.VIII/PC/WP.6/Rev.1 - Strengthening confidence building and consultative mechanisms under the Biological Weapons Convention - Submitted by the United States of America.
- BWC/CONF.VIII/PC/WP.35 - Strengthening confidence-building measures in regard to dual use materials - Submitted by Germany.
- BWC/CONF.VIII/PC/WP.36 - Step-by-step approach in CBM participation (2016) - Submitted by Australia, Canada, Japan, Malaysia, Republic of Korea, and Switzerland.
- BWC/MSP/2015/MX/WP.16 - Providing reassurance on Biological Weapons Convention (BWC) Implementation - Submitted by Australia, Brunei Darussalam, Chile, Costa Rica, Ecuador, Ghana, Japan, Malaysia, Norway, Republic of Korea, Thailand.
- BWC/MSP/2015/3/Add.1 - 2015 Report of the Implementation Support Unit - Submitted by the Implementation Support Unit.

Participation in the CBM regime in 2016

In 2016, participation in the CBM data exchange increased considerably. As of 31 October 2016, 80 BWC states parties had submitted their CBM. The overall status of the CBMs remains weak. Since the beginning of the data exchange in 1987, the annual level of participation was never higher than 44 per cent of the BWC states parties. In total, 116 countries submitted a CBM at least once. This means that 59 BWC states parties have yet to submit their first CBM declaration. Continuity in states' participation also remains weak: 25 countries have submitted a CBM regularly for the last 10 years and 32 countries have submitted a CBM only once or twice since 1987.

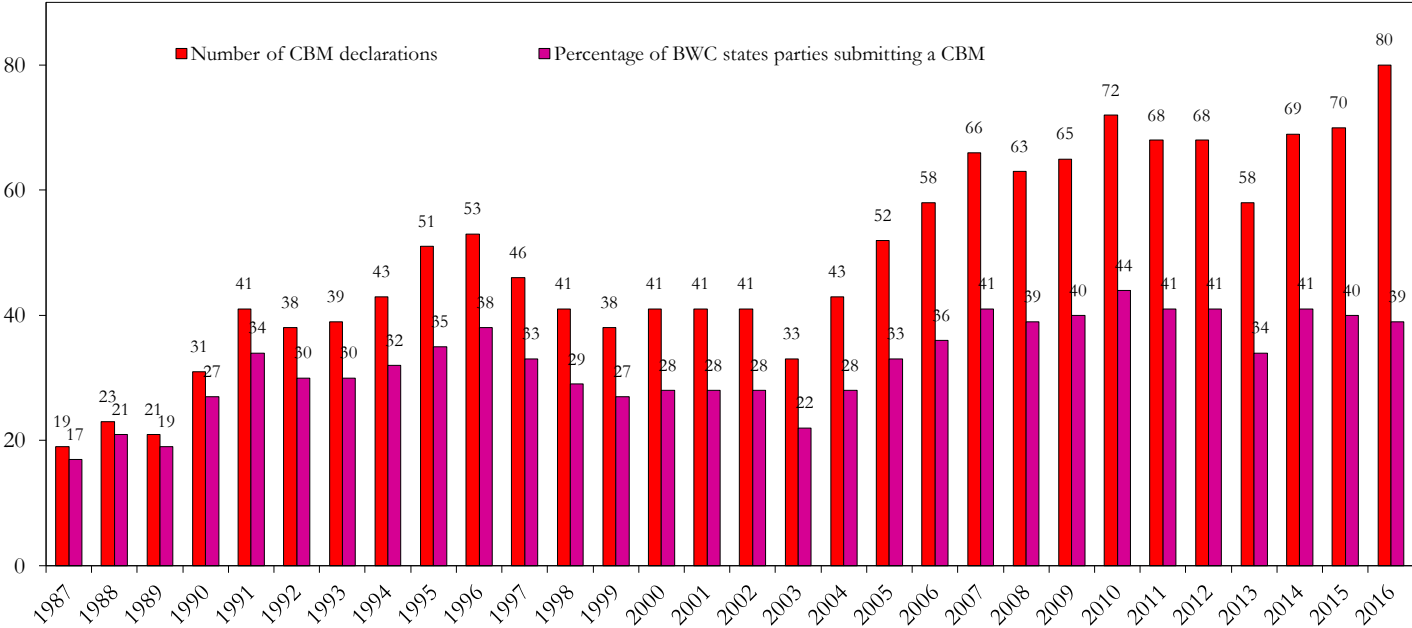
First-time submissions in 2016: Gabon

¹ Also covering documents of the MSP and other articles of 2015, as they were published after the publication of the 2015 Reader.

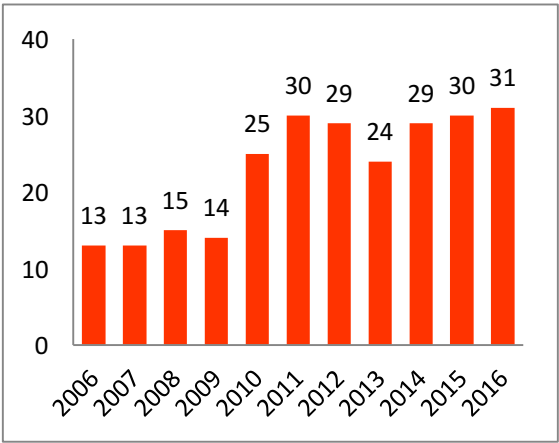
CBM submissions in 2016 (States in bold made their CBM available to the public.):

- | | | | | |
|---------------------|---------------------------|-----------------------|-------------------------|--------------------------|
| 1. Albania | 18. Cuba | 34. Ireland | 52. Netherlands | 67. Singapore |
| 2. Algeria | 19. Cyprus | 35. Italy | 53. New Zealand | 68. Slovakia |
| 3. Argentina | 20. Czech Republic | 36. Japan | 54. Norway | 69. Slovenia |
| 4. Armenia | 21. Denmark | 37. Jordan | 55. Oman | 70. South Africa |
| 5. Australia | 22. Ecuador | 38. Kazakhstan | 56. Peru | 71. Spain |
| 6. Austria | 23. Estonia | 39. Kenya | 57. Poland | 72. Sweden |
| 7. Belarus | 24. Finland | 40. Latvia | 58. Portugal | 73. Switzerland |
| 8. Belgium | 25. France | 41. Lebanon | 59. Qatar | 74. Thailand |
| 9. Bhutan | 26. Gabon | 42. Liechtenstein | 60. Rep. Korea | 75. Turkey |
| 10. Bulgaria | 27. Georgia | 43. Lithuania | 61. Rep. Moldova | 76. Ukraine |
| 11. Brazil | 28. Germany | 44. Luxembourg | 62. Romania | 77. UK |
| 12. Cameroon | 29. Greece | 45. Malawi | 63. Russia | 78. United Arab Emirates |
| 13. Canada | 30. Hungary | 46. Malaysia | 64. Saudi Arabia | 79. USA |
| 14. Chile | 31. India | 47. Malta | 65. Serbia | 80. Uzbekistan |
| 15. China | 32. Iran | 48. Mauritius | 66. Seychelles | |
| 16. Colombia | 33. Iraq | 49. Mexico | | |
| 17. Croatia | | 50. Montenegro | | |
| | | 51. Myanmar | | |

Figure 1. CBM submissions per year between 1987 and 2016 (Numbers in this figure differ from numbers provided by the Implementation Support Unit. This is due to differences in counting states that were formerly part of other states, such as the former republics of the Soviet Union. This figure provides the actual number of CBM declarations submitted in the respective year.)



As of 31 October 2016, 31 countries have made their 2016 CBM declarations publicly available, a slight increase compared to previous years. All of the 31 publicly available CBMs can be found on the website of the Implementation Support Unit (ISU) (www.unog.ch/bwc/cbms): Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, Denmark, Estonia, Finland, Germany, Ireland, Japan, Latvia, Lithuania, Luxembourg, Mauritius, Mexico, Myanmar, Netherlands, New Zealand, Norway, Portugal, Republic of Moldova, Romania, Serbia, Slovenia, Sweden, Switzerland, Turkey, Ukraine, United Kingdom and the USA.



At least Belgium provided two separate versions of their CBMs, one for the restricted part of the ISU website and one for the public.

Table 1. Countries that made their CBM declarations publicly available, 2006-2016

Country	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Albania					x						
Australia	x	x	x	x	x	x	x	x	x	x	x
Austria				x	x	x	x	x		x	x
Bangladesh			x								
Belgium						x	x	x	x	x	x
Brazil					x						
Bulgaria		x	x		x	x	x	x	x	x	x
Canada						x	x	x	x	x	x
Croatia	x								x		
Cyprus						x	x				
Czech Republic	x			x	x	x	x	x	x	x	x
Denmark		x	x		x	x	x		x	x	x
Ecuador						x					
Estonia					x	x		x			x
Finland	x	x	x	x	x	x	x	x	x	x	x
Georgia				x	x	x					
Germany	x	x	x	x	x	x	x	x	x	x	x
Greece						x	x	x			
Hungary									x	x	
Japan							x	x	x	x	x
Ireland	x	x	x	x	x	x				x	x
Latvia	x			x		x	x	x	x	x	x
Liechtenstein		x	x	x	x	x		x	x		
Lithuania	x	x	x	x	x	x	x	x	x	x	x
Luxembourg									x	x	x
Madagascar							x				
Malaysia	x					x					
Mauritius											x
Mexico										x	x
Myanmar											x
Netherlands								x	x	x	x
New Zealand	x	x	x		x	x	x	x	x	x	x
Norway			x		x	x	x	x		x	x
Poland					x						
Portugal					x	x	x	x	x	x	x
Qatar							x	x			
Republic of Moldova							x	x	x	x	x
Romania			x	x	x	x	x	x	x	x	x
Serbia							x		x	x	
Slovakia									x		
Slovenia									x	x	x
Senegal					x						
Slovakia		x									
Sweden	x	x	x	x	x	x	x	x	x	x	x
Switzerland	x	x	x	x	x	x	x	x	x	x	x
Thailand					x	x	x				
Turkey						x	x		x	x	x
United Kingdom	x	x	x	x	x	x	x	x	x	x	x
Ukraine						x	x			x	x
USA					x	x	x	x	x	x	x
Total	13	13	15	14	25	30	29	24	29	30	31

As shown in Table 1 above 50 countries have made their CBM publicly available at least once since 2006. Many states make their CBMs publicly available in an erratic way. No explanation readily offers itself for why many states make their CBMs publicly available in one year but not in another.

Summary of data in publicly available 2016 CBM declarations

A summary of the data declared in the 31 publicly available CBMs of 2016 is provided in the table below. More detailed information can be found in the Annex to this Reader. 32 maximum biological containment facilities were declared in publicly available CBMs in 2016, seven of which were partially or wholly funded by ministries of defence. 19 of the 31 countries making their 2016 CBM publicly available declared having a biodefence programme; they provided information on 65 biodefence facilities. And lastly, 21 unusual disease outbreaks and 80 vaccine production facilities were declared in the 31 publicly available CBMs of 2016.

Table 2. Summary of data in publicly available CBM declarations, 2016

Form A, part 1:	Number of maximum biological containment facilities (BSL-4 or equivalent) declared.
Form A, part 2 (i):	Does the state party declare having a biodefence programme?
Form A, part 2 (iii):	Number of biodefence facilities declared.
Form B (ii):	Number of unusual disease outbreaks declared.
Form F:	Does the state party declare having a past offensive and/or defensive programme?
Form G:	Number of vaccine production facilities declared.
ND:	“Nothing to declare” indicated in Form 0.
ND:	“Nothing to declare” indicated in Form 0.
n.a.:	“Nothing new to declare” indicated in Form 0.

Country	Form A, part 1	Form A, part 2 (i)	Form A, part 2 (iii)	Form B (ii)	Form F (off/def)	Form G
Australia	4	yes	1	0	no/no	1
Austria	0	yes	1	ND	no/no	ND
Belgium	0	yes	3	ND	ND	1
Bulgaria	0	no	ND	ND	ND	ND
Canada	2	yes	2	2	yes/yes	14
Czech Republic	2	no	ND	ND	NN	4
Denmark	0	yes	1	ND	no/yes	2
Estonia	0	no	ND	0	ND	ND
Finland	0	yes	1	ND	ND	ND
Germany	3	yes	5	0	NN	5
Ireland	0	no	ND	0	ND	3
Japan	2	yes	2	ND	NN	7
Latvia	0	yes	1	ND	NN	ND
Lithuania	0	no	ND	0	no/no	ND
Luxembourg	0	no	ND	1	no / no	ND
Mauritius	ND	no	ND	ND	ND	ND
Mexico	0	no	ND	2	ND	1
Myanmar	ND	n.a.	ND	ND	ND	2
Netherlands	0	yes	1	0	no/yes	8
New Zealand	0	no	ND	NN	no/no	ND
Norway	0	yes	3	ND	no/no	3
Portugal	0	yes	1	ND	no/yes	1
Republic of Moldova	0	yes	1	1	NN	ND
Romania	0	yes	ND	ND	ND	2
Slovenia	ND	no	ND	ND	ND	ND
Sweden	1	yes	2	ND	no/no	1
Switzerland	2	yes	13	4	no/yes	1
Turkey	0	yes	0	ND	no/no	3
Ukraine	0	no	ND	0	ND	8
United Kingdom	8	yes	1	3	yes/yes	3
USA	8	yes	26	8	NN	10

ANNEX

The following table summarizes the data declared in **CBM Form A, part 1**, of the publicly available CBM submissions from 2016 and compares them with the information in publicly available CBMs from 2007 to 2015. The table provides the names and locations of facilities declared in CBM Form A, part 1, their containment levels, the year(s) they were declared, and whether the facilities were wholly or partly funded by ministries of defence (MoD). Grey cells indicate that there was no CBM submission or that it was not made publicly available in the respective year. “ND” indicates that the state ticked the “Nothing to declare” box in Form 0. “NN” indicates that the state ticked the “Nothing new to declare” box in Form 0. “-” indicates that no data were provided.

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?
Australia	1. Australian Animal Health Laboratory (Geelong)	BL4	x	x	x	x	x	x	x	x	x	x	no
	2. National High Security Quarantine Laboratory (North Melbourne)	BL4	x	x	x	x	x	x	x	x	x	x	no
	3. Queensland Health and Forensic Scientific Services (Cooper Plains)	BL4	x	x	x	x	x	x	x	x	x	x	no
	4. Emerging Infectious Disease and Biohazard Response Unit (Westmead)	BL4	-	x	x	x	x	x	x	x	x	x	no
Austria	1. Federal Ministry of Defence/Armament and Defence Technology Agency Div NBC & Environmental Protection Technology (Vienna)	BL3			x	x	x	x	x	x	x	x	partly
Belgium	1. Federaal orientatielab (FOL)	BL3					ND	ND	ND	ND	x	x	-
Bulgaria	1. National Center of Infectious and Parasitic Diseases (Sofia)	BL3	x	x	x	x	x	x	x	x	x	x	no
	2. Department of Microbiology and Centre for Virology Military Medical Academy (Sofia)	BL3	-	-	-	-	-	-	-	-	-	x	wholly
	3. National Diagnostic and Research Veterinary Medical Institute (Sofia)	BL3	-	-	-	x	x	-	-	-	-	x	no
Canada	1. National Microbiology Laboratory (Winnipeg)	BL4					x	x	x	-	x	x	no
	2. National Centre for Foreign Animal Disease (Winnipeg)	BL4					x	x	x	-	x	x	no
Croatia	<i>Nothing to declare</i>	-								ND			
Cyprus	<i>Nothing to declare</i>	-					ND	n.a.					
Czech Republic	1. State Veterinary Institute (Jihlava)	BL3			-	x	x	-	NN	-	NN	NN	-
	2. State Veterinary Institute (Lysolaje)	BL3			-	-	x	-	NN	-	NN	NN	-
	3. Tekro, spol.s.r.o. (Uničov)	BL3			-	x	x	-	NN	-	NN	NN	-
	4. Collection of Animal Pathogenic Microorganisms (Brno)	BL3			x	-	-	-	NN	-	NN	NN	-
	5. Institute of Molecular Pathology (Hradec Králové)	BL3			x	-	x	-	NN	-	NN	NN	-
	6. Central Military Health Institute, Department Těchonín (Těchonín)	BL4			x	-	x	x	NN	x	NN	NN	-
	7. Central Military Health Institute, Department Prague (Prague)	BL2			-	-	x	-	NN	-	NN	NN	-

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?	
	8. Laboratory for Biological Monitoring and Protection (Milín)	BL4			x	-	x	x	NN	x	NN	NN	-	
	9. Laboratory of Molecular Biology (Hradec Králové)	BL2			x	-	-	-	NN	-	NN	NN	-	
	10. Division of Infectious Diseases, Department of Infectious Diseases and Epizootology, Faculty of Veterinary Medicine (Brno)	BL3			x	-	x	-	NN	-	NN	NN	-	
	11. National Institute of Public Health; Centre of Epidemiology and Microbiology (Šrobárova)	BL3			-	-	x	-	NN	-	NN	NN	-	
	12. Bioveta, a.s. (Ivanovice na Hané)	BL3			-	-	x	-	NN	-	NN	NN	-	
Denmark	1. Centre for Biosecurity and Biopreparedness (Copenhagen)	BL2	x	x		x	-	ND		x	ND	ND	-	
	2. Anonymous larger university in Denmark (<i>no location provided</i>)	BL3	-	-		-	x	ND		-	ND	ND	-	
	3. TB Vaccine Research (Copenhagen)	BL3	-	-		-	x	ND		-	ND	ND	-	
	4. QC Bio (Copenhagen)	BL3	-	-		-	x	ND		-	ND	ND	-	
	5. International Reference Laboratory of Mycobacteriology (Copenhagen)	BL3	-	-		-	x	ND		-	ND	ND	-	
Ecuador	<i>Nothing to declare</i>	n.a.					ND							
Estonia	1. Joint Laboratories of Tartu University Clinics (Tartu)	BL3				ND	ND					x	-	
	2. Microbiology Laboratory of North-Estonia Regional Hospital	BL3										x	-	
	3. Veterinary & Food Laboratory	BL3										x	-	
	4. Mycobacteriosis Laboratory of University of Life Sciences	BL3										x	-	
Finland	1. Centre for Biothreat Preparedness (Helsinki)	BL3	x	x	x	x	x	x	x	x	x	x	partly	
	2. National Institute for Health and Welfare, Bacteriological and Virological Lab (Helsinki, Turku)	BL3	x	x	x	x	x	x	x	x	x	x	no	
	3. Yersinia Research Laboratory (Helsinki, Turku)	BL2	x	x	x	x	x	x	x	x	x	x	partly	
	4. Department of Virology, University of Helsinki (Helsinki)	BL3	x	x	x	x	x	x	x	x	x	x	no	
	5. Institute of Biotechnology (Helsinki)	BL3	-	-	-	-	-	-	x	-	-	-	n.a.	
	6. Finnish Food Safety Authority (Helsinki)	BL3	x	x	x	x	x	x	x	x	x	x	no	
	7. Finnish Defence Research Agency (FDRA) (Lakiala)	BL3	x	x	x	x	x	x	x	x	x	x	wholly	
	8. Department of Food and Environmental Sciences (Helsinki)	BL3	-	-	-	-	-	-	-	-	x	x	x	no
	9. Clostridium botulinum laboratory (Helsinki)	BL2	-	-	-	-	-	-	-	-	x	x	x	no
Georgia	1. National Center for Disease Control and Public Health (Tbilisi)	BL2			x	x	x							

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?
	2. Laboratory of Ministry of Agriculture of Georgia (Tbilisi)	BL2			-	x	x						
Germany	1. Bernhard-Nocht-Institut für Tropenmedizin (Hamburg)	BL4	x	x	x	x	x	x	x	x	x	x	no
	2. Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health (Insel Riems)	BL4 ²	x	x	x	x	x	x	x	x	x	x	no
	3. Institut für Virologie der Philipps Universität Marburg (Marburg)	BL4	x	x	x	x	x	x	x	x	x	x	no
Greece	1. University of Crete School of Medicine(Heraklion)	BL3					x	NN	NN				
	2. Kapodistrian University of Athens School of Medicine (Athens)	BL3					x	NN	NN				
	3. Aristotelian University of Thessaloniki (Thessaloniki)	BL3					x	NN	NN				
	4. Infectious Diseases Hospital(Thessaloniki)	BL3					x	NN	NN				
	5. Hellenic Pasteur Institute(Athens)	BL3					x	NN	NN				
	6. Athens School of Public Health (Athens)	BL3					x	NN	NN				
Hungary	1. National Center for Epidemiology (Budapest)	BL4								x	x		
Ireland	1. National Virus Reference Laboratory, University College Dublin (Dublin)	BL3+	x	x	x	x	x				x	x	no
	2. Public Health Laboratory (Dublin)	BL3	x	x	x	x	x				x	x	no
Japan	1. Murayama Annex of National Institute of Infectious Diseases (Tokyo)	BL4						x	x	x	x	x	no
	2. Riken Tsukuba Institute (Ibaraki)	BL4						-	x	x	x	x	no
Latvia	1. National Microbiology Reference Laboratory (Riga)	BL3					x	x	x	x	x	x	no
	2. Centre for Disease Prevention and Control of Latvia (Riga)	-					-	x	-	-	-	-	-
Liechtenstein	<i>Nothing new to declare</i>	-	NN	NN	NN	NN	NN		NN	NN			-
Lithuania	1. Microbiological laboratory of Vilnius Public Health Centre (Vilnius)	BL3	x	x	x	x	-	-	-	-	-	-	-
	2. Laboratory of Centre for Communicable Diseases (Vilnius)	BL2	x	x	x	x	-	-	-	-	-	-	-
	3. National Food and Veterinary Risk Assessment Institute (Vilnius)	BL3	x	x	x	x	x	x	x	x	x	x	no
	4. National Public Health Surveillance Laboratory (Vilnius)	BL3	-	-	-	-	x	x	x	x	x	x	no
Luxembourg	1. Laboratoire national de santé (Dudelange)	n.a.								x	x	x	no
Madagascar	-	-						-					
Malaysia	1. Biotechnology Research Institute, Universiti Malaysia Sabah (Kota Kinabalu)	BL3					x						

²Maximum containment facility not suitable for work with human pathogens.

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?
	2. Medical Laboratories for Medical Microbiology, Parasitology and Virology, University of Putra Malaysia (Serdang)	BL2					x						
	3. Institute of Systems Biology, Universiti Kebangsaan (Bangi)	BL2					x						
	4. Veterinary Research Institute (Ipoh)	BL3					x						
	5. Science and Technology Research Institute for Defence (Kajang)	"normal"					-						
Mauritius	1. -	-										-	-
	2. 1. Universidad de Monterrey (Nuevo León)	BL3									x	x	no
	3. 2. Instituto Nacional de Ciencias Médicas y Nutrición "Salvador Zubirán" (Tlalpan)	BL3									x	-	no
	4. 3. Centro de Investigación en Tecnología y Diseño del Estado de Jalisco A.C. (Jalisco)	BL3									x	x	no
	5. 4. Laboratorios de Diagnostico del Departamento de Medicina Zootecnia de Cerdos (Coyoacán)	BL3									x	x	no
	6. 5. Unidad de Investigación del Instituto Nacional de Enfermedades Respiratorias (Tlalpan)	BL3									x	x	no
	7. 6. Dirección General de Epidemiología, Instituto de Diagnóstico y Referencia Epidemiológicos (Álvaro Obregón)	BL3									x	x	no
	8. 7. Comisión México - Estados Unidos para la prevención de la Fiebre Aftosa y otras enfermedades exóticas de los animales (Cuajimalpa)	BL3									x	x	no
	9. 8. Laboratorio Estatal de Salud Pública del Estado de Sonora (Sonora)	BL3									x	x	no
	10. 9. Instituto de Investigaciones Biomédicas de la Universidad Nacional Autónoma de México (Coyoacán)	BL3									x	x	no
	11. 10. Laboratorio Estatal de Salud Pública de Veracruz (Veracruz)	BL3									x	x	no
	12. 11. Laboratorio Nacional de Máxima Seguridad Biológica para el Estudio de la Tuberculosis y Enfermedades Emergentes (Tlalpan)	BL3									-	x	no
	13. 12. Centro Nacional de Servicios de Diagnóstico en Salud Animal (Pachuca de Soto)	BL3									x	x	no
Moldova	1. National Center for Public Health (Chisinau)	BL3						x	NN	NN	x	NN	-

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?
	2. Republican Center for Veterinary Diagnostics (Chisinau)	BL2						x	NN	NN	x	NN	-
Myanmar	-	-										ND	-
Netherlands	1. TNO Department of CBRN Protection	BL3							x	-	-	x	partly
	2. National Institute for Public Health and the Environment (Bilthoven)	BL3							x	x	x	x	no
New Zealand	National Centre for Biosecurity and Infectious Disease (Upper Hutt)	BL3+	x	x		x	x	x	-	ND	ND	ND	-
Norway	Institute of Microbiology, Armed Forces Medical Services (Oslo)	BL3		x		x	x	x	x		x	ND	-
Portugal	1. Laboratório de Bromatologia e Defesa Biológica (Lisbon)	BL3				x	x	x	-	-	-	x	-
	2. Unidade de reposta a Emergências e Biopreparação (Lisbon)	BL3				x	x	-	-	-	-	-	-
	3. Instituto Nacional de Saúde Doutor Ricardo Jorge (Lisbon)	BL3				-	-	x	x	x	x	x	no
	5. Unidade de reposta a Emergências e Biopreparação (Braga)	BL3				-	-	-	x	-	-	-	-
	6. Instituto Nacional de Investigação Agrária e Veterinária (Lisbon)	BL3				-	-	x	x	x	x	x	no
	7. Life and Health Sciences Research Institute (Braga)	BL3				-	-	-	-	x	x	x	no
	8. Instituto de Tecnologia Química e Biológica (Lisbon)	BL3				-	-	-	-	x	x	x	no
	9. Departamento de Microbiologia e Imunologia (DMI) (Lisboa)	BL3				-	-	-	-	-	x	x	no
Quatar	<i>Nothing new to declare</i>	-						ND					
Romania	1. Laboratory of Microbiology and Epidemiology, Military Medical Research Center (Bucharest)	BL2 ³		NN	x	NN	x	x	x	-	-	x	wholly
	2. Pasteur Institute (Bucharest)	BL2		NN	-	NN	-	-	-	x	x	x	no
	3. Institute for Hygiene and Veterinary Public Health (Bucharest)	BL3		NN	-	NN	-	-	-	x	x	x	no
	4. The National Institute of Research (NIR) "Cantacuzino" (Bucharest)	BL3 ⁴		-	-	-	-	-	-	-	x	x	no
	5. Institute for Diagnosis and Animal Health (Bucharest)	BL3		-	-	-	-	-	-	-	x	x	no
	6. Institute for Control of Veterinary Biological Products and Medicines (Bucharest)	BL2		-	-	-	-	-	-	-	x	x	no
Serbia	<i>Nothing to declare</i>	-						ND		ND	ND		
Slovakia	<i>Nothing to declare</i>	-								ND			

³ BSL 3 is under construction.

⁴ BSL3 exists but not operational, BSL2 yes

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?
Slovenia	<i>Nothing to declare</i>	-								ND	NN	NN	-
Sweden	1. Swedish Defence Research Agency Division of NBC Defence (Umeå)	BL3	x	x	x	x	x	-	-	-	-	-	-
	2. High Containment Laboratory, Public Health Agency of Sweden (Solna)	BL4	x	x	x	x	x	x	x	x	x	x	no
	3. National Veterinary Institute (Uppsala)	BL3	x	x	x	x	x	-	-	-	-	-	-
Switzerland	1. Labor Spiez (Spiez)	BL3	NN	NN	NN	x	x	x	x	x	x	x	partly
	2. Institute of Virology and Immunology (Mittelhäusern)	BL3	NN	NN	NN	x	x	x	x	x	x	x	no
	3. National Reference Center for Emerging Viral Infections (Geneva)	BL4	NN	NN	NN	x	x	x	x	x	x	x	no
	4. Institute of Medical Virology (Zürich)	BL4	NN	NN	NN	-	-	-	-	x	x	x	no
Thailand	<i>Nothing new to declare</i>	-				NN	NN	NN					
Turkey	1. Ankara University Biotechnology Institute (Ankara)	BL2					x	x		-	NN	NN	-
	2. Refik Saydam National Public Health Agency (Ankara)	BL3					x	-		-	NN	NN	-
	3. Bornova Veterinary Control and Research Institute (Ankara)	BL3					x	-		-	NN	NN	-
	4. Diagnosis of Poultry Disease Laboratory (Ankara)	BL3					x	-		-	NN	NN	-
	5. Biosafety Level-3 Laboratory Institute	BL3					-	x		-	NN	NN	-
Ukraine	1. Governmental Scientific Oversight Institute for Biotechnology and Microorganism Culture Collection (Kiev)	- ⁵					x	x			x	-	-
	2. Mechnikov Institute for Microbiology and Immunology (Charkov)	- ⁶					x	x			x	x	-
	3. Gromashevsky Institute for Epidemiology and Infectious Diseases (Kiev)	BL ⁷					x	x			x	-	-
	4. Mechnikov Scientific Research Anti-Plague Institute (Odessa)	BL3					x	x			x	-	-
	5. Central Sanitary Epidemiological Station (Kiev)	BL3					x	x			-	-	-
	6. Lviv Scientific Research Institute for Epidemiology and Hygiene (Lvov)	BL ⁸					x	x			x	x	-
	7. Anti-Plague Station (Simferopol)	BL3					x	x			-	-	-
	8. Institute for Experimental and Clinical Veterinary Medicine (Charkov)	BL2					-	x			x	x	no

⁵Ukraine declared four units with an overall floorspace of 780 sqm, without indicating the containment level.

⁶BL4 does not exist; highest level of containment is not indicated (until 2011); BL3 and BL4 do not exist (2012).

⁷BL4 does not exist; highest level of containment is not indicated.

⁸Until 2011, Ukraine declared three units with an overall floorspace of 1,273 sqm, without indicating the containment level.

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?
	9. Institute for Veterinary Medicine (Kiev)	- ⁹					-	x			-	x	-
	10. Ukrainian Centre for Disease Control and Monitoring of the Ministry of Health of Ukraine (Kiev)	BL3					-	-			x	x	no
	11. State Scientific Control institute of biotechnology and strains of microorganisms (Donetsk)	BL2					-	-			x	x	-
United Kingdom	1. Defence Science and Technology Laboratory (Porton Down, Salisbury)	BL4	x	x	x	x	x	x	x	x	x	x	wholly
	2. Public Health England (Colindale, London)	BL4	x	x	x	x	x	x	x	x	x	x	no
	3. Public Health England (Porton)	BL4	x	x	x	x	x	x	-	x	x	x	no
	4. National Institute for Biological Standards and Control (Potters Bar)	BL4	x	x	x	x	x	x	x	x	x	x	no
	5. The Francis Crick Institute Containment 4 Building C (London)	BL4	x	x	x	x	x	x	x	x	x	x	no
	6. The Pirbright Institute (Pirbright)	BL4	-	-	-	-	-	-	x	x	x	x	no
	7. Animal and Plant Health Agency (Addlestone)	SAPO4 ¹⁰	x	x	x	x	x	x	x	x	x	x	no
	8. Institute for Animal Health, Pirbright Laboratory (Woking)	SAPO4 ⁸	x	x	x	x	x	x	-	-	-	-	-
	9. Merial Animal Health (Pirbright)	SAPO4 ⁸	-	x	x	x	x	x	x	x	x	x	no
	10. Schering-Plough Animal Health (Uxbridge)	SAPO4 ⁸	-	x	-	-	-	-	-	-	-	-	-
USA	1. Viral Immunology Center, Georgia State University (Atlanta, GA)	BL4				x	x	x	x	x	x	x	no
	2. The Betty Slick and Lewis J. Moorman, Jr. Laboratory Complex (San Antonio, TX)	BL4				x	x	x	x	x	x	x	partly
	3. Galveston National Laboratory (Galveston, TX)	BL4				x	x	x	x	x	x	x	partly
	4. Plum Island Animal Disease Center (Greenport, TX)	BL3				x	x	-	-	-	-	-	-
	5. U.S. Army Medical Research Institute of Infectious Diseases (Fort Detrick, MD)	BL4				x	x	x	x	x	x	x	wholly
	6. National Biodefense Analysis and Countermeasures Center (Fort Detrick, MD)	BL4				-	-	x	x	x	x	x	partly
	7. Integrated Research Facility at Rocky Mountain Laboratories (Hamilton, MT)	BL4				-	-	x	x	x	x	x	no
	8. Coordinating Center for Infectious Diseases (Atlanta, GA)	BL4				x	-	-	-	-	-	-	-

⁹Ukraine declared four units with an overall floorspace of 780 sqm, without indicating the containment level.

¹⁰Specified Animal Pathogens Order.

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	MoD funded in 2016?
	9. CDC, Office of Infectious Diseases (Atlanta, GA)	BL4				-	-	x	x	x	x	x	partly
	10. Integrated Research Facility at Fort Detrick - NIAID (Fort Detrick, MD)	BL4				-	-	-	-	-	x	x	no

The following table summarizes the data declared in **CBM Form A, part 2 (ii) and (iii)** of the publicly available CBM submissions from 2016 and compares them with the information in publicly available CBMs from 2007 to 2015. The table indicates the overall funding for the biodefence programme as declared in CBM Form A, part 2 (ii), and lists the names and locations of biodefence facilities declared in CBM Form A, part 2 (iii), specifying the year(s) they were declared. Grey cells indicate that there was no CBM submission or that it was not made publicly available in the respective year. “ND” indicates that the state ticked the “Nothing to declare” box in Form 0. “NN” indicates that the state ticked the “Nothing new to declare” box in Form 0. “-“ indicates that no data were provided.

Country	Total funding in million EUR ¹¹										Name and location of biodefence facilities declared in CBM Form A, Part 2 (iii)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016	
Australia	1.5	1.6	1.9	1.7	1.7	2.0	2.0	2.0	1.7	1.7	Biological Defence Research, Land Division, DSTO (Fishermans Bend)	x	x	x	x	x	x	x	x	x	x
Austria			0.01	0.03	0.05	0.03	0.02	0.09	0.09	0.09	Armament and Defence Technology Agency (Mödling)			x	x	x	x	x	x	x	x
Belgium					0.6	1.0	0.3	0.3	0.4	0.2	1. Centre de Technologies Moléculaires Appliquées (Brussels)					x	x	x	x	x	x
											2. Centre de Technologie Moléculaire Appliquée (Louvain-La-Neuve)					-	-	-	-	-	x
											3. Université Catholique de Louvain (Louvain-La-Neuve)					x	x	x	x	x	x
											4. Defense Laboratory Department (Vilvoorde)					x	x	x	x	x	x
											5. Research Laboratory for Vector Borne Disease (Brussels)					x	-	-	-	-	-
											6. Faculté des Sciences Agronomiques, UCL (Louvain-La-Neuve)					-	-	-	-	x	-

¹¹ National currencies were converted to Euros using the online service, <http://www.finanzen.net/waehrungsrechner>. 15 April of each respective year, the deadline for submitting the CBM to the UN, was selected as the date for the currency conversion.

Bulgaria	-	-		-	-	NN	NN	NN	NN	ND	1. National Center of Infectious and Parasitic Diseases, Ministry of Health (Sofia)	x	x		x	x	x	x	x	x	ND
											2. National Research Diagnostic Veterinary Institute (Sofia)									x	ND
Canada					6.0+	3.9 ¹²	6.9	8 ¹³	3.5	3.1	1. Defence R&D Canada (Suffield)					x	x	x	x	x	x
											2. Defence R&D Canada (Valcartier)					x	x	x	x	x	x
Croatia								ND			<i>Nothing to declare</i>									ND	
Cyprus					ND	ND					<i>Nothing to declare</i>						ND	ND			
Czech Rep.				-	-	-	-	-	NN	NN	1. Central Military Health Institute, department Těchonin (Těchonin)			-	-	x	x	-	ND	ND	NN
											2. Central Military Health Institute, department Prague (Prague)			-	-	x	x	x	ND	ND	NN
											3. Institute of Molecular Pathology (IMP) (Hradec Králové)			-	-	x	x	x	ND	ND	NN
											4. Laboratory for biological monitoring and protection (Mílín)			-	-	x	x	-	ND	ND	NN
Denmark	1.9	2.0		2.9	2.8	2.7		2.6	2.7	2.7	Centre for Biosecurity and Biopreparedness (Copenhagen)	x	x		x	x	x		x	x	x
Ecuador					ND						<i>Nothing to declare</i>						ND				
Estonia				ND	ND					ND	<i>Nothing to declare</i>					ND	ND		n.a.		ND
Finland	-	-	-	-	-	-	-	-	-	-	Centre for Biothreat Preparedness (Helsinki)	x	x	x	x	x	x	x	x	x	x
Georgia			0.3	1.7	1.6						1. National Center for Disease Control and Public Health (Tbilisi)			x	x	x					
											2. Laboratory of Ministry of Agriculture of Georgia (Tbilisi)			-	x	x					
Germany											1. CBRN Defence, Safety and Environmental Protection School (Sonthofen)	x	x	x	x	x	x	x	x	x	x
											2. Bundeswehr Institute of Microbiology (Munich)	x	x	x	x	x	x	x	x	x	x
											3. Bundeswehr Research Institute for Protective Technologies and NBC-Protection (Munster)	x	x	x	x	x	x	x	x	x	x
											4. Central Institute of the Bundeswehr Medical Service (Kiel)	-	x	x	-	x	x	x	x	x	x
											5. Centre for Biological Threats and Special Pathogens at the Robert Koch Institute (Berlin)	-	-	-	-	-	-	-	-	x	x
Greece					ND	ND	ND				<i>Nothing to declare</i>						ND	ND	ND		
Hungary								-	-		1. Medical Centre of Hungarian Defence Forces (Budapest)									x	-
											2. Biosafety Laboratory (Budapest)									-	x

¹²It is estimated that in 2011/2012, the amount spent on the Canadian biological defence program was \$5,039,000.

¹³ Funding within the Canadian Safety and Security Program (CSSP), investment in biological related projects is estimated to be \$100M over ten years.

Ireland	-	-	-	-	-				-	-	"Ireland does not have a national biological defence R&D programme"	-	-	-	-	-				ND	ND	
Japan						1.1	2.3	2.5	0.01	0.01	1. Military Medicine Research Unit, Test & Evaluation Command (Tokyo)						x	x	x	x	x	
Latvia					-	-	-	-	-	-	1. Latvian Centre of Infectious Diseases (Riga)					x	x	x	x	x	x	
Liechtenstein	NN	NN	NN	NN	NN						Nothing new to declare	NN	NN	NN	NN	ND		NN	NN	NN		
Lithuania	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Luxembourg								ND	ND	ND	Nothing to declare								ND	ND	ND	
Madagascar						ND					Nothing to declare						ND					
Malaysia					ND						Nothing to declare					ND						
Mauritius									ND		Nothing to declare										ND	
Mexico									ND	ND	Nothing to declare										ND	ND
Moldova					0.02	0.02	0.04	0.03	NN	NN	1. The National Center of Public Health (Chisinau)					x	x	x	x	NN	NN	
Myanmar										ND	Nothing to declare										ND	
Netherlands							1.2	1.2 ¹⁴	1	1 ¹⁵	1. TNO Prins Maurits Building Department of CBRN Protection (Rijswijk)							x	x	x	x	
New Zealand	ND	ND		ND	ND	ND	ND	ND	ND	ND	Nothing to declare	ND	ND		ND	ND	ND	ND	ND	ND	ND	
Norway											1. Institute of Microbiology, Armed Forces Medical Services (Oslo)		x		x	x	x	x		-	x	
		-		-	-	0.5	-			2	2.6	2. Norwegian Defence Research Establishment (Kjeller)		-		-	-	-	-		x	x
												3. Norwegian Institute of Public Health		-		-	-	-	-		-	x
Portugal				0.2	0.2	0.1	0.03	0.05	0.26	0.27	1. Laboratório de Bromatologia e Defesa Biológica (Lisbon)				x	x	x	x	x	x	x	
Quatar						ND					Nothing to declare						ND					
Romania		-	NN	NN	-	0.01	0.01	ND	ND	ND	Military Medical Research Center (Bucharest)		x	NN	NN	x	x	x	ND	ND	ND	
Serbia						ND		ND	ND		Nothing to declare						ND		ND	ND		
Slovakia								ND	ND		Nothing to declare								ND	ND		

¹⁴ The biological defence budget for the period 2010-2013 was 3,5 Million Euro.

¹⁵ The biological defence budget for the period 2014-2017 is 3 Million Euro.

Slovenia								ND	ND	ND	<i>Nothing to declare</i>								ND	ND	ND	
Sweden	2.8	2.7	2.7	3.1	3.5	3.7	6.6	4.2	3.7	3.4	Swedish Defence Research Agency (Umea)			x	x	x	x	x	x	x	x	
											National Veterinary Institute (Uppsala)			-	-	-	-	x	x	x	x	
Switzerland	0.6	0.6	1.0	1.7	3.9	4.2	4.1	4.1	4.9	4.8	1. Spiez Laboratory, Swiss NBC Defence Establishment (Spiez)	x	x	x	x	x	x	x	x	x	x	
											2. Institute of Virology and Immunoprophylaxis (Mittelhäusern)	-	-	-	x	x	x	x	x	x	x	
											3. National Reference Center for Emerging Viral Infections (Geneva)	-	-	-	x	x	x	x	x	x	x	
											4. National Reference Center for Anthrax (Bern)	-	-	-	x	x	x	x	x	x	x	
											5. Bacteriological Laboratory Regional Competence Center- Regional Laboratory West (Geneva)	-	-	-	x	x	x	x	x	x	x	
											6. Virological Laboratory Regional Competence Center- Regional Laboratory West (Geneva)	-	-	-	x	x	x	x	x	x	x	
											7. Diagnostic Laboratories of the Institute of Microbiology- Regional Competence Center- Regional Laboratory West (Lausanne)	-	-	-	x	x	x	x	x	x	x	
											8. Labor Spiez- Regional Competence Center- Regional Laboratory West Central (Spiez)	-	-	-	x	x	x	x	x	x	x	
											9. Department of Medical Microbiology- Regional Competence Center- Regional Laboratory East Central (Luzern)	-	-	-	x	x	x	x	x	x	x	
											10. Institute of Medical Microbiology – Regional Competence Center- Regional Laboratory East (Zurich)	-	-	-	x	x	x	x	x	x	x	
											11. Institute for Medical Virology- Regional Competence Center- Regional Laboratory East (Zurich)	-	-	-	x	x	x	x	x	x	x	
											12. Cantonal Laboratory of Basel-Stadt- Regional Competence Center- Regional Laboratory North (Basel)	-	-	-	x	x	x	x	x	x	x	
											13. Cantonal Institute of Microbiology- Regional Competence Center- Regional Laboratory South (Bellinzona)	-	-	-	x	x	x	x	x	x	x	
Thailand				NN	NN	NN					<i>Nothing new to declare</i>				NN	NN	NN					
Turkey					2.3	NN		1.7	1.7	ND	1. IDC (Ankara)					x	NN		x	-	-	
											2. Refik Saydam National Public Health Agency (Ankara)					x	NN		x	-	-	
Ukraine					-	-			0.4	-	<i>Nothing to declare</i>					-	-			ND	ND	
UK	75.0	77.6	65.7	53.6	57.8	62	60.1	59.1	69.4	66.5	Defence Science and Technology Laboratory (Porton Down, Salisbury)	x	x	x	x	x	x	x	x	x	x	
USA				451.6	475	779	743	670	812.4	730.4	1. Plum Island Animal Disease Center (Greenport, TX)				x	x	x	x	x	x	x	
											2. Tyndall AFB, Research Road (Tyndall, FL)					x	x	x	x	-	-	-
											3. Tyndall AFB, Barnes Drive (Tyndall, FL)					x	x	x	x	-	-	-
											4. Lothar Salomon Life Sciences Test Facility (Dugway, UT)					x	x	x	-	-	-	x
											5. U.S. Army Edgewood Chemical and Biological Center					x	x	x	x	x	x	x

									(Aberdeen, MD)									
									6. U.S. Army Medical Research Institute of Chemical Defense (Aberdeen, MD)				x	x	x	x	x	x
									7. U.S. Army Medical Research Institute of Infectious Diseases (Fort Detrick, MD)				x	x	x	x	x	x
									8. Walter Reed Army Institute of Research (Silver Spring, MD)				x	x	x	-	-	-
									9. Battelle Biomedical Research Center (West Jefferson, OH)				x	x	-	-	-	-
									10. Naval Surface Warfare Center – Dahlgren Division (Dahlgren, VA)				x	x	x	-	x	x
									11. Naval Research Laboratory (Washington, DC)				x	x	x	x	x	x
									12. Naval Medical Research Center (Fort Detrick), MD)				x	x	x	x	x	x
									13. Brookhaven National Laboratory (Upton, NY)				x	x	x	x	x	x
									14. Idaho National Laboratory (Idaho Falls, ID)				x	x	x	x	-	-
									15. Los Alamos National Laboratory (Los Alamos, NM)				x	x	x	x	x	x
									16. Lawrence Livermore National Laboratory (Livermore, CA)				x	x	x	x	x	x
									17. Oak Ridge National Laboratory (Oak Ridge, TN)				x	-	-	-	-	-
									18. Pacific Northwest National Laboratory (Richland, WA)				x	x	x	x	x	x
									19. Sandia National Laboratories (Albuquerque, NM)				x	x	x	x	x	x
									20. C.W Bill Young Center for Biodefense and Emerging Infectious Diseases (Bethesda, MD)				x	x	x	x	x	x
									21. Integrated Research Facility- Rocky Mountain laboratories (Hamilton, MT)				x	x	x	x	x	x
									22. Dale and Betty Bumpers Vaccine Research Center (Bethesda, MD)				x	x	x	x	x	x
									23. Office of Infectious Diseases - OID (Atlanta, GA)				x	x	-	-	-	x
									24. Division of Vector-borne Infectious Diseases, CDC (Fort Collins, CO)				x	x	x	x	x	x
									25. Mass Spectrometry Toxin Laboratory, CDC (Atlanta, GA)				x	x	-	-	-	-
									26. Foreign Disease-Weed Science Research Unit (Fort Detrick, MD)				x	x	x	x	x	x
									27. National Animal Disease Center (Ames, IA)				x	x	x	x	x	x
									28. Southeast Poultry Research Laboratory (Athens, GA)				x	x	x	x	x	x
									29. National Biodefense Analysis and Countermeasures Center (Fort Detrick, MD)				-	x	x	x	x	x
									30. Centers for Disease Control and Prevention, CDC (Atlanta, GA)				-	x	x	x	x	x
									31. Lawrence Berkeley National Laboratory (Berkeley, CA)				-	-	x	x	-	-
									32. National Center for Environmental Health (Atlanta, GA)				-	-	x	x	x	x

											33. Air Force Research Laboratory (Wright-Patterson Air Force Base, OH)				-	-	-	x	x	-	-
											34. Lothar Salomon Test Facility (Dugway, UT)				-	-	-	x	-	x	x
											35. Integrated Research Facility at Fort Detrick (Fort Detrick, MD)				-	-	-	-	x	x	x

The following table summarizes the data declared in **CBM Form G** of the publicly available CBM submissions from 2016 and compares them with the information in publicly available CBMs from 2007 to 2015. It provides the names and locations of vaccine production facilities declared in CBM Form G, the year(s) they were declared, and the diseases against which vaccines were produced. Grey cells indicate that there was no CBM submission or that it was not made publicly available in the respective year. “ND” indicates that the state ticked the “Nothing to declare” box in Form 0. “NN” indicates that the state ticked the “Nothing new to declare” box in Form 0. “-“ indicates that no data were provided.

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases ¹⁶	Other diseases	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	Decl. 2015	Decl. 2016
Australia	1. bioCSL Limited (Parkville and Broadmeadows,)	no	yes	x	x	x	x	x	x	x	x	NN	x
	2. Q Fever Manufacturing Facility (Broadmeadows)	no	yes	-	-	x	x	x	-	-	NN	NN	-
	3. Ludwig Institute for Cancer Research (Heidelberg, VIC)	no	yes	-	-	x	x	x	x	x	NN	NN	-
	4. Queensland Institute of Medical Research (Queensland)	no	no	-	-	-	-	-	x	x	NN	NN	-
Austria	<i>Nothing to declare</i>	n.a.	n.a.			ND	ND	ND	ND	ND	ND	ND	ND
Belgium	1. GlaxoSmithKline Biologicals S.A (Rixensart)	_17	_14					x	x	x	x	x	x
	2. Pfizer Animal Health (Louvain-la-Neuve)	_14	_14					x	-	-	-	-	-
Bulgaria	1. BulBio- NCIPD Ltd (Sofia)	n.a.	n.a.	x	x		x	x	x	x	x	x	ND
	2. National Diagnostic and Research Veterinary Medical Institute (Sofia)	n.a.	n.a.	-	-		x	-	-	-	-	-	ND
Canada	1. Artemis Technologies Inc. (Guelph)	no	yes					x	x	x	x	x	x
	2. Bioniche Life Sciences Inc. (Belleville)	no	yes					x	x	x	x	-	-
	3. Gallant Custom Laboratories Inc. (Cambridge)	no	yes					x	x	x	x	x	x
	4. Pfizer Animal Health (Saanichton)	no	yes					x	x	x	-	-	-
	5. Elanco Canada Limited (Ontario)	no	yes					x	x	x	x	x	x
	6. Elanco Canada Limited - Aqua Health (Charlottetown and Victoria)	no	yes					x	x	x	x	x	x
	7. Nutratech Inc. (Winnipeg)	no	yes					x	x	x	x	x	x
	8. Saskatchewan Research Council (Saskatoon)	no	yes					x	x	x	-	-	-
	9. Saskatoon Colostrum Co. Ltd. (Saskatoon)	no	yes					x	x	x	x	x	x
	10. Vetcovac Ltée. (Saint-Hyacinthe)	no	yes					x	x	x	-	-	-
	11. Ceva Animal Health Inc. (Ontario)	no	yes					x	x	-	x	x	x
	12. Biovet Inc. (Saint-Hyacinthe)	no	yes					x	x	x	x	x	x

¹⁶As designated by the Centers for Disease Control and Prevention (CDC) in the USA.

¹⁷This information is not provided in the public version of the CBM.

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	13. Intervet Canada Corp. (Kirkland)	no	yes					x	x	-	-	-	-	
	14. Vétoquinol N.A. Inc. (Lavaltrie)	no	yes					x	x	-	-	-	-	
	15. Vacci-Vet Inc. (Québec)	n.a.	yes					-	-	-	x	x	x	
	16. ID Biomedical Corporation of Quebec (GlaxoSmithKline Inc.) (Quebec City)	n.a.	yes					-	-	x	x	x	x	
	17. Medicago (Québec)	n.a.	yes					-	-	-	-	x	x	
	18. Immunovaccine (Halifax)	Anthrax	yes					-	-	-	-	-	x	x
	19. Ceva Animal Health Inc. (Ontario)	n.a.	yes					-	-	-	-	-	-	x
	20. Sanofi Pasteur Limited (Toronto)	n.a.	yes					-	-	x	x	x	x	x
Croatia	1. Institute of Immunology	no.	Yes								x	x		
Cyprus	<i>Nothing to declare</i>	n.a.	n.a.					ND	ND					
Czech Republic	1. Baxter BioScience s.r.o (Kostolec nad Černými Lesy)	no	yes			NN	ND	x	NN	NN	NN	NN	-	
	2. SEVAPHARMA a.s. (Prague)	no	yes			NN	ND	x	NN	NN	NN	NN	x	
	3. Bioveta a.s. (Ivanovice nad Hané)	Anthrax	yes			NN	ND	x	NN	NN	NN	NN	x	
	4. Dyntec s.r.o. (Terezín)	no	yes			NN	ND	x	NN	NN	NN	NN	x	
	5. BIOPHARM, Research Institute of Biopharmacy and Veterinary Drugs (Jíluvé u Prahy)	no	yes			NN	ND	x	NN	NN	NN	NN	x	
Denmark	1. Statens Serum Institute (Copenhagen)	no	yes	x	x		NN	x	x		x	x	x	
	2. Bavarian Nordic A/S (Kvistgard)	Smallpox	yes	x	x		NN	x	x		x	x	x	
Ecuador	<i>Nothing to declare</i>	n.a.	n.a.					ND						
Estonia	<i>Nothing to declare</i>	n.a.	n.a.				ND	ND		n.a.			ND	
Finland	<i>Nothing to declare</i>	n.a.	n.a.	NN	NN	NN	NN	ND	ND	ND	ND	ND	ND	
Georgia	<i>Nothing to declare</i>	n.a.	n.a.			ND	ND	ND						
Germany	1. Novartis Vaccines and Diagnostics GmbH & Co. KG (Marburg)	Botulism	yes	x	x	x	x	x	x	NN	x	x	-	
	2. GlaxoSmithKline Biologicals (Marburg)	Botulism	yes	-	-	-	-	-	-	-	-	-	x	
	3. GlaxoSmithKline (Branch of SB Pharma GmbH & Co KG) (Dresden)	no	yes	x	x	x	x	x	x	NN	x	x	x	
	4. IDT Biologika GmbH (Rosslau)	Smallpox	yes	x	x	x	x	x	x	NN	x	x	x	
	5. Rhein Biotech GmbH (Düsseldorf)	no	yes	-	-	-	x	x	x	NN	x	x	-	
	6. Bavaria Nordic GmbH (Berlin)	Smallpox	no	-	-	-	x	x	x	NN	-	-	-	
	7. Dynavax GmbH (Düsseldorf)	no	yes	-	-	-	-	-	-	-	-	-	-	x

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	7. Vibalogics GmbH (Cuxhaven)	no	yes	-	-	-	-	-	x	NN	x	x	x
Greece	<i>Nothing to declare</i>	n.a.	n.a.					ND	ND	ND			
Hungary	1. Omninvest Ltd. (Budapest)	no	yes								x	x	
	2. GlaxoSmithKline Biological Kft. (Budapest)	no	yes								-	x	
Ireland	1. Elanco Laboratories (Sligo)	-	-	x	x	x	x	x				x	-
	2. MSD International GmbH (Carlow)	-	-	-	-	-	-	-				x	x
	3. Schering Plough (Brinny)	-	-	-	-	-	-	-				x	x
	4. Pfizer Ireland Pharmaceuticals (Dublin)	-	-	-	-	-	-	-				x	x
Japan	1. Denka Seiken Co., Ltd (Tokyo)	no	yes						x	x	x	x	x
	2. Kitasato Daiichi Sankyo Vaccine Co., Ltd (Saitama)	no	yes						x	x	x	x	x
	3. Takeda Pharmaceutical co., Ltd (Osaka)	no	yes						x	x	x	x	x
	4. The Research Foundation for Microbial Diseases of Osaka University (Osaka)	no	yes						x	x	x	x	x
	5. Chemo-Sero-Therapeutic Research Institute (Kumamoto)	no	yes						x	x	x	x	x
	6. Japan BCG Laboratory (Tokyo)	no	yes						x	x	x	x	x
	7. Japan Poliomyelitis Research Institute (Tokyo)	no	yes						x	x	x	x	x
Latvia	<i>Nothing to declare</i>	-	-					-	ND	ND	ND	ND	ND
Liechtenstein	<i>Nothing new to declare</i>	-	-	NN	NN	NN	NN	NN		NN	NN	NN	
Lithuania	<i>Nothing new to declare</i>	-	-	NN	NN	NN	NN	NN	NN	NN	NN	ND	ND
Luxembourg	<i>Nothing to declare</i>	-	-								ND	ND	ND
Madagascar	-	-	-						-				
Mauritius	-	-	-										ND
Mexico	1. Centro de Investigación y Estudios Avanzados en Salud Animal, Universidad Autónoma del Estado de México (Toluca)	no	yes									x	-
	2. Laboratorios de Biológicos y Reactivos de México S.A de C.V. (Colonia Popotla)	no	yes									x	x
Malaysia	1. Institute of Veterinary Services (Putrajaya)	no	yes					x					
Moldova	<i>Nothing to declare</i>	n.a.	n.a.					ND	ND	ND	ND	ND	ND
Netherlands	1. Central Veterinary Institute, part of Wageningen UR (Lelystad)	no	yes							x	x	x	x
	2. Intervet / MSD Animal Health (Boxmeer)	no	yes							x	x	x	x

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	3. Nederlands Vaccin Instituut (Bilthoven)	no	yes							x	-	-	
	4. Abbott Biologicals B.V. WWP (Weesp)	no	yes							x	x	x	x
	5. Boehringer Ingelheim Animal Health Operation (Weesp)	n.a.	n.a.							x	x	x	x
	6. Janssen / Crucell Holland B.V. (Leiden)	no	yes							x	x	x	x
	7. Erasmus Medical Centre (Rotterdam)	no	yes							-	x	x	x
	8. Bilthoven Biologicals B.V. (Bilthoven)	no	yes							-	x	x	x
	9. Patheon Biologics B.V. (Groningen)	no	yes							-	x	x	x
New Zealand	<i>Nothing to declare</i>	n.a.	n.a.	ND	ND		ND	ND	ND	ND	ND	ND	ND
Norway	1. Alpharma (Overhalla)	no	yes		x		x	x	x	x		x	x
	2. The National Veterinary Institute (Oslo)	no	yes		x		x	x	x	x		x	x
	3. Norwegian Institute of Public Health (Nydalen)	no	yes		x		x	x	x	x		x	x
Portugal	1. Genibet Biopharmaceuticals	no	yes				ND	ND	x	x	x	x	x
Qatar	<i>Nothing to declare</i>	n.a.	n.a.						ND				
Romania	1. "Cantacuzino" National Institute of R&D for Microbiology and Immunology (Bucharest)	no	yes		-	-	x	NN	x	x	x	-	-
	2. National Society Pasteur Institute S.A. (Bucharest)	no	yes		x	x	-	NN	x	x	x	-	-
	3. S.C. Pasteur Filiala Filipeti S.R.L (Prahova)	no	yes		-	-	-	-	-	x	x	-	x
	4. S.C. Romvac Company S.A. (Voluntari)	Anthrax	yes		-	-	-	-	-	x	x	x	x
Serbia	Institute of Immunology and Virology "Torlak" (Belgrad)	no	yes						x		x	x	
Slovakia	<i>Nothing to declare</i>	n.a.	n.a.								ND	ND	
Slovenia	<i>Nothing to declare</i>	n.a.	n.a.								ND	ND	ND
Sweden	1. SBL Vaccin AB (Solna)	no	yes	x	x	x	x	x	-	NN	-	-	-
	2. UniTech Biopharma (Matfors)	no	yes	x	x	x	x	x	-	NN	-	-	-
	3. Cobra Biopharma (Matfors)	no	yes	-	-	-	-	-	x	NN	-	-	-
	4. Valneva Sweden AB (Stockholm)	no	yes	-	-	-	-	-	x	x	x	x	x
Switzerland	1. Janssen Vaccines AG (Bern)	no	yes	NN	NN	NN	x	x	x	x	x	-	x
	2. Cytos Biotechnology AG (Schlieren)	no	no	NN	NN	NN	x	x	x	-	-	-	-
	3. Pevion Biotech Ltd. (Ittingen)	no	yes	NN	NN	NN	x	x	x	x	-	-	-

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	4. PaxVax Berna GmbH (Thörishaus)	no	yes	-	-	-	-	-	-	-	-	x	x
Thailand	1. The Government Pharmaceutical Organisation (Bangkok)	no	yes				x	x	x				
	2. Merieux Biological Products Co., Ltd. (Chachoengsao)	no	yes				-	-	x				
	3. Queen Saovabha Memorial Institute (Bangkok)	no	yes				-	-	x				
	4. BioNet-Asia Co., Ltd. (Bangkok)	no	yes				-	-	x				
	5. Bureau of Veterinary, Department of Livestock Development (Nakhon Ratchasima)	Anthrax	yes				-	-	x				
Turkey	1. Konya Veterinary Control and Research Institute (Meram-Konya)	no	yes					x	NN		-	-	-
	2. Pendik Veterinary Control and Research Institute (Pendik-Istanbul)	Brucellosis	yes					x	NN		-	-	x
	3. Central Veterinary Control and Research Institute (Ankara)	Anthrax	yes					x	NN		x	x	-
	4. Veterinary Control Institute (Ankara)	no	yes					-	NN		x	x	x
	5. Veterinary Control Institute (Atakum)	no	yes					-	NN		x	x	-
	6. Foot and Mouth Disease Institute (Ankara)	no	yes					-	NN		x	x	x
	7. VETAL Animal Health Products Company (Adiyaman)	no	yes					-	NN		x	x	-
	8. DOLL VET Veterinary Vaccine (Sanliurfa)	no	yes					-	NN		x	x	-
	9. ATAFEN Veterinary Materials Production Company (Ismir)	no	yes					-	NN		x	x	-
	10. AKUAKIM Medical, Chemical, Pharmaceutical, Feed Additives and Water Products Industry and Trade Company (Manisa)	no	yes					-	-		-	x	-
Ukraine	1. Biofabrika Sumy (Sumy)	Anthrax	yes					x	x			x	x
	2. Biofabrika Dnepropetrovsk (Dnepropetrovsk)	no	yes					x	x			-	-
	3. Biofabrika Kharkiv (Kharkiv)	no	yes					x	x			x	x
	4. Biofabrika Kherson (Kherson)	Anthrax	yes					x	x			x	x
	5. Biofabrika Novogalechinsk (Kiev)	no	yes					x	x			x	-
	6. OOO "Ukrvetpromsnab" (Brovary)	no	yes					x	x			x	x
	7. Corporation "Ukrvetpromsnab" (Kiev)	no	yes					x	x			-	-
	8. Institute for Experimental and Clinical Veterinary Medicine (Kharkiv)	no	yes					x	x			x	-
	9. Institute for Veterinary Medicine of the National Academy of Science (Kiev)	no	yes					x	x			x	-
	10. PSJC "Pharmstandard-Biolek" (Kharkiv)	no	yes					x	-			x	x
	11. OOO "Farmeks Group" (Kiev)	no	yes					-	-			-	x

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	12. LLC Pharmedica GmbH (Lvov)	no	yes					x	-			-	x
	13. PSJC "Farmak" (Kiev)	no	yes					x	-			-	x
United Kingdom	1. Porton Biopharma Limited (Porton Down)	Anthrax	no	x	x	x	x	x	x	x	x	x	x
	2. MedImmune (Liverpool)	no	yes	x	x	x	x	x	x	x	x	x	x
	3. Seqirus Vaccines Limited (Liverpool)	no	yes	x	x	x	x	x	x	x	x	x	x
USA	1. Emergent BioDefense Operations Lansing Inc. (Lansing, MI)	Anthrax	no				x	x	x	x	x	x	x
	2. MassBiologics (Boston, MA)	no	yes				x	x	x	x	x	x	x
	3. Med Immune LLC (Gaithersburg, MD)	no	yes				x	x	x	x	x	x	-
	4. Merck Sharp & Dohme Corp (North Wales, PA)	no	yes				x	x	x	x	x	x	x
	5. Organon Teknika Corporation LLC (Durham, NC)	no	yes				x	x	x	x	x	x	x
	6. Sanofi Pasteur Inc. (Swiftwater, PA)	no	yes				x	x	x	x	x	x	x
	7. Sanofi Pasteur Biologics Co. (Cambridge, MA)	Smallpox	no				x	x	x	x	x	x	x
	8. Wyeth Pharmaceuticals Inc. (New York, NY)	no	yes				x	x	x	x	x	x	x
	9. Barr Laboratories, Inc. (Forrest, VA)	no	yes				-	-	x	x	x	x	x
	10. Protein Sciences Corporation (Meriden, CT)	no	yes				-	-	-	x	x	x	x

Research Group for Biological Arms Control

The aim of the Research Group is to contribute, through innovative research and outreach activities, to the universal prevention of biological weapons development, production and use. The focus of activities is twofold.

Firstly, the Research Group contributes to preventing the erosion of the universal bioweapons prohibition by opposing norm-harming activities. Secondly, it develops new concepts and instruments for monitoring bioweapon relevant activities and for verifying and enforcing compliance with the norm against bioweapons.

Contact

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