

Carl Friedrich von Weizsäcker Centre for Science and Peace Research

> Research Group for Biological Arms Control



# 2014 Reader on Publicly Available CBMs

December 2014

# 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 2014

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: 170
New BWC States Parties in 2014: 0
States Parties with national contact points: 77
<b>CBMs submitted in 2014:</b> 69 as of 27 November 2014
First-time CBM submissions in 2014: 1
Number of states having participated in the CBM data exchange in 27 years: 116

# **CBM-specific publications in 2014**

BWC/MSP/2013/WP.1 Confidence-building measures: time to redouble efforts for effective action - submitted by the United States of America.

BWC/MSP/2013/WP.6 Confidence-Building Measures: Taking discussions on enabling fuller participation forward to the Eighth Review Conference. Submitted by Switzerland.

BWC/MSP/2013/WP.7 Step-by-step approach in CBM participation. Submitted by Australia, Canada, Japan, Malaysia, New Zealand, Republic of Korea, and Switzerland.

"Biological Weapons Convention Confidence, the prohibition and learning from the past" by Brian Rappert and Chandré Gould, Institute for Security Studies Africa<sup>1</sup>

"Guide to Participating in the Confidence-Building Measures of the Biological Weapons Convention" prepared by the United Nations Office for Disarmament Affairs with the support of the European Union<sup>2</sup>

"The Biological Weapons Convention: Compliance, Transparency & Confidence" by Filippa Lentzos, Kings College London<sup>3</sup>

"Balanced Minimalism. The Biological Weapons Convention after its 7th Review Conference" in PRIF-report No. 120 by Una Becker-Jakob, Peace Research Institute Frankfurt, p. 27 ff.<sup>4</sup>

"Report from Geneva: The Biological Weapons Convention Meeting of Experts August 2013" by Graham S. Pearson in association with Nicholas A. Sims, p. 28, 29, 36<sup>5</sup>

# Participation in the CBM regime in 2014

In 2014, participation in the CBM data exchange increased considerably. As of 27 November 2014, 69 BWC states parties had submitted their CBM. However, 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 54 BWC states parties have yet to submit their first CBM declaration. Continuity in states' participation also remains weak: 25 countries have submitted a

<sup>&</sup>lt;sup>1</sup> http://www.issafrica.org/uploads/Paper258.pdf

<sup>&</sup>lt;sup>2</sup> http://www.unog.ch/80256EDD006B8954/%28httpAssets%29/5316814CF65D0E10C1257B2B0039E156 /\$file/CBM+guide+2013.pdf

 $<sup>^3\</sup> http://www.filippalentzos.com/wp-content/uploads/2014/10/The-BWC-Compliance-Transparency-and-Confidence-.pdf$ 

<sup>&</sup>lt;sup>4</sup> http://www.hsfk.de/PRIF-Reports.890.0.html

<sup>&</sup>lt;sup>5</sup> http://www.sussex.ac.uk/Units/spru/hsp/Reports%20from%20Geneva/HSP%20Reports%20from%20 Geneva%20no.%2038.pdf

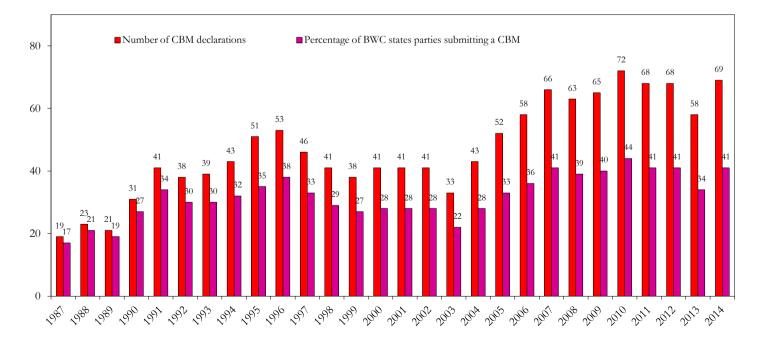
CBM annually for the last 10 years and 32 countries have submitted a CBM only once or twice since 1987.

## First-time submission in 2014: Algeria

**CBM submissions in 2014** (States in bold made their CBM available to the public):

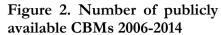
1.	Albania	15.	Colombia	29.	India	44.	Malta	58.	Singapore
2.	Algeria	16.	Croatia	30.	Iraq	45.	Mexico	59.	Slovakia
3.	Argentina	17.	Cuba	31.	Ireland	46.	Netherlands	60.	Slovenia
4.	Australia	18.	Cyprus	32.	Italy	47.	New	61.	South Africa
5.	Austria	19.	Czech	33.	Japan		Zealand	62.	Spain
6.	Azerbaijan		Republic	34.	Jordan	48.	Norway	63.	Sweden
7.	Belarus	20.	Denmark	35.	Kenya	49.	Poland	64.	Switzerland
8.	Belgium	21.	Ecuador	36.	Kyrgyzstan	50.	Portugal	65.	Turkey
9.	Brazil	22.	Estonia	37.	Latvia	51.	Qatar	66.	Ukraine
10.	Brunei	23.	Finland	38.	Lebanon	52.	Rep. Korea	67.	UK
	Darussalam	24.	France	39.	Lybia	53.	Rep. Moldova	68.	USA
11.	Bulgaria	25.	Georgia	40.	Liechtenstein	54.	Romania	69.	Uzbekistan
12.	Canada	26.	Germany	41.	Lithunia	55.	Russia		
13.	Chile	27.	Greece	42.	Luxembourg	56.	Senegal		
14.	China	28.	Hungary	43.	Malaysia	57.	Serbia		

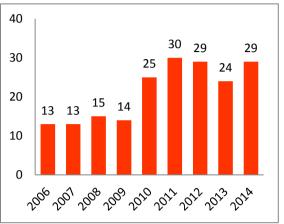
Figure 1. CBM submissions per year between 1987 and 2014 (Numbers in this figure differ from numbers provided by the Implementation Support Unit. This is due to differences in counting states that where formerly part of other states, such as the former republics of the Soviet Union. This figure provides the actual number of CBM declarations submitted in the respective year.)



## Publicly available CBMs in 2014

As of 27 November 2014, 29 countries have made their 2014 CBM declarations publicly available, a notable increase compared to previous years. 23 of the 29 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, Finland, Germany, Japan, Latvia, Lithuania, Netherlands, New Zealand, Norway, Portugal, Romania, Republic of Sweden, Switzerland, Turkey, Moldova, United Kingdom and the USA. Six States provided their CBM directly to the Hamburg Research Group: Croatia, Hungary, Liechtenstein, Luxembourg, Serbia and Slovakia.





Only in 2011 more States have made their CBM public. Since 2010 the number of public CBMs has stabilised.

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

Country	2006	2007	2008	2009	2010	2011	2012	2013	2014
Albania					x				
Australia	Х	х	х	х	x	х	х	х	х
Austria				х	х	х	х	X	
Bangladesh			х						
Belgium						х	x	х	x
Brazil					х				
Bulgaria		х	х		х	х	х	х	х
Canada						х	х	х	х
Croatia	Х								х
Cyprus						х	х		
Czech Republic	Х			х	х	X	X	х	х
Denmark		X	х		X	X	X		X
Ecuador						X			
Estonia					х	X		х	
Finland	Х	X	х	х	X	X	x	X	х
Georgia				x	x	x			
Germany	х	х	х	X	X	X	х	х	х
Greece						X	X	X	
Hungary									X
Japan							X	X	X
Ireland	х	X	x	X	X	X	А		A
Latvia	X	А	А	X	А	X	x	x	x
Lichtenstein	Λ	х	x	X	x	X	л	X	X
Lithuania	X	X	X	X	X	X	X	X	X
Luxembourg	Λ	A	Λ	A	A	л		л	X
Madagascar							x		л
Malaysia	X					X	л		
Netherlands						А		x	x
New Zealand	X	X	X		x	X	x	X	X
Norway	Λ	Λ	X		X	X	X	X	л
Poland			А		X	А	А	А	
Portugal					X	X	x	X	X
Quatar					л	л	X	X	л
Repuclic of Moldova							X	X	X
Romania			x	x	x	X	X	X	X
Serbia			Λ	л	л	л	X	л	X
Slovakia							л		X
Slovenia									X
Senegal					x				Λ
Slovakia		X			Λ				
Sweden	х	X	x	x	x	x	x	x	x
Switzerland	X	X	X	X	X	X	X	X	X
Thailand	Λ	Λ	Λ	Λ	X	X	X	Λ	Λ
Turkey					Х				37
United Kingdom	X7	v	v	v	v	X	X	v	X
Ukraine	Х	X	X	X	X	X	X	X	X
USA					**	X	X	**	**
	12	12	15	14	X 25	X 20	X 20	X 24	X 20
Total	13	13	15	14	25	30	29	24	29

## Table 1. Countries that made their CBM declarations publicly available, 2006-2014

As shown in Table 1 above, the number of states making their CBM declarations publicly available is all about the same. 40 countries have done so 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 2014 CBM declarations

A summary of the data declared in the 29 publicly available CBMs of 2014 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 2014, four of which were partially or wholly funded by ministries of defence. 19 of the 29 countries making their 2014 CBM publicly available declared having a biodefence programme; they provided information on 67 biodefence facilities. And lastly, thirteen unusual disease outbreaks and 74 vaccine production facilities were declared in the 29 publicly available CBMs of 2014.

Table 2. Summary	of data in	publicly available	e CBM declarations, 201	4
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Form A, part 1: Form A, part 2 (i):	Number of maximum biological containment facilities (BSL-4 or equivalent) declared. 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.
NN:	"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	1	no/no	3
Austria	0	yes	1	0	no/no	0
Belgium	ND	yes	4	1	ND	1
Bulgaria	0	yes	1	ND	no/no	1
Canada	2	yes	2	2	yes/yes	12
Croatia	ND	no	0	ND	no / no	1
Czech Republic	2	no	2	ND	NN	5
Denmark	0	yes	1	ND	no/yes	2
Finland	0	yes	1	ND	ND	ND
Germany	31	yes	5	1	NN	5
Hungary	1	yes	1	0	no / no	1
Japan	2	yes	1	ND	NN	7
Latvia	0	yes	1	ND	NN	ND
Liechtenstein	NN	no	NN	0	NN	NN
Lithuania	0	no	ND	0	no/no	NN
Luxembourg	0	no	0	0	no / no	0
Netherlands	0	yes	1	0	no/yes	8
New Zealand	0	no	ND	NN	no/no	ND
Portugal	0	yes	1	ND	ND	1
Republic of Moldova	0	yes	1	0	NN	ND
Romania	0	NN	1	ND	ND	4
Serbia	0	no	0	0	no/no	1
Slovakia	ND	no	ND	ND	ND	ND
Slovenia	0	no	0	ND	ND	0
Sweden	1	yes	2	0	no/no	1
Switzerland	2	yes	13	0	no/yes	1
Turkey	0	yes	2	0	no/no	7
United Kingdom	83	yes	1	0	yes/yes	3
USA	7	yes	24	8	NN	10

<sup>1</sup> Includes one maximum containment facility not suitable for work with human pathogens.

<sup>2</sup> The BSL-4 unit is approved for diagnostic purposes only.

<sup>3</sup> Includes three animal pathogen maximum containment facilities designated SAPO (Specified Animal Pathogens Order).

#### **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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## ANNEX TO THE HRG's 2014 READER ON PUBLICLY AVAILABLE CBMs

The following table summarizes the data declared in **CBM Form A, part 1**, of the publicly available CBM submissions from 2014 and compares them with the information in publicly available CBMs from 2006 to 2013. 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. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0. "NN" indicates that the state ticked the "Nothing new to declare" box in Form 0.

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	MoD funded in 2014?
	1. Australian Animal Health Laboratory (Geelong)	BL4	х	х	х	х	х	х	х	х	х	no
	2. National High Security Quarantine Laboratory (North Melbourne)	BL4	х	х	х	х	х	х	х	х	х	no
Australia	3. Queensland Health and Forensic Scientific Services (Cooper Plains)	BL4	х	х	х	х	х	х	х	х	х	no
	4. Emerging Infectious Disease and Biohazard Response Unit (Westmead)	BL4	-	-	х	х	х	х	х	х	х	no
Austria	1. Federal Ministry of Defence and Sports/Div NBC & Environmental Protection Technology (Vienna)	BL3				х	х	Х	х	х	х	wholly
Belgium	Nothing to declare	n.a.						ND	ND	ND	ND	n.a.
	1. National Center of Infectious and Parasitic Diseases (Sofia)	BL3		Х	х		х	х	х	Х	х	no
Bulgaria	2. National Diagnostic and Research Veterinary Medical Institute (Sofia)	BL3		-	-		х	х	-	-	-	n.a.
Canada	1. National Microbiology Laboratory (Winnipeg)	BL4						X	х	х	-	n.a.
Canada	2. National Centre for Foreign Animal Disease (Winnipeg)	BL4						X	х	х	-	n.a.
Croatia	Nothing new to declare	n.a.									ND	n.a.
Cyprus	Nothing new to declare	BL2						ND	n.a.			n.a.
	1. State Veterinary Institute (Jihlava)	BL3	-			-	х	х	-	NN	-	n.a.
	2. State Veterinary Institute (Lysolaje)	BL3	-			-	-	х	-	NN	-	n.a.
	3. Tekro, spol.s.r.o. (Uničov)	BL3	-	1		-	х	х	-	NN	-	n.a.
Czech Republic	4. Collection of Animal Pathogenic Microorganisms (Brno)	BL3	х			х	-	-	-	NN	-	n.a.
Ozech Kepublic	5. Institute of Molecular Pathology (Hradec Králové)	BL3	х			х	-	х	-	NN	-	n.a.
	6. Central Military Health Institute, Department Těchonín (Těchonín)	BL4	х			х	-	х	х	NN	х	n.a.
	7. Central Military Health Institute, Department Prague (Prague)	BL2	-			-	-	х	-	NN	-	n.a.
	8. Laboratory for Biological Monitoring and Protection (Milin)	BL4	Х			х	-	х	х	NN	х	n.a.

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	MoD funded in 2014?
	9. Laboratory of Molecular Biology (Hradec Králové)	BL2	х			х	-	-	-	NN	-	n.a.
	10. Division of Infectious Diseases, Department of Infectious Diseases and Epizootology, Faculty of Veterinary Medicine (Brno)	BL3	X			х	-	х	-	NN	-	n.a.
	11. National Institute of Public Health; Centre of Epidemiology and Microbiology (Šrobárova)	BL3	-			-	-	х	-	NN	-	n.a.
	12. Bioveta, a.s. (Ivanovice na Hané)	BL3	-			-	-	х	-	NN	-	n.a.
	1. Centre for Biosecurity and Biopreparedness (Copenhagen)	BL2		х	х		х	-	ND		х	no
	2. Anonymous larger university in Denmark (no location provided)	BL3		-	-		-	х	ND		-	n.a.
Denmark	3. TB Vaccine Research (Copenhagen)	BL3		-	-		-	х	ND		-	n.a.
Demnark	4. QC Bio (Copenhagen)	BL3		-	-		-	х	ND		-	n.a.
	5. International Reference Laboratory of Mycobacteriology (Copenhagen)	BL3		-	-		-	х	ND		-	n.a.
Ecuador	Nothing to declare	n.a.						ND				n.a.
Estonia	Nothing to declare	n.a.					ND	ND				n.a.
	1. Centre for Biothreat Preparedness (Helsinki)	BL3	х	х	х	х	х	х	х	х	х	partly
	2. National Institute for Health and Welfare, Bacteriological and Virological Lab (Helsinki, Turku)	BL3	х	x	х	х	х	х	х	х	х	no
	3. Yersinia Research Laboratory (Helsinki, Turku)	BL2	х	х	х	х	х	х	х	х	х	partly
	4. Department of Virology, University of Helsinki (Helsinki)	BL3	х	х	х	х	х	х	х	х	х	partly
Finland	5. Institute of Biotechnology (Helsinki)	BL3	-	-	-	-	-	-	-	х	-	n.a.
	6. Finnish Food Safety Authority (Helsinki)	BL3	-	х	х	х	х	х	х	х	х	no
	7. The Defence Forces Research Agency (DFRA) (Lakiala)	BL3	-	х	х	х	х	х	х	х	х	wholly
	8. Department of Food and Environmental Sciences (Helsinki)	BL3	-	-	-	-	-	-	-	-	х	no
	9. Clostridium botulinum laboratory (Helsinki)	BL2	-	-	-	-	-	-	-	-	Х	no
Coordia	1. National Center for Disease Control and Public Health (Tbilisi)	BL2				х	Х	Х		_	_	no
Georgia	2. Laboratory of Ministry of Agriculture of Georgia (Tbilisi)	BL2				-	х	х				no
Germany	1. Bernhard-Nocht-Institut für Tropenmedizin (Hamburg)	BL4	х	х	Х	x	х	х	х	х	х	no

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	MoD funded in 2014?
	2. Friedrich-Loeffler-Institut, Federal Research Institute for Animal Health (Insel Riems)	BL4 <sup>1</sup>	х	х	х	х	х	X	X	X	x	no
	3. Institut für Virologie der Philipps Universität Marburg (Marburg)	BL4	х	х	х	х	х	х	х	х	х	partly
	1. University of Crete School of Medicine(Heraklion)	BL3						X	NN	NN		-
	2. Kapodistrian University of Athens School of Medicine (Athens)	BL3						х	NN	NN		-
Carrier	3. Aristotelian University of Thessaloniki (Thessaloniki)	BL3						х	NN	NN		-
Greece	4. Infectious Diseases Hospital(Thessaloniki)	BL3						х	NN	NN		-
	5. Hellenic Pasteur Institute(Athens)	BL3						х	NN	NN		-
	6. Athens School of Public Health (Athens)	BL3						х	NN	NN		-
Hungary	1. National Center for Epidemiology (Budapest)	BL4									х	no
Ireland	1. National Virus Reference Laboratory, University College Dublin (Dublin)	BL3+	х	x	х	x	х	х				n.a.
Ireland	2. Public Health Laboratory (Dublin)	BL3	х	х	х	х	х	х				n.a.
Japan	1. Murayama Annex of National Institute of Infectious Diseases (Tokyo)	BL4							х	х	х	no
	2. Riken Tsukuba Institute (Ibaraki)	BL4							-	х	х	no
÷ .	1. National Microbiology Reference Laboratory (Riga)	BL3						х	х	х	х	no
Latvia	2. Centre for Disease Prevention and Control of Latvia (Riga)	-						-	х	-	-	n.a.
Liechtenstein	Nothing new to declare	-		NN	NN	NN	NN	NN		NN	NN	n.a.
	1. Microbiological laboratory of Vilnius Public Health Centre (Vilnius)	BL3	X	х	х	х	х	-	-	-	-	n.a.
	2. Laboratory of Centre for Communicable Diseases (Vilnius)	BL2	х	х	х	х	х	-	-	-	-	n.a.
Lithuania	3. National Food and Veterinary Risk Assessment Institute (Vilnius)	BL3	х	х	х	х	х	х	х	х	х	no
	4. National Public Health Surveillance Laboratory (Vilnius)	BL3	-	-	-	-	-	х	х	х	х	no
Luxembourg	1. Laboratoire national de santé (Dudelange)	n.a.									X	no
Madagascar	-	-							-			n.a.
Malaysia	1. Biotechnology Research Institute, Universiti Malaysia Sabah (Kota Kinabalu)	BL3	-					x				n.a.

<sup>&</sup>lt;sup>1</sup> Maximum 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. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	MoD funded in 2014?
	2.Medical Laboratories for Medical Microbiology, Parasitology and Virology, University of Putra Malaysia (Serdang)	BL2	-					X				n.a.
	3. Institute of Systems Biology, Universiti Kebangsaan (Bangi)	BL2	-					X				n.a.
	4. Veterinary Research Institute (Ipoh)	BL3	-					X				n.a.
	5. Science and Technology Research Institute for Defence (Kajang))	"normal"	х					-				n.a.
	1. TNO Department of CBRN Protection	BL3								Х	-	n.a.
Netherlands	2. National Institute for Public Health and the Environment (Bilthoven)	BL3								x	х	no
New Zealand	National Centre for Biosecurity and Infectious Disease(Upper Hutt)	BL3+	Х	х	Х		Х	х	х	-	ND	n.a.
Norway	Institute of Microbiology, Armed Forces Medical Services (Oslo)	BL3			х		Х	х	х	Х		n.a.
	1. Laboratório de Bromatologia e Defensa Biológica (Lisbon)	BL3					х	Х	х	-	-	n.a.
	2. Unidade de reposta a Emergências e Biopreparação (Lisbon)	BL3					х	х	-	-	-	n.a.
	3. Departamento de Docnças Infecciosas (Lisbon)	BL3					-	-	х	х	х	no
De ster e el	4. Laboratõrio Nacional De Investigação Veterinaria (Lisbon)	BL3					-	-	х	х	-	n.a.
Portugal	5. Unidade de reposta a Emergências e Biopreparação (Braga)	BL3					-	-	-	х	-	n.a.
	6. Instituto Nacional de Investigação Agrária e Veterinária (Lisbon)	BL3					-	-	-	-	х	no
	7. University of Minho (Braga)	BL3					-	-	-	-	х	no
	8. Universidade de Lisboa (Lisbon)	BL3					-	-	-	-	х	no
Quatar	Nothing new to declare	-							ND			n.a.
Republic of	1. National Center for Public Health (Chisinau)	BL3							х	NN	NN	n.a.
Moldova	2. Republican Center for Veterinary Diagnostics (Chisinau)	BL2							х	NN	NN	n.a.
	1. Laboratory of Microbiology and Epidemiology, Military Medical Research Center (Bucharest)	BL2			NN	x	NN	x	x	x	-	wholly
Romania	2. Pasteur Institute (Bucharest)	BL2			NN	-	NN	-	-	-	х	no
	3. Institute for Hygiene and Veterinary Public Health (Bucharest)	BL3			NN	-	NN	-	-	-	х	no
Serbia	Nothing to declare	n.a.							ND		ND	n.a.
Slovakia	Nothing to declare										ND	n.a.
Slovenia	Nothing to declare										ND	n.a.

Country	Name and location of facilities declared in CBM Form A, part 1	Cont. level	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	MoD funded in 2014?
	1. Swedish Defence Research Agency Division of NBC Defence (Umeå)	BL3	х	х	х	х	х	х	-	-	-	n.a.
Sweden	2. Säkerhetslaboratorium, Swedish Institute of Infectious Disease Control (Solna)	BL4	х	х	x	х	х	х	х	х	x	no
	3. National Veterinary Institute (Uppsala)	BL3	Х	х	х	х	х	х	-	-	-	n.a.
	1. Labor Spiez (Spiez)	BL3	NN	NN	NN	NN	х	х	х	х	х	partly
Switzerland	2. Institue of Virology and Immunoprophylaxis (Mittelhäusern)	BL3	NN	NN	NN	NN	х	х	х	х	х	no
Switzerland	3. National Reference Center for Emerging Viral Infections (Geneva)	BL4	NN	NN	NN	NN	Х	х	х	х	х	no
	4. Institut für Medizinische Virologie (Zürich)	BL4	NN	NN	NN	NN	-	-	-	-	х	no
Thailand	Nothing new to declare	-					NN	NN	NN			-
,	1. Ankara University Biotechnology Institute (Ankara)	BL2						х	х		-	n.a.
	2. Refik Saydam National Public Health Agency (Ankara)	BL3						х	-		-	n.a.
Turkey	3. Bornova Veterinary Control and Research Institute (Ankara)	BL3						х	-		-	n.a.
	4. Diagnosis of Poultry Disease Laboratory (Ankara)	BL3						х	 	-	n.a.	
	5. Biosafety Level-3 Laboratory Institute	BL3						-	х		-	n.a.
	1. Governmental Scientific Oversight Institute for Biotechnology and Microorganism Culture Collection (Kiev)	_2						х	x			n.a.
	2. Mechnikov Institute for Microbiology and Immunology (Charkov)	_3						х	х			n.a.
	3. Gromaschevsky Institute for Epidemiology and Infectious Diseases (Kiev)	_4						х	X			n.a.
Ukraine	4. Mechnikov Scientific Research Anti-Plague Institute (Odessa)	BL3						х	х			n.a.
	5. Central Sanitary Epidemiological Station (Kiev)	BL3						х	х			n.a.
	6. Lvov Scientific Research Institute for Epidemiology and Hygiene (Lvov)	BL3 <sup>5</sup>						х	х			n.a.
	7. Anti-Plague Station (Simferopol)	BL3						х	х			n.a.

<sup>&</sup>lt;sup>2</sup> Ukraine declared four units with an overall floorspace of 780 sqm, without indicating the containment level.
<sup>3</sup> BL4 does not exist; highest level of containment is not indicated (until 2011); BL3 and BL4 do not exist (2012).
<sup>4</sup> BL4 does not exist; highest level of containment is not indicated.
<sup>5</sup> Until 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. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014	MoD funded in 2014?
	8. Institute for Experimental and Clinical Veterinary Medicine (Charkov)	BL2						-	х			n.a.
	9. Institute for Veterinary Medicine (Kiev)	_6						-	х			n.a.
	1. Defence Science and Technology Laboratory (Porton Down, Salisbury)	BL4	х	х	х	х	х	х	х	х	х	wholly
	2. Public Health England (Colindale, London)	BL4	х	х	Х	х	х	х	х	х	х	no
	3. Public Health England (Porton)	BL4	х	х	Х	х	х	х	х	-	х	no
United	4. National Institute for Biological Standards and Control (Potters Bar)	BL4	х	х	х	х	х	х	х	х	х	no
Kingdom	5. National Institute for Medical Research (London)	BL4	х	х	х	х	х	х	х	х	х	no
	6. The Pirbright Institute (Pirbright)	BL4	-	-	-	-	-	-	-	х	х	no
	7. Veterinary Laboratories Agency (Addlestone)	SAPO47	х	х	Х	х	х	х	х	х	х	no
	8. Institute for Animal Health, Pirbright Laboratory (Woking)	SAPO4 <sup>8</sup>	х	х	Х	х	х	х	х	-	-	n.a.
	9. Merial Animal Health (Pirbright)	SAPO48	-	-	х	х	х	х	х	х	х	no
	10. Schering-Plough Animal Health (Uxbridge)	SAPO48	-	-	х	-	-	-	-	-	-	n.a.
	1. Viral Immunology Center, Georgia State University (Atlanta, GA)	BL4					Х	х	х	Х	х	no
	2. The Betty Slick and Lewis J. Moorman, Jr. Laboratory Complex (San Antonio, TX)	BL4					х	x	х	х	х	partly
	3. Galveston National Laboratory (Galveston, TX)	BL4					Х	х	х	х	х	partly
	4. Plum Island Animal Disease Center (Greenport, TX)	BL3					х	х	-	-	-	n.a.
USA	5. U.S. Army Medical Research Institute of Infectious Diseases (Fort Detrick, MD)	BL4					х	х	х	х	х	wholly
	6. National Biodefense Analysis and Countermeasures Center (Fort Detrick, MD)	BL4					-	-	х	х	х	no
	7. National Institutes of Health (NIH) - NIAID-Rocky Mountain Laboratories (Hamilton, MT)	BL4					-	-	x	х	х	no
	8. Coordinating Center for Infectious Diseases (Atlanta, GA)	BL4					х	-	-	-	-	n.a.
	9. CDC, Office of Infectious Diseases (Atlanta, GA)	BL4					-	-	х	х	х	no

 <sup>&</sup>lt;sup>6</sup> Ukraine declared four units with an overall floorspace of 780 sqm, without indicating the containment level.
 <sup>7</sup> Specified Animal Pathogens Order.

The following table summarizes the data declared in **CBM Form A, part 2 (ii) and (iii)** of the publicly available CBM submissions from 2014 and compares them with the information in publicly available CBMs from 2006 to 2013. 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 no data were provided.

Country		1	Fotal f	fundir	ng in n	nillion	EUR	8		Name and location of biodefence facilities declared ir CBM Form A, Part 2 (iii)	1								
	2006	2007	2008	2009	2010	2011	2012	2013	2014		Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
Australia	1.2	1.5	1.6	1.9	1.7	1.7	2.0	2.0	2.0	Biological Defence Research, Land Division, DSTO (Fishermans Bend)	х	х	х	х	х	х	х	х	х
Austria				0.01	0.03	0.05	0.03	0.02	0.09	Armament and Defence Technology Agency (Mödling)				х	х	х	х	х	х
										1. Centre de Technologies Moléculaires Appliquées (Brussels)						х	х	х	х
Bolgium						0.6	1.0	0.3	0.3	2. Université Catholique de Louvain (Louvain-La-Neuve)						х	х	х	х
Belgium						0.0	1.0	0.5	0.5	3. Defense Laboratory Department (Vilvoorde)						х	х	х	х
										4. Research Laboratory for Vector Borne Disease (Brussels)						х	-	1	-
Bulgaria		-	-		-	-	NN	NN	NN	National Center of Infectious and Parasitic Diseases, Ministry of Health (Sofia)		x	х		х	х	х	х	x
Canada						6.0+	3.9 <sup>9</sup>	6.9	810	1. Defence R&D Canada (Suffield)						х	х	х	x
Callada						0.01	5.9	0.9	0	2. Defence R&D Canada (Valcartier)						х	х	х	х
Croatia									ND	Nothing to declare									ND
Cyprus						ND	ND			Nothing to declare						ND	ND		
Czech Rep.					_		_	_	-	1. Central Military Health Institute, department Těchonin (Těchonin)	-			-	-	х	х	-	ND
Ozeen Kep.										2. Central Military Health Institute, department Prague (Prague)	-			-	-	х	х	х	ND

<sup>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> It is estimated that in 2011/2012, the amount spent on the Canadian biological defence program was \$5,039,000.

<sup>10</sup> Funding within the Canadian Safety and Security Program (CSSP), investment in biological related projects is estimated to be \$100M over ten years.

Country		1	<b>Fotal</b> :	fundir	ng in n	nillion	EUR	8		Name and location of biodefence facilities declared in CBM Form A, Part 2 (iii)	n								
	2006	2007	2008	2009	2010	2011	2012	2013	2014		Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
			1							3. Institute of Molecular Pathology (IMP) (Hradec Králové)	-			-	-	х	x	х	ND
										4. Laboratory for biological monitoring and protection (Milín)	-			-	-	х	х	-	ND
Denmark		1.9	2.0		2.9	2.8	2.7		2.6	Centre for Biosecurity and Biopreparedness (Copenhagen)		х	x		х	х	x		х
Ecuador						ND				Nothing to declare						ND			
Estonia					ND	ND				Nothing to declare					ND	ND		n.a.	
Finland	-	-	-	-	-	-	-	-	-	Centre for Biothreat Preparedness (Helsinki)	x	x	x	x	x	х	x	x	х
										1. National Center for Disease Control and Public Health (Tbilisi)				x	х	х			
Georgia				0.3	1.7	1.6				2. Laboratory of Ministry of Agriculture of Georgia (Tbilisi)				-	x	x			
										1. NBC-Defence and Self-Protection School of the Bundeswehr (Sonthofen)	x	x	x	x	x	x	x	x	х
										2. Bundeswehr Institute of Microbiology (Munich)	х	х	х	x	х	х	х	х	х
Germany	12.9	11.7	11.2	8.4	9.9	9.5	9.1	9.1	9.2	3. Federal Armed Forces Scientific Institute for Protection Technologies (Munster)	х	х	х	х	х	х	х	х	х
										4. Central Institute of the Bundeswehr Medical Service (Kiel)	-	-	х	х	-	х	х	х	х
										5. Centre for Biological Threats and Special Pathogens at the Robert Koch Institute(Berlin)	-	-	-	-	-	-	-	-	х
Greece						ND	ND	ND		Nothing to declare						ND	ND	ND	
Hungary									-	1. Medical Centre of Hungarian Defence Forces (Budapest)									х
Ireland	-	-	-	-	-	-				"no national programme to conduct biological defence R & D"	-	-	-	-	-	-			
Japan							1.1	2.3	2.5	1. Military Medicine Research Unit, Test & Evaluation Command (Tokyo)							х	х	х
Latvia						-	-	-	-	1. Latvian Centre of Infectious Diseases (Riga)						х	х	х	х
Liechtenstein		NN	NN	NN	NN	NN				Nothing new to declare		NN	NN	NN	NN	ND		NN	NN
Lithuania	ND	ND	ND	ND	ND	ND	ND	ND	ND	Nothing to declare	ND								
Luxembourg									ND	Nothing to declare									ND
Madagascar							ND			Nothing to declare							ND		
Malaysia	ND					ND				Nothing to declare	ND					ND			

Country			<b>Fotal</b> :	fundir	ng in n	nillion	EUR	8		Name and location of biodefence facilities declared ir CBM Form A, Part 2 (iii)	1								
	2006	2007	2008	2009	2010	2011	2012	2013	2014		Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
Netherlands								1.2	1.211	1. TNO Prins Maurits Building Department of CBRN Protection (Rijswijk)								х	х
New Zealand	ND	ND	ND		ND	ND	ND	ND	ND	Nothing to declare	ND	ND	ND		ND	ND	ND	ND	ND
Norway			-		-	-	0.5	-		1. Institute of Microbiology, Armed Forces Medical Services (Oslo)			x		х	x	x	x	
Portugal					0.2	0.2	0.1	0.03	0.05	1. Laboratório de Bromatologia e Defensa Biológica (Lisbon)					x	х	х	х	х
Quatar							ND			Nothing to declare							ND		
Republic of Moldova						0.02	0.02	0.04	0.03	1. The National Center of Public Health (Chisinau)						x	x	x	x
Romania			-	NN	NN	-	0.01	0.01	ND	Military Medical Research Center (Bucharest)			x	NN	NN	х	x	х	ND
Serbia							ND		ND	Nothing to declare							ND		ND
Slovakia									ND	Nothing to declare									ND
Slovenia									ND	Nothing to declare									ND
0 1	2.0	2.0	0.7	0.7	2.4	25	0.7		40.4	Swedish Defence Research Agency (Umea)				x	x	x	x	x	х
Sweden	2.8	2.8	2.7	2.7	3.1	3.5	3.7	6.6	10.1	National Veterinary Institute (Uppsala)				-	-	-	-	х	х
										1. Spiez Laboratory, Swiss NBC Defence Establishment (Spiez)	х	х	х	х	х	х	х	х	х
										2. Institue of Virology and Immunoprophylaxis (Mittelhäusern)	-	-	-	-	х	х	х	х	х
										3. National Reference Center for Emerging Viral Infections (Geneva)	-	-	-	-	х	х	х	х	х
										4. National Reference Center for Anthrax (Bern)	-	-	-	-	х	х	х	х	х
										5. Bacteriological Laboratory Regional Competence Center- Regional Laboratory West (Geneva)	-	-	-	-	х	x	x	x	x
Switzerland	0.6	0.6	0.6	1.0	1.7	3.9	4.2	4.1	4.1	6. Virological Laboratory Regional Competence Center- Regional Laboratory West (Geneva)	-	-	-	-	х	х	x	х	х
Switzenand	0.6	0.6	0.6	1.0	1./	5.9	4.2	4.1	4.1	7. Diagnostic Laboratories of the Institute of Microbiology- Regional Competence Center- Regional Laboratory West (Lausanne)	-	-	-	-	x	x	x	x	х
										8. Labor Spiez- Regional Competence Center- Regional Laboratory West Central (Spiez)	-	-	-	-	х	х	х	х	х
										9. Department of Medical Micobiology- Regional Competence Center- Regional Laboratory East Central (Luzern)	-	-	-	-	x	х	x	х	х
										10. Institute of Medical Microbiology – Regional Competence Center- Regional Laboratory East (Zurich)	-	-	-	-	x	x	x	x	x

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

Country		r -	<b>Fotal</b> 1	fundir	ng in n	nillion	EUR	8		Name and location of biodefence facilities declared in CBM Form A, Part 2 (iii)	l								
·	2006	2007	2008	2009	2010	2011	2012	2013	2014		Decl. 2006	Decl. 2007	Decl. 2008		Decl. 2010		Decl. 2012		Decl. 2014
										11. Institute for Medical Virology- Regional Competence Center- Regional Laboratory East (Zurich)	-	-	-	-	х	х	x	x	x
										12. Cantonal Laboratory of Basel-Stadt- Regional Competence Center- Regional Laboratory North (Basel)	-	-	-	-	х	х	х	x	х
										13. Cantonal Institute of Microbiology- Regional Competence Center- Regional Laboratory South (Bellinzona)	-	-	-	-	x	x	x	x	x
Thailand					NN	NN	NN			Nothing new to declare					NN	NN	NN		
771						2.3	NN		1.7	1. IDC (Ankara)						х	NN		x
Turkey						2.5	ININ		1./	2. Refik Saydam National Public Health Agency (Ankara)				1		х	NN		x
Ukraine						-	-			"A national programme for research and development in biodefence does not exist in Ukraine." "The Institute for Experimental and Clinical Veterinary Medicine conducts research into standard operating procedures for biosecurity and biodefence." (2012) ( <i>Authors translation</i> )						-	-		
UK	73.6	75.0	77.6	65.7	53.6	57.8	62	60.1	59.1	Defence Science and Technology Laboratory (Porton Down, Salisbury)	х	x	x	x	x	x	x	х	х
										1. Plum Island Animal Disease Center (Greenport, TX)					х	х	х	х	x
										2. Tyndall AFB, Research Road (Tyndall, FL)					х	х	х	х	-
										3. Tyndall AFB, Barnes Drive (Tyndall, FL)				1	х	х	х	х	-
										4. Lothar Salomon Life Sciences Test Facility (Dugway, UT)					х	х	х	-	-
										5. U.S. Army Edgewood Chemical and Biological Center (Aberdeen, MD)					х	х	х	х	x
										6. U.S. Army Medical Research Institute of Chemical Defense (Aberdeen, MD)					х	х	х	х	x
										7. U.S. Army Medical Research Institute of Infectious Diseases (Fort Detrick, MD)					х	x	x	х	x
										8. Walter Reed Army Institute of Research (Silver Spring, MD)					х	х	х	-	-
USA					451.6	475.2	779	743	670	9. Battelle Biomedical Research Center (West Jefferson, OH)					х	x	-	-	-
										10. Naval Surface Warfare Center – Dahlgren Division (Dahlgren, VA)					х	х	х	-	х
										11. Naval Research Laboratory (Washington, DC)					х	х	х	х	х
										12. Naval Medical Research Center (Silver Springs, MD)					х	х	х	х	х
										13. Brookhaven National Laboratory (Upton, NY)					х	х	х	х	x
										14. Idaho National Laboratory (Idaho Falls, ID)					х	X	X	х	-
										15. Los Alamos National Laboratory (Los Alamos, NM)					X	X	X	X	X
										16. Lawrence Livermore National Laboratory (Livermore, CA)					X	х	X	х	х
										17. Oak Ridge National Laboratory (Oak Ridge, TN)					х	-	-	-	

Country		]	Fotal f	fundin	ng in n	nillion	EUI	R <sup>8</sup>		Name and location of biodefence facilities declared i CBM Form A, Part 2 (iii)	n								
	2006	2007	2008	2009	2010	2011	2012	2013	2014		Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
										18. Pacific Northwest National Laboratory (Richland, WA)					х	x	х	х	х
										19. Sandia National Laboratories (Albuquerque, NM)					х	х	х	х	х
										20. C.W Bill Young Center for Biodefense and Emerging Infectious Diseases (Bethesda, MD)					x	х	х	x	х
										21. Integrated Research Facility- Rocky Mountain laboratories (Hamilton, MT)					х	х	х	х	х
										22. Dale and Betty Bumpers Vaccine Research Center (Betesda, MD)					х	х	х	х	х
										23. Coordinating Center for Infectious Diseases (Atlanta, GA)					х	х	-	-	-
										24. Division of Vector-borne Infectious Diseases, CDC (Fort Collins, CO)					х	х	х	х	x
										25. Mass Spectrometry Toxin Laboratory, CDC (Atlanta, GA)					х	х	-	-	-
										26. Foreign Disease-Weed Science Research Unit (Fort Detrick, MD)					х	х	х	х	x
										27. National Animal Disease Center (Ames, IA)					х	х	х	х	x
										28. Southeast Poultry Research Laboratory (Athens, GA)					х	х	х	х	х
										29. National Biodefense Analysis and Countermeasures Center (Fort Detrick, MD)					-	х	х	x	х
										30. Office of Infectious Diseases, CDC (Atlanta, GA)					-	х	х	x	х
										31. Lawrence Berkeley National Laboratory (Berkeley, CA)					-	-	х	х	-
										32. National Center for Environmental Health (Atlanta, GA)					-	-	х	х	x
										33. Air Force Research Laboratory (Wright-Patterson Air Force Base, OH)					-	-	-	x	х
										34. Lothar Salomon Test Facility (Dugway, UT)					-	-	-	x	-
										35. Integrated Research Facility at Fort Detrick (Fort Detrick, MD)					-	-	-	-	x

The following table summarizes the data declared in **CBM Form G** of the publicly available CBM submissions from 2014 and compares them with the information in publicly available CBMs from 2006 to 2013. 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. "-" indicates that no data were provided.

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases <sup>12</sup>	Other diseases			Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
	1. CSL Limited (Parkville and Broadmeadows,)	no	yes	х	х	х	х	х	х	х	х	х
Australia	2. Q-Gen Ltd. (no location provided)	no	yes	-	-	-	х	х	х	-	-	NN
Australia	3. Ludwig Institute for Cancer Research (Heidelberg, VIC)	no	yes	-	-	-	х	х	х	х	х	NN
	4. Queensland Institute of Medical Research (Queensland)	no	no	-	-	-	-	-	-	х	х	NN
Austria	Nothing to declare	n.a.	n.a.				ND	ND	ND	ND	ND	ND
Datation	1. GlaxoSmithKline Biologicals S.A (Rixensart)	_13	_14						х	х	х	х
Belgium	2. Pfizer Animal Health (Louvain-la-Neuve)	_14	_14						х	-	-	-
D 1	1. BulBio- NCIPD Ltd (Sofia)	Haem fevers	yes		х	х		х	х	х	х	х
Bulgaria	2. National Diagnostic and Research Veterinary Medical Institute (Sofia)	Anthrax	yes		-	-		х	-	-	-	-
	1. Artemis Technologies Inc. (Guelph)	no	yes						х	х	х	х
	2. Bioniche Life Sciences Inc. (Belleville)	no	yes						х	х	х	х
	3. Gallant Custom Laboratories Inc. (Cambridge)	no	yes						х	х	х	х
	4. Pfizer Animal Health (Saanichton)	no	yes						X	х	х	-
	5. Novartis Animal Health Canada Inc. (Mississauga)	no	yes						х	х	х	х
	6. Novartis – Aqua Health (Charlottetown and Victoria)	no	yes						х	х	х	х
Canada	7. Nutratech Inc. (Winnipeg)	no	yes						х	х	х	х
	8. Saskatchewan Research Council (Saskatoon)	no	yes						х	х	х	-
	9. Saskatoon Colostrum Co. Ltd. (Saskatoon)	no	yes						х	х	х	х
	10. Vetcovac Ltée. (Saint-Hyacinthe)	no	yes						х	х	х	-
	11. Vetech Laboratories Inc. (Guelph)	no	yes						х	х	-	х
	12. Biovet Inc. (Saint-Hyacinthe)	no	yes						х	х	х	х
	13. Intervet Canada Corp. (Kirkland)	no	yes						х	х	-	-

<sup>&</sup>lt;sup>12</sup> As designated by the Centers for Disease Control and Prevention (CDC) in the USA.

<sup>&</sup>lt;sup>13</sup> This information is not provided in the public version of the CBM.

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases <sup>12</sup>	Other diseases	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
	14. Vétoquinol N.A. Inc. (Lavaltrie)	no	yes						х	х	-	-
	15. Vacci-Vet Inc. (Québec)	n.a.	yes						-	-	-	х
	16. ID Biomedical Corporation of Quebec (GlaxoSmithKline Inc.) (Quebec City)	n.a.	yes						-	-	х	х
	17. Sanofi Pasteur Limited (Toronto)	n.a.	yes						-	-	х	х
Croatia	1. Institute of Immunology	no.	Yes									х
Cyprus	Nothing to declare	n.a.	n.a.						ND	ND		
	1. Baxter BioScience s.r.o (Kostolec nad Černými Lesy)	no	yes	х			NN	ND	х	NN	NN	NN
	2. Sevapharma a.s. (Prague)	no	yes	х			NN	ND	х	NN	NN	NN
Czech Republic	3. Bioveta a.s. (Ivanovice nad Hané)	Anthrax	yes	х			NN	ND	х	NN	NN	NN
Republic	4. Dyntec s.r.o. (Terezín)	no	yes	х			NN	ND	х	NN	NN	NN
	5. BIOPHARMA, Research Institute of Biopharmacy and Veterinary Drugs (Jíluvé u Prahy)	no	yes	х			NN	ND	х	NN	NN	NN
Denmark	1. Statens Serum Institute (Copenhagen)	no	yes		х	х		NN	x	х		х
Deninark	2. Bavarian Nordic A/S (Kvistgard)	Smallpox	yes		х	х		NN	х	х		х
Ecuador	Nothing to declare	n.a.	n.a.						ND			
Estonia	Nothing to declare	n.a.	n.a.					ND	ND		n.a.	
Finland	Nothing to declare	n.a.	n.a.	NN	NN	NN	NN	NN	ND	ND	ND	ND
Georgia	Nothing to declare	n.a.	n.a.				ND	ND	ND			
	1. Novartis Vaccines and Diagnostics GmbH & Co. KG (Marburg)	Botulism	yes	х	х	х	х	х	х	х	NN	х
	2. GlaxoSmithKline Biologicals (Dresden)	no	yes	х	х	х	х	х	х	х	NN	х
<b>C</b>	3. IDT Biologika GmBH (Rosslau)	Smallpox	yes	х	х	х	х	х	х	х	NN	х
Germany	4. Rhein Biotech GmbH (Düsseldorf)	no	yes	-	-	-	-	х	х	х	NN	х
	5. Bavaria Nordic GmbH (Berlin)	Smallpox	no	-	-	-	-	x	х	х	NN	-
	6. Vibalogics GmbH (Cuxhaven)	no	yes	-	-	-	-	-	-	х	NN	х
Greece	Nothing to declare	n.a.	n.a.						ND	ND	ND	
Hungary	1. Omninvest Ltd. (Budapest)	No	yes									х
Ireland	1. Elanco Laboratories (Sligo) <sup>14</sup>	-	-	х	х	х	х	х	х			

<sup>&</sup>lt;sup>14</sup> Not currently active but maintains capacity to produce human or animal vaccines.

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases <sup>12</sup>	Other diseases	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
	1. Denka Seiken Co., Ltd (Tokyo)	no	yes							х	X	х
	2. Kitasato Daiichi Sankyo Vaccine Co., Ltd (Saitama)	no	yes							x	х	х
	3. Takeda Pharmaceutical co., Ltd (Osaka)	no	yes							х	х	х
Japan	4. Research Foundation for Microbial Diseases of Osaka University (Osaka)	no	yes							x	х	х
	5. Chemo-Sero-Therapeutic Research Institute (Kumamoto)	Smallpox	yes							х	х	Х
	6. Japan BCG Laboratory (Tokyo)	no	yes							x	х	х
	7. Japan Poliomyelitis Research Institute (Tokyo)	no	yes							х	х	х
Latvia	Nothing to declare	-	-						-	ND	ND	ND
Liechtenstein	Nothing new to declare	-	-		NN	NN	NN	NN	NN		NN	NN
Lithuania	Nothing new to declare	-	-	NN								
Luxembourg	Nothing to declare	-	-									ND
Madagascar	-	-	-			<u> </u>	Ī			-		
Malaysia	1. Institute of Veterinary Services (Putrajaya)	no	yes						х			
	1. Central Veterinary Institute, part of Wageningen UR (Lelystad)	no	yes								х	х
	2. MSD Animal Health (Boxmeer)	no	yes								х	х
	3. Nederlands Vaccin Instituut (Bilthoven)	no	yes								х	-
	4. WWP (Weesp)	no	yes								х	х
Netherlands	5. Boehringer Iugelheim Animal Health Operation (Weesp)	n.a.	n.a.								х	х
	6. Crucell Holland (Leiden)	no	yes								х	Х
	7. ErasmusMedical Centre (Rotterdam)	no	yes								-	х
	8. Bilthoven Biologicals B.V. (Bilthoven)	no	yes								-	х
	9. DSM Biologics (Groningen)	no	yes			<u> </u>	Ī				-	х
New Zealand	Nothing to declare	n.a.	n.a.	ND	ND	ND		ND	ND	ND	ND	ND
	1. Alpharma (Overhalla)	no	yes			х		x	х	х	х	
Norway	2. The National Veterinary Institute (Oslo)	no	yes			х		x	х	х	х	
	3. Norwegian Institute of Public Health (Nydalen)	no	yes			х		х	х	х	х	
Portugal	1. Genibet Biopharmaceuticals	no	yes					ND	ND	х	х	Х

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases <sup>12</sup>	Other diseases	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
Quatar	Nothing to declare	n.a.	n.a.							ND		
Republic of Moldova	Nothing to declare	n.a.	n.a.						ND	ND	ND	ND
	1. "Cantacuzino" National Institute of R&D for Microbiology and Immunology (Bucharest)	no	yes			-	-	х	NN	х	х	х
Romania	2. National Society Pasteur Institute S.A. (Bucharest)	no	yes			x	х	-	NN	х	х	х
Komama	3. S.C. Pasteur Filiala Filipești S.R.L (Prahova)	no	yes			-	-	-	-	-	х	х
	4. S.C. Romvac Company S.A. (Voluntari)	no	yes			-	-	-	-	-	х	х
Serbia	Institute of Immunology and Virology "Torlak" (Belgrad)	no	yes							х		х
Slovakia	Nothing to declare	n.a.	n.a.									ND
Slovenia	Nothing to declare	n.a.	n.a.									ND
	1. SBL Vaccin AB (Solna)	no	yes	х	х	х	х	х	х	-	NN	-
Sweden	2. UniTech Biopharma (Matfors)	no	yes	х	х	х	х	х	х	-	NN	-
Sweden	3. Cobra Biopharma (Matfors)	no	yes	-	-	-	-	-	-	х	NN	-
	4. Crucell Sweden AB (Stockholm)	no	yes	-	-	-	-	-	-	х	х	х
	1. Crucell Switzerland AG (Bern)	no	yes	NN	NN	NN	NN	х	х	х	х	х
Switzerland	2. Cytos Biotechnology AG (Schlieren)	no	no	NN	NN	NN	NN	х	х	х	-	-
	3. Pevion Biotech Ltd. (Ittingen)	no	yes	NN	NN	NN	NN	х	х	х	Х	-
	1. The Government Pharmaceutical Organisation (Bangkok)	no	yes					х	х	х		
	2. Merieux Biological Products Co., Ltd. (Chachoengsao)	no	yes					-	-	х		
Thailand	3. Queen Saovabha Memorial Institute (Bangkok)	no	yes					-	-	х		
	4. BioNet-Asia Co., Ltd. (Bangkok)	no	yes					-	-	х		
	5. Bureau of Veterinary, Department of Livestock Development (Nakhon Ratchsasima)	Anthrax	yes					-	-	х		
	1. Konya Veterinary Control and Research Institute (Meram-Konya)	no	yes						х	NN		-
	2. Pendik Veterinary Control and Research Institute (Pendik-Istanbul)	no	yes						х	NN		-
<b>T</b> .1.	3. Central Veterinary Control and Research Institute (Ankara)	Anthrax	yes						х	NN		х
Turkey	4. Veterinary Control Institute (Ankara)	no	yes						-	NN		х
	5. Veterinary Control Institute (Atakum)	no	yes						-	NN		х
	6. Foot and Mouth Disease Institute (Ankara)	no	yes						-	NN		х

Country	Name and location of vaccine production facilities declared in CBM Form G	Cat. A diseases <sup>12</sup>	Other diseases	Decl. 2006	Decl. 2007	Decl. 2008	Decl. 2009	Decl. 2010	Decl. 2011	Decl. 2012	Decl. 2013	Decl. 2014
	7. VETAL Animal Health Products Company (Adiyaman)	no	yes	r'		I.	I.		-	NN		х
	8. DOLL VET Veterinary Vaccine (Sanliurfa)	no	yes						-	NN		х
	9. ATAFEN Veterinary Materials Production Company (Ismir)	no	yes						-	NN		х
	1. Biofabrika Suma (Suma)	Anthrax	yes						х	х		
	2. Biofabrika Dnepropetrovsk (Dnepropetrovsk)	no	yes						х	х		
	3. Biofabrika Charkov (Charkov)	no	yes						х	х		
	4. Biofabrika Cherson (Cherson)	Anthrax	yes						х	х		
	5. Biofabrika Novogalechinsk (Kiev)	no	yes						х	х		
TT1 ·	6. OOO "Ukrvetpromsnab" (Brovar)	no	yes						х	х		
Ukraine	7. Corporation "Ukrzoovetpromsnab" (Kiev)	no	yes						x	х		
	8. Institute for Experimental and Clinical Veterinary Medicine(Charkov)	no	yes						x	х		
	9. Institute for Veterinary Medicine of the National Academy of Science (Kiev)	no	yes						x	х		
	10. Closed Joint Stock Company "Biolek" (Charkov)	no	yes						x	-		
	11. Pharmalife GmbH (Lvov)	no	yes						x	-		
	12. Open Joint Stock Company "Pharmak" (Kiev)	no	yes						x	-		
	1. Public Health England (Porton Down)	Anthrax	no	х	х	х	х	х	х	х	х	х
United Kingdom	2. MedImmune (Liverpool)	no	yes	х	х	х	х	х	х	х	х	х
Kingdolli	3. Novartis Vaccines and Diagnostics Limited (Liverpool)	no	yes	х	х	х	х	х	х	х	х	х
	1. Emergent BioDefense Operations Lansing Inc. (Lansing, MI)	Anthrax	no					x	х	х	х	х
	2. MassBiologics (Boston, MA)	no	yes					x	х	х	х	х
	3. Med Immune LLC (Gaithersburg, MD)	no	yes					x	х	х	х	х
	4. Merck & Co, Inc. (Whitehouse Station, NJ)	no	yes					x	х	х	х	х
USA	5. Organon Teknika Corporation LLC (Durham, NC)	no	yes					x	х	х	х	х
0.011	6. Sanofi Pasteur Inc. (Swiftwater, PA)	no	yes					x	x	x	х	х
	7. Sanofi Pasteur Biologics Co. (Cambridge, MA)	Smallpox	no					х	х	х	х	х
	8. Wyeth Pharmaceuticals Inc. (New York, NY)	no	yes					x	х	х	х	х
	9. Barr Laboratories, Inc. (Forrest, VA)	no	yes					-	-	х	х	х
	10. Protein Sciences Corporation (Meriden, CT)	no	yes					-	-	-	х	х

## **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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