## ANNEX A to

CWC DECLARATION OF PROTECTIVE PROGRAMMES

Dated 02 July 2019

**FORMAT FOR THE ANNUAL REPORTING OF INFORMATION ON NATIONAL PROGRAMMES FOR PROTECTION AGAINST CHEMICAL WEAPONS, UNDER ARTICLE X OF THE CHEMICAL WEAPONS CONVENTION**

Name of State Party providing the information:

1. *The United Kingdom of Great Britain and Northern Ireland*

Reporting period:

2. This report covers the calendar year: *2018*

**INFORMATION ON THE EXISTENCE OF A NATIONAL PROGRAMME(S) RELATED TO PROTECTION AGAINST CHEMICAL WEAPONS**

|  |  |
| --- | --- |
| 1. Does the State Party have a national programme(s) for the implementation of protective measures against CW?
 | YES 🗹 NO 🞏 |

If Yes, do these cover:

|  |  |
| --- | --- |
| a) protection of military personnel against attack from CW? |  YES 🗹 NO 🞏 |
| b) protection of the civilian population against attack from CW? |  YES 🗹 NO 🞏 |

**GENERAL INFORMATION ON THE MAIN ELEMENTS OF A NATIONAL PROGRAMME(S) RELATED TO PROTECTIVE PURPOSES**

4. Summarise (in general terms) the national programme(s), and/or regional and local differences (as appropriate to and within the territory of the State Party), for the implementation of protective measures against CW attack against the State Party’s armed forces or civilian population (continue on a separate sheet if necessary):

*The UK Cabinet Defence Committee decided to abandon the UK’s offensive chemical weapons capability in 1956. Since the implementation of this decision activities relating to CW have been defensive in nature, focussing on the need to provide the UK, its overseas interests, and its Armed Forces with effective protection against the threat of attack by CW.*

*The UK’s key policy aim in relation to the protective measures for the Armed Forces and, consistent with our membership of NATO, is to maintain our political and military freedom of action, despite the presence, threat or use of CW. Our policy is made up of seven elements: arms control, preventing supply, deterrence, protection, hazard management, disablement and elimination. These elements are informed by the National Security Strategy and underpinned by cross-government risk assessment, including the National Security Risk Assessment.*

*The UK’s military posture with regard to the threat from CW is made up of three elements:*

* *The ability to remove or reduce the threat by taking direct action;*
* *Measures to minimise our vulnerability to the weapons;*
* *Capabilities, training and equipment that protect our forces and allow them to manage the battlefield risks.*

*All three elements interrelate, and all three are needed to ensure that we have a balanced defensive posture, and to give us the flexibility required to maximise operational effectiveness. Our force protection programme includes research to evaluate the threat and develop new and improved protective measures, procurement of equipment capabilities, the use of specialised military units to perform specific chemical defence functions and comprehensive programmes of protective training for all members of the Armed Forces.*

*Following the terrorist attacks in the United States on 11th September 2001, and the subsequent anthrax incidents, the UK Government of the day looked at all arrangements for securing public safety in the event of such attacks being inflicted on the UK. The Civil Contingencies Committee (CCC) initiated reviews of existing contingency planning arrangements, and from these established the cross- government National Resilience Capabilities Programme (NRCP) in 2005. The Programme consists of twenty two separate areas of work designed to enhance the UK’s resilience and ensure that a robust infrastructure of response and recovery is in place to deal rapidly, effectively and flexibly with the consequences of all kinds of non-malicious and malicious civil emergencies, including chemical, biological and radiological risks. The majority of Government Departments, the UK’s Devolved Administrations, the emergency services and other agencies are heavily involved in building and maintaining the capability that comprise the Programme, which is managed and co-ordinated by the Civil Contingencies Secretariat (CCS) within the Cabinet Office. This unit was established in 2001 and aims to improve the UK’s ability to prepare for, respond to, and recover from emergencies.*

*In 2010, the new Government created a National Security Council, bringing together all the senior ministers concerned, under the chairmanship of the Prime Minister. The NSC ensures a strategic and tightly coordinated approach across the whole of government to the risks and opportunities the country faces and comprises a number of Ministerial sub-Committees including: Threats, Hazards, Resilience, Contingencies (THRC) sub-committee, and an officials’ equivalent, which is supported by CCS and replaced the CCC.*

*In the event of a civil incident involving CBRN hazards, the CCS would ensure that a Lead Government Department (LGD) is identified for the emergency response and recovery phases. LGDs have been identified already for the most likely events.*

*When there are clear indications that an incident is the result of terrorism, the Home Office will take the immediate lead. The Home Office is the LGD for counter-terrorist policy and has strategic responsibility for responding to terrorist incidents in the United Kingdom. This includes ensuring that the UK has the necessary capabilities in place to respond effectively to CBRN attack. The Home Office also leads, in partnership with law enforcement agencies and other Government departments, a programme of work to reduce our vulnerability to CBRN attacks. This includes denying terrorists access to hazardous substances.*

*When the investigative process permits and matters move to the stage of long term recovery from a CBRN terrorist attack, such as decontamination of the built and open environment, the lead would be transferred to the Department for Environment Food and Rural Affairs (Defra), the Scottish Government, the Welsh Assembly Government or the Northern Ireland Executive, dependent upon the location of the incident. The UK has a range of options for the remediation of the open and built environment following a CBRN attack, including military and private sector specialists with decontamination and hazardous waste capability.*

*The response to a CBRN incident would be a multi-agency one and a number of Government Departments have key responsibilities. For example, the Department of Health and Social Care is responsible for the impact on public health from all forms of disruptive challenge, including CBRN, and the Department for Transport has strategic responsibility for transport security, including airports, in-flight security and transport of hazardous materials. UK Governments have invested in the provision and ongoing maintenance of equipment and training to enable the Fire and Rescue Service to undertake the mass decontamination of people affected by CBRN incidents on behalf of the Health Service and there is a continued exploration led by the Home Office of how to improve and enhance the capability. In addition, the Foreign and Commonwealth Office has a strategic responsibility for the UK’s response to disruptive challenges involving UK citizens and our interests overseas.*

*Many of these processes were* used *in response to the use of a novichok nerve agent in Salisbury in 2018. The Cabinet Office coordinated the UK’s overall response to the incident. Public Health England, in coordination with the Department of Health and Social Care provided advice to the public, first responders and healthcare workers on necessary safety measures. The Home Office and police worked with the Defence Science and Technology Laboratory (Dstl) to test biomedical and environmental samples. The Foreign and Commonwealth Office, the Department for Business, Energy and Industrial Strategy, and the Ministry of Defence worked together to enable the OPCW’s Technical Assistance Visits, which confirmed the UK’s assessment of the chemical agent that had been used. Defra led the decontamination and recovery effort in coordination with the military and government scientists. Other departments and agencies were also involved at various stages of the cross-government response.*

5. List the main national government and/or regional and local bodies (as appropriate to the circumstances of the State Party) that have primary responsibility within the State Party for:

1. protection of armed forces:

*The Ministry of Defence (MOD)*

1. protection of specialist personnel such as police, fire fighters, ambulance and medical personnel, or government officials:

*The primary responsibility will rest with the employers within the organisations concerned, for example the Chief Fire Officer will have operational responsibility for the safety of the fire fighters within their local brigade on behalf of the local Fire and Rescue Authority. They will be supported by the relevant sponsoring UK Government Departments, or Devolved Administration.*

*Home Office for Police in England and Wales, and Fire in England; Department of Health and Social Care for Ambulance/Medical personnel in England;*

*Scottish Government for Police, Fire and Ambulance/medical personnel in Scotland;*

*Welsh Government for Fire and Ambulance/medical personnel in Wales;*

*Northern Ireland Assembly for Policing, Fire and Ambulance/medical personnel in Northern Ireland.*

1. protection of the general public:

*Cabinet Office, Home Office, Department for Environment Food and Rural Affairs, Scottish Government, Welsh Government, Northern Ireland Executive, Department of Health and Social Care, Department for Transport*

6. If protective equipment is provided for armed forces or civilians, is it:

|  |  |
| --- | --- |
| 1. developed from government-sponsored research and development?

  |  YES 🗹 NO 🞏  |
| 1. acquired commercially?
 |  YES 🗹 NO 🞏 |
| 1. acquired from the governments of other States Parties?
 |  YES 🗹 NO 🞏 |
| 1. Has the State Party’s government made an offer of assistance through the OPCW under Article X, paragraph 7 of the CWC?
 |  YES 🗹 NO 🞏 |

**INFORMATION ON THE MAIN ELEMENTS OF RESEARCH AND DEVELOPMENT ACTIVITIES RELATED TO PROTECTIVE PURPOSES**

8. Does the government of the State Party undertake research and development related to protection against CW, in the following fields:

|  |  |
| --- | --- |
| Respiratory protection | YES 🗹 NO 🞏 |
| Protective clothing | YES 🗹 NO 🞏 |
| Collective protection | YES 🗹 NO 🞏 |
| Decontamination technologies for area, personnel and materials | YES 🗹 NO 🞏 |
| Detection/identification of CW agents  | YES 🗹 NO 🞏 |
| Laboratory analysis for CW agents | YES 🗹 NO 🞏 |
| Medical countermeasures | YES 🗹 NO 🞏 |
| Hazard modelling | YES 🗹 NO 🞏 |

**INFORMATION ON THE EXISTENCE OF UNITS, ONE OF WHOSE PRINCIPAL FUNCTIONS MAY BE PROTECTION AGAINST CHEMICAL WEAPONS**

|  |  |
| --- | --- |
| 1. Are there any military units one of whose principal functions

 is protection against CW? | YES 🗹 NO 🞏 |
| 1. If Yes, briefly state their main tasks (such as collective protection, decontamination, detection, and/or medical countermeasures). Continue on a separate sheet if necessary:
 |  |

*The Defence CBRN Wing provides Defence with dismounted specialist Counter-CBRN operational capability. This includes CBR Target Reconnaissance, Sampling and Identification of Biological, Chemical and Radiological Agents (SIBCRA) and the ability to courier CBR samples as necessary. The unit also provides specialist advice to military commanders.*

**INFORMATION ON THE TRAINING PROGRAMME RELATED TO PROTECTIVE PURPOSES**

|  |  |
| --- | --- |
| 1. Does the State Party conduct operational training for its armed forces using real CW agent or simulants:
 |  YES 🗹 NO 🞏 |

1. Does the State Party train its military personnel in the following fields:

|  |  |
| --- | --- |
|  a) use of personal protection equipment? |  YES 🗹 NO 🞏 |
| 1. decontamination?
 |  YES 🗹 NO 🞏 |
| 1. detection?
 |  YES 🗹 NO 🞏 |
| 1. medical aspects of protection?
 |  YES 🗹 NO 🞏 |

|  |  |
| --- | --- |
| 1. Has the State Party’s government provided, in the last year, training

of foreign military or civilian personnel on protection from a possible CW attack? |  YES 🗹 NO 🞏 |

 **INFORMATION ON PROTECTION OF THE CIVILIAN POPULATION**

|  |  |
| --- | --- |
| 1. Does the programme for protection against CW provide for support to the civilian population in case of use or threat of use of CW?
 |  YES 🗹 NO 🞏 |

15. If yes, indicate which of the following will provide the support:

|  |  |
| --- | --- |
| 1. Fire service?
 |  YES 🗹 NO 🞏 |
| 1. Emergency medical personnel?
 |  YES 🗹 NO 🞏 |
| 1. Police?
 |  YES 🗹 NO 🞏 |
| 1. Military units?
 |  YES 🗹 NO 🞏 |
| 1. Other contracted entities (e.g. private companies)?
 |  YES 🗹 NO 🞏 |
| 16. If the answer to Question 14 is No, is there an objective for specialist personnel to provide such support in the future? |  YES 🞏 NO 🞏 |

|  |  |
| --- | --- |
| 1. Are training exercises carried out which involve practising the response to CW attacks against the civilian population?
 |  YES 🗹 NO 🞏 |
| 1. Is the general public provided with training to protect themselves against the effects of CW attack (excluding those involved in regular military training as part of compulsory national service)?
 |  YES 🞏 NO 🗹 |
| 1. Is educational information available to the general public regarding protection against CW attack (e.g. leaflets, internet sites etc)?
 |  YES 🗹 NO 🞏 |

1. Provide references (if available) to select, publicly available, scientific papers published in the reporting year related to national CW protective programmes.

**ADDITIONAL INFORMATION**

1. WOOD S.G.A.; CHAKRABORTY N.; SMITH M.W.; SUMMERS M.J.; BREWER S.A. The impact of canister geometry on chemical biological radiological and nuclear filter performance: A computational fluid dynamics analysis. *Journal of occupational and environmental hygiene,* ***2018,*** DOI:10.1080/15459624.2018.1533674
2. WILSON C.; COOPER N.J.; BRIGGS M.E.; COOPER A.I.; ADAMS D.J. Investigating the breakdown of the nerve agent simulant paraoxon and chemical warfare agents GB and VX using nitrogen containing bases. *Organic & biomolecular chemistry,* ***2018,*** DOI:10.1039/c8ob02475h
3. KASSA J.; TIMPERLEY C.M.; BIRD M.; WILLIAMS R.L.; GREEN A.C.; TATTERSALL J.E.H. Some benefit from non-oximes MB408, MB442 and MB444 in combination with the oximes HI6 or obidoxime and atropine in antidoting sarin or cyclosarin poisoned mice. *Toxicology,* ***2018,*** DOI: 10.1016/j.tox.2018.07.008
4. ASTLE M.A.; RANCE G.A.; FAY M.W.; NOTMAN S.; SAMBROOK M.R.; KHLOBYSTOV A.N. Synthesis of hydroxylated group IV metal oxides inside hollow graphitized carbon nanofibers: nanosponges and nanoreactors for enhanced decontamination of organophosphates. *Journal of Materials Chemistry A,****2018,*** DOI:10.1039/c8ta08100j
5. DALTON C.H.; GRAHAM S.J.; JENNER J. Effect of aqueous dilution on the absorption of the nerve agent VX through skin in vitro. *Talanta,* ***2018,*** DOI:10.1016/j.talanta.2018.04.022
6. WHITMORE C.L.; COOK A.R.; MANN T.M.; PRICE M.E.; EMERY E.R.; ROUGHLEY N.; FLINT D.P.; STUBBS S.J.; ARMSTRONG S.J.; RICE H.; TAATTERSALL J.E.H. The efficacy of HI-6 DMS in a sustained infusion against percutaneous VX poisoning in the guinea pig. *Toxicology Letters,* ***2018,*** DOI:10.1016/j.toxlet.2017.11.007
7. SAMBROOK M.R.; GASS I.A.; CRAGG P.J. Spectroscopic and inclusion properties of G-series chemical warfare agents and their simulants: a DFT study. *Supramolecular Chemistry,* ***2018,*** DOI:10.1080/10610278.2017.1401074
8. MANN T.M.; PRICE M.E.; WHITMORE C.L.; PERROTT R.L.; LAWS T.R.; MCCOLM R.; EMERY E.R.; TATTERSALL J.E.H.; GREEN A.C.; RICE H. Bioscavenger is effective as a delayed therapeutic intervention following percutaneous VX poisoning in the guinea pig. *Toxicology Letters,* ***2018,*** DOI:10.1016/j.toxlet.2017.11.029

1. DALTON C.H.; HALL C.; LYDON H.; JENNER J.; CHIPMAN J.K.; GRAHAM J.S.; CHILCOTT R.P. The percutaneous absorption of soman in a damaged skin porcine model and the evaluation of WoundStat as a topical decontaminant. *Cutaneous and Ocular Toxicology,* ***2018,*** DOI:10.1080/15569527.2017.1365883
2. WEETMAS C.; NOTMAN S.; ARNOLS P.L. Destruction of chemical warfare agent simulants by air and moisture stable metal NHC complexes. *Dalton Transactions,* ***2018,*** DOI:10.1039/c7dt04805j
3. LYDON H.; HALL C.; MATAR H.; DALTON C.H.; CHIPMAN J.K.; GRAHAM J.S.; CHILCOTT R.P. The percutaneous absorption of VX in a damaged skin porcine model and the evaluation of WoundStat™ as a topical decontaminant. *Journal of Applied Toxicology,* ***2018,*** DOI:10.1002/jat.3542
4. KASSA J.; TIMPERLEY C.M.; BIRD M.; WILLIAMS R.L.; GREEM A.C.; TATTERSALL J.E.H. Evaluation of the influence of Three Newly Developed Bispyridinium Anti-nicotinic Compounds (MB408, MB442, MB444) on the efficacy of Antidotal Treatment of Nerve Agent Poisoning in Mice. *Basic & Clinical Pharmacology & Toxicology,* ***2018,*** DOI:10.1111/bcpt12935
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