

**Seventh Review Conference of the States Parties
to the Convention on the Prohibition of the
Development, Production and Stockpiling
of Bacteriological (Biological) and
Toxin Weapons and on Their Destruction**

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Item 10 of the agenda

**Review of the operation of the Convention
as provided for in its Article XII**

**Implementation of Article X of the BTWC – some illustrative
contributions**

Submitted by the European Union

I. Introduction

1. As part of the European Union's contribution to global non-proliferation and disarmament efforts, we are supporting the implementation of a number of international instruments, including the BTWC. To demonstrate our commitment to the implementation of Article X and as part of the preparations for the 7th BTWC Review Conference we have put together some specific but not comprehensive examples of Article X cooperation activities carried out by EU Member States and EU Institutions.

2. Part A covers amounts of Development assistance in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases.¹ Part B sets out some illustrative projects by EU Member States and EU Institutions.

II. Part A

**Development assistance by EU institutions and EU member states with regard to capacity building
in the fields of disease surveillance, detection, diagnosis, and containment of infectious diseases
(Amounts are in USD million)**

<i>Type of assistance</i>	<i>ODA* Sector Code</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>
Infectious disease control	12250	469.54	473.70	422.26	369.78
Basic health care	12220	525.64	681.90	885.44	821.25
Health education	12261	24.30	24.42	40.53	27.89

¹ Source: Official Development Assistance – OECD <http://stats.oecd.org/Index.aspx?DatasetCode=CRSNEW>

* Official Development Assistance

Basic health infrastructure	12230	76.13	128.49	204.09	177.29
Malaria control	12262	4.60	47.53	56.24	80.80
Tuberculosis control	12263	1.88	31.69	25.02	18.01

III. Part B: Descriptions of a selection of individual projects or initiatives by EU Member States and the EU institutions - indicative examples of Article X assistance

Belgium

The Institute for Tropical Medicine in Antwerp, Belgium – a partner for health professionals from the South.

3. For many years the Institute for Tropical Medicine in Antwerp (ITM) has been providing scholarship programmes for health professionals from the South, for training at advanced master level and for experts in specific fields of science through short courses. The majority of participating students benefit from scholarships financed by Belgian Development Cooperation. For this purpose 12,950,000 EUR are available for the period 2008-2013. The ITM also receives core funding from several governmental entities. The ITM currently offers three Master tracks and nine specialised short courses covering the fields of tropical clinical sciences, public health (health systems policy & management and disease control) and tropical animal health. All Masters and short courses included in the scholarship programme are accredited through international bodies.

- (a) Master degrees included in the scholarship programme:
 - (i) Master in Public Health – Health Systems Management and Policy;
 - (ii) Master in Public Health – Disease Control;
 - (iii) Master of Science in Tropical Animal Health;
 - (iv) Master in International Health – Tropical Clinical Sciences;
- (b) Specialised short courses accredited as course components of a Master degree:
 - (i) Short Course on Antiretroviral Therapy;
 - (ii) Short course on Clinical Research and Evidence-based Medicine;
 - (iii) Planning & Management of Reproductive Health Programmes;
 - (iv) Planning & Management of Tropical Diseases Programmes;
 Health Policy;
 - (v) Strategic Management of Health Services.

4. Furthermore, the Belgian Development Cooperation helps ITM to cooperate with and support similar institutions in the South in order to mutually reinforce capacities and accomplish their respective scientific and societal missions in the fields of tropical medicine for humans and animals, disease control and health services management. In the period 2006-2010 the ITM has been cooperating with and supporting the following institutions:

- (a) The National Institute of Hygiene, Epidemiology and Microbiology and the Institute of Tropical Medicine Pedro Kouri in Cuba;
- (b) Instituto de Medicina Tropical Alexander von Humboldt de Universidad Peruana Cayetano Heredia in Peru;
- (c) The University of Pretoria, Department of Veterinary Tropical Diseases in South Africa;
- (d) L'Institut National de Recherche Biomédicale de Kinshasa in DR Congo;
- (e) The National Institutes of Malariology, Parasitology and Entomology in Vietnam, Cambodia and Laos;
- (f) Le Centre Hospitalier Universitaire de Dakar in Senegal;
- (g) The Tropical Disease Research Centre of NDOLA in Zambia;
- (h) The Sihanouk Hospital Center of HOPE in Cambodia;
- (i) Instituto de Salud Publica of the Pontificia Universidad Católica in Ecuador;
- (j) The Institute of Public Health, Bangalore, India;
- (k) Le Centre MURAZ / Santé maternelle et nouveau-nés, paludisme, nutrition in Burkina Faso;
- (l) Centro Internacional de Zoonosis, Quito, Ecuador;
- (m) Universidad Mayor de San Simon, Cochabamba in Bolivia.

Bulgaria

5. In the period 2007-2011, the National Center for Infectious and Parasitic Diseases (NCIPD) was designated as WHO Collaborating Center for research and training in surveillance of communicable diseases and antimicrobial resistance, among its tasks being the coordination and collaboration in this field with partners in countries in Southeast Europe, North Africa and Central Asia. The Center collaborated, *inter alia*, with NAMRO (Cairo) on hemorrhagic fevers, partners in the FYROM on polio and swine flu diagnosis, in Turkmenistan, Uzbekistan, Kyrgyzstan, as well as in Armenia on malaria diagnosis.

6. In 2006-2008, through twinning projects with The Netherlands and Italy (PHARE projects) aimed at strengthening the combat capacity against infectious diseases, NCIPD received equipment for identification of highly pathogenic bacterial and viral agents. As a part of these twinning projects, an intensive post-graduate educational programme was implemented, involving epidemiologists, microbiologists and virologists working in the field of surveillance of infectious diseases with a focus on early warning.

7. The Republic of Bulgaria has collaborated with EU partners and participated in activities carried out through the Executive Agency for Health and Consumers, the European Center for Disease Prevention and Control (ECDC), the EU Early Warning and Response System, etc.

Czech Republic

8. The Czech Republic fulfils its obligations under Article X through various projects in development aid and assistance.

9. The foreign aid projects include the health, agriculture and other related topics to the BTWC. The Czech Republic has been recently active in providing help to prevent and cure infectious diseases. Through the bilateral project the program to prevent HIV/AIDS disease in Ethiopia was launched. Other programs providing help in management of cholera epidemics in Haiti and in Zimbabwe, including prophylactic and awareness rising issues, were completed. In 2010 the Czech Republic built microbiological laboratory for drinking water analysis in Georgia. On July 14, 2011 the Memorandum of Understanding among the US Agency for International Development (USAID), the Swedish International Development Cooperation Agency (SIDA) and the Czech Development Agency (CzDA) was signed in Bosnia and Herzegovina in Sarajevo. The main goal is the participation in the long-term agricultural projects.

Finland

Strengthening the Management of Public Health Emergencies in Vietnam - with focus on the Prevention and Control of Diseases of Epidemic Potential including Highly Pathogenic Avian Influenza (HPAI)

10. The United Nations system agencies (FAO, WHO, UNICEF, UNDP) in Vietnam have worked together with local ministries (Ministry of Agriculture and Rural Development, Ministry of Health, Ministry of Education) in implementing the Joint Government-UN Programme "Strengthening the Management of Public Health Emergencies in Viet Nam - with a focus on the Prevention and Control of Diseases of Epidemic Potential including Highly Pathogenic Avian Influenza (HPAI).

11. Phase I of this Joint Government-UN Programme provided emergency support to control HPAI in poultry and respond to the threat of a human pandemic. The objectives were to reduce risk of a global pandemic of Highly Pathogenic Avian Influenza (HPAI) emanating from Vietnam and enhance national and local capacity to manage outbreaks of diseases of epidemic potential caused by human and animal pathogens. This was done by controlling the disease in poultry population at risk through vaccinations and by strengthening the national and local epidemiological and surveillance capacities.

12. Phase II of the Joint Programme supports Viet Nam's transition to a sustained response through implementation of activities within the Viet Nam Integrated National Operational Program for Avian and Human Influenza, 2006-2010 (the OPI, also known as the "Green Book"). The OPI was prepared by a Government taskforce established under the National Steering Committee for Avian Influenza (NSCAI), with support from UN agencies, the World Bank and other donors. It was adopted by the Government on 31 May 2006 as the framework for mobilization of national resources and international support to fight HPAI. It was also broadly endorsed by the international community at a Government-Donor meeting on 2nd June 2006 as a basis for harmonized support following the principles of the Hanoi Core Statement (HCS).

13. Finland has supported both phases of the programme.

France

14. France fulfils its obligations under Article X through many projects, among which two organizations' activities might be highlighted :

The Institut de Recherche pour le Développement (IRD) :

15. The IRD is a French research institute which, working with Southern partners, addresses international development issues. The aims underpinning all its work are to improve health and public health with a view to achieving the global Millennium Development Goals.

16. Through partnership-based research, training and innovation, it is present in more than 50 countries in Africa, the Mediterranean basin and Latin America. Its projects are jointly run with partners and are based on an interdisciplinary approach. They address questions vital for Southern countries, such as tropical diseases, the links between health and environment, water resources or food security.

17. One emblematic project conducted by IRD, in the field of biological research, is RISA (*Résistance Insecticide Santé Agriculture*), an team working on insecticide resistance, health and agriculture, formed in 2009 and following a thesis funded by the IRD. It unites regional efforts to assess the impact of pesticide use in Africa on insecticide resistance in the malaria vector *Anopheles gambiae* and the plant pests *Bemisia tabaci* and *Plutella xylostella*. Research is conducted in Benin, Burkina Faso and Togo. The aim, at a time when food resources are strained, is to introduce crop protection programme management strategies that will limit the ecotoxicological risks connected with large-scale pesticide use.

The Institut Pasteur International Network (RIIP) :

18. The *Institut Pasteur International Network* (RIIP) is a partnership of 32 research and public health institutes on five continents. With its global presence and the top-level expertise of its scientists, the RIIP is well-positioned to perform infectious disease surveillance and participate in the global response to major epidemics. The Network hosts several Reference Centres and WHO Collaborating Centres, which carry out constant surveillance for diseases with epidemic potential such as influenza, cholera, dengue, yellow fever and emerging infectious diseases. As such, RIIP member institutes provide technical advice at the national and international level. The RIIP interacts with local and international public health authorities and works closely with health ministries, the WHO's Global Outbreak Alert and Response Network (GOARN) and the Institut Pasteur's Laboratory for Urgent Response to Biological Threats (CIBU).

19. Research is conducted on several infectious diseases, among which: HIV/AIDS, tuberculosis, malaria, influenza, dengue, rabies, viral hepatitis, bacterial meningitis, antibiotic resistance, leishmaniasis, diarrheal diseases. The Institut Pasteur International Network (RIIP) also strives to improve scientific capabilities and human resources around the world. To achieve this, the RIIP develops training programs in partnership with universities and local stakeholders. Over 100 RIIP trainees come every year to complete their training by taking courses or serving traineeships in Paris. The Institut Pasteur and the Institut Pasteur International Network provide international grants for traineeships and courses taken in Paris.

Germany

20. Under the 7th Framework Programme, which runs from 2007 to 2013, direct funding can be obtained for "International Cooperation" as an integral part of the thematic area "Health", which is of particular significance in areas with a bearing on global health problems, such as resistance to microbicides, HIV/AIDS, malaria, tuberculosis, neglected diseases and international health systems. The calls for proposals and expressions of interest also cover topics of international relevance, which are tailored to the international

partners' R&D needs and which, for example, are specifically intended to be implemented in collaboration with African partners.

21. Following the first two rounds of the call for proposals and expressions of interest, 25 African states are currently involved in projects in the thematic area "Health". African scientists are collaborating with German institutions in 18 projects which have an African input. An example is the Poverty Related Diseases College: International Programme on BioMedicine and Development (PRD College) project, which will help to close educational gaps between the bio-sciences and the health and development sector in Africa. The creation of a training and exchange programme for African doctors and young scientists is being supported. The project is coordinated by the University of Yaoundé in Cameroon. The network includes African partners in Cameroon, South Africa, Zambia, Uganda and Tanzania and European institutions, including the Department for Infectious Diseases and Tropical Medicine of the University of Munich and the Max Planck Institute for Infection Biology in Berlin.

22. Since 2007, partnerships between German universities and clinics on the one hand and medical schools and clinics in developing countries on the other have been supported as part of Germany's development cooperation policy. These partnerships have, among other things, facilitated exchanges in the field of applied and clinical research with a view to improving medical treatment for HIV/AIDS sufferers. In Cameroon, for example, the aim is to optimize the treatment of HIV by means of early diagnosis and research into the causes of resistance to treatment, in cooperation with a German research institute. Universities and hospitals in African partner countries will benefit from the know-how of German scientific institutions and will learn to adopt the necessary quality standards required for implementing clinical trials, etc.

23. In cooperation with the Kwame Nkrumah University of Science and Technology (KNUST), the Bernhard Nocht Institute for Tropical Medicine (BNI) in Hamburg operates the Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR) in Kumasi (Ghana) as a joint venture. The KCCR provides a platform for collaborative research projects involving Ghanaian scientists and has acquired an international reputation as a teaching and research centre which is open to scientists from around the world. The collaboration is based on a long-lasting contract. In the first years of the collaboration the research projects at KCCR were financed predominantly by the BNI. The project financing by the BNI now decreases and financing of projects by other resources increases. This demonstrates that KCCR is now established and acknowledged in a way which makes investment in research for other donors more and more interesting, and thus creating an element of sustainability.

Greece

Mediterranean Zoonoses Control Programme of the World Health Organization and its Coordinating Centre in Athens, Greece

24. The Mediterranean Zoonoses Control Centre (MZCC) started its operation in February 1979 following a special agreement between WHO and the Greek Government. During the last 5 years, the activities of the MZCP co-ordinated by the MZCC and with the support and contribution of the Greek Government, have been as follows: Besides the regular MZCP activities development, the Greek Government provided an extraordinary financial contribution to implement 2 projects in SYRIA and JORDAN on the inter-sectoral epidemiological surveillance of BRUCELLOSIS in humans and animals. Both were successfully concluded. The Government of Greece is available to further support the MZCP and its Coordinating Centre in Athens, financially and technically. This will permit further expansion and enrichment of the capacity building activities of this regional

programme. To this end, negotiations are on the way with WHO and other International Organizations.

**National Reference Laboratory for Arboviruses and Hemorrhagic Fever Viruses,
Aristotle University of Thessaloniki, School of Medicine, Dept. of Microbiology**

25. Training of scientists from the Central African Republic, Nigeria, Iran, China, Albania and Bulgaria on the rapid diagnosis and molecular epidemiology of viral hemorrhagic fevers. Their expenses were jointly covered by EU Research Programmes (INCO), WHO and the Greek Government.

Ministry of Rural Development and Food (MRDF) – General Veterinary Directorate

26. Programme TAIEX. Study visit on Protection and Control Strategies, monitoring and reporting system of Echinococcosis and Hydatidosis (May 2011 with the participation of Greece and Turkey).

27. Control and eradication programmes of Bovine Brucellosis, Sheep and Goat Brucellosis and Bovine Tuberculosis (July 2009 with the participation of Greece and Armenia)

28. Control of Foot and Mouth Disease (FMD) Includes activities such as sero-surveillance, vaccination campaigns and training workshops.

29. Monitoring of Zoonoses and Zoonotic agents, antimicrobial resistance of zoonotic agents and food borne outbreaks. Zoonoses Monitoring - Implementation of National control and eradication programmes based on European Veterinary Legislation (Directive 2003/99/EC). Covers mandatory monitoring for the major zoonoses: Brucellosis, Tuberculosis, Echinococcosis, Salmonellosis, Campylobacteriosis, Listeriosis, Trichinellosis, Verotoxigenic Escherichia coli. Participation of the the Balkan Tripartite (EuFMD/EC/O.I.E) Group of Bulgaria, Greece and Turkey.

Ministry of Foreign Affairs

30. Greece contributes to the Global Fund to Fight AIDS, Tuberculosis and Malaria and supports EU activities in the area of HIV/AIDS, whilst it also contributes to UNAIDS.

Ireland

Ireland Vietnam blood borne virus initiative (IVVI)

UCD & NIHE: Irish aid contribution €2.5 million

Bringing Vietnamese research capacity to a new level: laboratory facility and skills development

31. The Ireland-Vietnam Blood-Borne Virus Initiative (IVVI) began in 2007 with funding from Irish Aid and Atlantic Philanthropies. The goal was to develop the infrastructure and capacity needed to better diagnose viral diseases such as HIV, Hepatitis B and C, and the Human T Lymphotropic Virus (HTLV). The project also aimed to improve Vietnam's health policies, which will in turn reduce the burden of infectious diseases.

32. Ireland's National Virus Reference Laboratory in University College Dublin (UCD) and the Vietnam's National Institute of Hygiene and Epidemiology (NIHE), are the two driving forces behind IVVI. Through IVVI, 33,000 individuals representing a large cross-section of the population, including blood donors, renal dialysis patients, blood transfusion patients, pregnant women and the general population have been tested. Along with large

scale testing, IVVI has also provided virus testing for outbreaks, such as measles in northern Vietnam and swine influenza (H1N1).

33. To help IVVI achieve its targets in training and testing, financial support went towards building a modern diagnostic laboratory at NIHE in Hanoi. New approaches have cut the cost of tests. In addition to construction of a high tech facility, nine NIHE staff members have completed a Master's degree in clinical and diagnostic virology in University College Dublin and now have the capacity to manage the NIHE/IVVI laboratory and implement studies that will help improve healthcare in Vietnam. Joint research work between the University College Dublin and NIHE will continue with these trained researchers.

34. The NIHE/IVVI laboratory has been recognised as a reference laboratory by the Ministry of Health. It has received international ISO accreditation and is taking initial steps to be certified by the World Health Organisation as a HIV drug resistance-testing centre in Vietnam and as a regional training centre for South East Asia.

Italy

35. Over the last three years, the activity in the health sector has been organised following the provisions contained in the guidelines "Global health: leading principles of the Italian Cooperation", a policy document which was approved in 2009 by the Directive Committee of the Italian Ministry of Foreign Affairs and represents the reference framework for the interventions of Italian Cooperation in the social and health fields.

36. Within this framework of reference, the initiatives which are currently under way and those which were approved in 2010 are primarily intended to offer assistance to Developing Countries in order to improve their policies and practices in fields such as: the organization and management of basic social and health services, the control of infectious diseases, environmental health, medical and surgical emergencies, the fight against mother and infant mortality, the control of chronic and degenerative diseases, the community mental health, the promotion and protection of disabled people's rights. Italy has assigned about 8% of its Official Development Assistance (ODA) to interventions in the health sector. The Directorate General for Development Cooperation alone allocated, in 2010, about €70.32 million for specific projects in the field of health and sanitation, in Countries identified by Italy's *Programming Guidelines and Directions*.

37. Below are two particularly important initiatives in the field of health and sanitation carried out by Italy:

(a) Fight against infectious diseases: **Itinerant Programme for sanitary education in disadvantaged areas "CinemArena"**. The project began on May 1st, 2010 and lasted for 10 months. Its objective was to spread educational and instructive messages, in order to limit the diffusion of serious diseases and promote respect for human rights amongst the weakest and most emarginated members of society. The CinemArena mobile company crossed five provinces of Kenya, successfully putting into place two educational campaigns on social and health issues, reaching the most remote areas of the country, where access to traditional means of communication is severely limited. The project was completed in March 2011 and employed funds for €230000.

(b) A brake on AIDS – Prevention in the local community and protection of the most vulnerable in the Kayole and Soweto townships (Nairobi, Kenya). The project started on July 1st, 2007 and has recently been completed (summer 2011). Its objective was to prevent the contagion and spread of HIV/AIDS as well as to protect the most vulnerable elements of the population in an area where the poor sanitary conditions and the abuse of drugs and alcohol dramatically increase the risk of the disease spreading. The practical

realisation of the project, funded with €731000 from the Italian Ministry of Foreign Affairs, was entrusted to the NGO Intersos.

The Netherlands

38. The Netherlands facilitates and participates in the fullest possible exchange of equipment, materials, and scientific and technological information for the use of bacteriological (biological) agents and toxins for peaceful purposes.

39. The Netherlands contributes individually and with other states, international organizations, non-governmental organizations, and other relevant partners, to the further development and application of scientific discoveries in the field of bacteriology (biology) for the prevention of disease and for other peaceful purposes.

40. The Netherlands has a strong tradition in international cooperation and belongs to the world's largest donors to the specialized UN agencies that are relevant for implementing this clause of the convention. In this regard, in particular the Dutch longstanding support to the WHO is worth noting. The Netherlands seeks to support the WHO's work with a sizeable contribution, of which a large part has yet to be earmarked. The WHO undertakes various initiatives, including guiding public health responses to biological and chemical weapons, as well as ensuring access to, quality and use of medical products and technologies.

41. In addition, the Netherlands has, since the Global Alliance for Vaccines and Immunisation (GAVI) was launched in 2000, contributed more than € 200 million to this global public-private partnership for immunization. GAVI aims at enlarging the "standard package" of vaccination with relatively expensive vaccines, like the ones against yellow fever, hepatitis B, pneumonia and other diseases. Research is planned on new vaccines against AIDS, tuberculosis and malaria. In this context, the Netherlands donated bilaterally over \$ 600 million to the Global Fund to Fight AIDS, Tuberculosis and Malaria and € 252 million to the WHO in the period 2000-2010, of which € 126 million for the termination of polio. In addition, the Netherlands has committed more than € 170 million to the development of new drugs, vaccines and diagnostics through international product development partnerships and the European Developing Countries Clinical Trials partnership.

42. On a smaller scale, the Netherlands is involved in several MATRA and Twinning Projects aimed at the strengthening of infectious disease surveillance, early warning and response systems in new EU Member States and pre-accession countries (e.g. Bulgaria, FYROM). The National Institute for Public Health and the Environment (RIVM) collaborates with China, Vietnam, Indonesia, Ethiopia and Gambia in the field of infectious disease control, for example by participating in AsiaFluCap.

Poland

43. Poland facilitates the exchange of equipment, materials and scientific and technological information concerning the use of bacteriological (biological) agents and toxins for peaceful purposes.

44. Poland also supports the development and application of scientific discoveries in the field of bacteriology (biology) for the prevention of disease and for other peaceful purposes.

45. Polish universities and research institutes are actively engaged in the international exchange of knowledge in the field of health and bacteriology, including through

participation in international research projects and hosting international seminars and symposiums.

46. The Government of Poland has been providing scholarships programmes for students and trainees from the developing countries pursuant to bilateral agreements. In the period 2006 – 2010 more than 2 000 undergraduate and postgraduate students, as well as trainees from the South, were provided free education in medicine, health science and biological sciences. The costs amounted to over 5.000.000 EUR, and the value of grants paid by the Ministry of Science and Higher Education and the Ministry of Health exceeded 2.000.000 EUR.

47. The following study modes are available for the holders of the scholarships of the Republic of Poland:

(a) Bachelor studies (1st cycle studies) – duration of 3 to 4 years; a student receives Bachelor title;

(b) Master's studies (2nd cycle studies) – duration of 2 years; designed for students with Bachelor degree; a student receives Master's degree;

(c) Master's long-cycle studies – duration of 5 to 6 years; a student receives Master's degree or a medical doctor title in case of medical studies;

(d) PhD studies (3rd cycle studies) – duration of 2, 3 or 4 years depending on a subject; available to students with Master's degree; a student receives PhD degree.

(e) Medical specialization, the period of training is 4 to 6 years, depending on the requirements of the specialization.

48. Foreign students can also take part in the post-doctoral internships, science internships, specialization courses and medical internships. Individuals applying for a scholarship should contact Polish diplomatic posts.

Portugal

49. Portugal fulfils its obligations under article X, partly through its National Institute of Health “Dr. Ricardo Jorge” (INSA), the Portuguese National Laboratory of Reference for disease surveillance and detection.

50. For INSA, the dissemination of technical and scientific information is considered a priority. In this light, INSA has invested in the training of human resources, improvement of infrastructures and development of standard operating procedures applied to investigation and research. In addition, INSA also develops several cooperation programmes with other European and African countries. These cooperation programmes aim at, *inter alia*, promoting the technical and scientific exchange and include the training of researchers from other national and international institutions.

51. INSA believes that the establishment of partnerships that ensure the technical exchange and international collaboration are essential to strengthen national and regional scientific capacities. That is why INSA, benefiting from its experience and expertise, can play an important role regarding the implementation of the Convention in the Community of Portuguese Speaking Countries such as Mozambique, Angola, Cape Verde and Brazil. INSA already works towards this goal.

52. Article X goals are also pursued by other Research and Development (R&D) institutions, such as the Institute of Hygiene and Tropical Medicine of the New University of Lisbon. The Institute of Hygiene and Tropical Medicine is recognized both nationally and internationally for its research, post-graduate training, and cooperation programmes

with developing countries. The Institute of Hygiene and Tropical Medicine hosts a “Unit of Medical Parasitology and Microbiology”, a R&D unit dedicated to the research in the fields of medical parasitology and microbiology, with the aim of contributing to the development of scientific knowledge in these areas.

Spain

The Health Institute Carlos III, Spain – The International reference on Spanish bio-research.

53. The Institute Carlos III is the reference on biological research in Spain and responsible for national and international representation, coordination and cooperation in many international fora related to biological health. For more than ten years, the Institute has been involved in cooperation projects and international programs aimed at supporting the sustainable development of biological sciences.

54. Among the projects that can be named, Spain would like to underline:

(a) The long-term collaboration activities with the Organización Panamericana de la Salud (Panamerican Health Organization): this programme is supported by the Institute Carlos II, the Ministry of Health and the Ministry of Foreign Affairs and Cooperation. This programme is implemented by workshops, seminars, training, funding and direct support to education and training projects, as well as the support to an system of early alarm on the spread of infectious diseases.

(b) Project Virored: this project is aimed at creating and reinforcing the existence of laboratories of reference for the purpose of identifying and correct diagnostic of emerging viral pathogens. This project is being implemented with regional workshops, and direct communication among the laboratories, researchers and scientists.

(c) La Red Iberoamericana Ministerial de Aprendizaje e Investigación en Salud (Iberoamerican Ministerial Net for Training and Research on Human Health). This is an effort to improve the capabilities of Latin-American health ministries through information, technological innovation and best practices sharing in a regional context.

55. Spain is also part of many multilateral programs, among those Spain would like to mention:

(a) The TDR (OMS): among other activities, this program is aimed at improving and developing the research capabilities on tropical diseases in those countries where those diseases have a great impact on the population

(b) The International Vaccine Institute: This is a research, training and assistance centre responsible for vaccines innovation to cope the developing countries' needs

Sweden

SIDA (Swedish International Development Co-operation Agency) - Strengthening of the health system

56. Development cooperation in Health through SIDA (not including health research) was 186 million euro in 2006 and is 138 million euro 2010. SIDA primarily works with bilateral aid but also regionally, and has a budget line for global programs.

57. The major areas of support according to DAC classification are (2010) HIV/AIDS (33%), Reproductive health care (17%), basic health care (20%) and infectious disease control (19%).

58. The number of countries where SIDA has bilateral programs in place for support of the health sector has declined in recent years mainly due to a reduction of countries with bilateral Swedish development cooperation. The largest programs in 2009 were found in Bangladesh, Burkina Faso, Mali, Uganda, Zambia and Nicaragua. In total, these countries received a subsidy of 35 million euro in 2009. In 2010 Nicaragua and Mali had been phased out. Much of the aid goes directly to health services, as infectious diseases are the largest burden of disease in these countries.

59. During 2009, SIDA initiated a process for developing a new financial instrument to enable support for product development and innovation in the health sector. The main objective of the process is to create the conditions for mobilizing capital from the private sector, foundations, etc., for research in poverty areas. In the first pilot project, SIDA investigated the possibility of establishing a funding model, to promote the flow of capital into the research and development of pharmaceuticals and diagnostics for poverty related diseases. The model has been tested in the development of new antibiotics and/or the development of a diagnostic tool for detection of antibiotic resistance.

60. During 2009, this concept was developed in a report entitled “Innovative Finance for Health”, under the project management of SIDA’s Team for Loans and Guarantees and with the support of Team Health. This report was presented to an enthusiastic audience at the High Level Conference on the effectiveness of antibiotics during the Swedish EU Presidency in the autumn of 2009. In 2010, efforts continued to effectively develop this funding model in order to involve the private sector and unlock funding for research regarding poverty-related diseases.

United Kingdom

Animal Health and Veterinary Laboratories Agency (AHVLA)

61. AHVLA is a designated national and international reference laboratory for many infectious and non-infectious diseases. Some of the services that it provides as part of reference laboratory status include (i) Expert consultancy on topics such as surveillance and control of disease (ii) Standardisation of diagnostic techniques (iii) Scientific and technical training (iv) Co-ordination of research studies in collaboration with other laboratories or organisations.

62. It has established OIE twinning projects with the following institutes:

- (a) Changchun Veterinary Research Institute, China – classical swine fever and rabies.
- (b) Onderstepoort Veterinary Institute, South Africa – avian influenza and Newcastle disease.
- (c) Botswana National Veterinary Laboratory - avian influenza and Newcastle disease.
- (d) Pendick Veterinary Control and Research Institute, Turkey – brucellosis.
- (e) Central Veterinary Research Laboratories, Khartoum, Sudan – brucellosis.

63. AHVLA’s unique breadth of veterinary and scientific skills on a wide range of animal diseases enables it to offer a comprehensive consultancy service to its customers overseas. This ranges from work on vaccine development to epidemiology and risk analysis and diagnostic test development. Recent examples include:

- (a) Consultancy to Vietnam on the 'pig high fever disease'.
- (b) Training on classical and African swine fever in Kazakhstan.

- (d) Technical assistance for the control of rabies in Turkey.
- (e) Key member of OFFLU² the joint OIE-FAO network on avian influenza.
- (f) Assessing impact of bovine tuberculosis on livestock productivity and human health in Ethiopia.
- (g) Assisting with control of an outbreak of contagious bovine pleuropneumonia (CBPP) in Namibia.
- (h) Training in laboratory management systems for Egyptian scientists.

64. In September 2009, the first VLA international conference, Animal Diseases 2009, was held in the UK. This event attracted over 400 delegates from 28 countries reflecting the level of interest in the topics covered over the three day event. In recent years, VLA has hosted:

- (a) The 4th International Brucellosis Research Conference with 300 delegates from 60 countries.
- (b) The 2006 Institute of Mycoplasma Conference with 256 delegates from 33 countries.
- (c) The 6th International Symposium of Avian Influenza with 267 delegates from 49 countries.

EU Institutions

65. **COUNCIL JOINT ACTION 2008/307/CFSP** of 14 April 2008 in support of World Health Organisation activities in the area of laboratory bio-safety and biosecurity in the framework of the European Union Strategy against the proliferation of Weapons of Mass Destruction.

66. The total estimated duration of this Joint Action is 24 months. It has a financial reference amount of EUR 2.105.000, with the following objectives:

- (a) ensuring the safety and security of microbial or other biological agents or toxins in laboratories and other facilities, including during transportation as appropriate, in order to prevent unauthorised access to and removal of such agents and toxins;
- (b) promoting bio-risk reduction practices and awareness, including bio-safety, bio-security, bioethics and preparedness against intentional misuse of biological agents and toxins, through international cooperation in this area.

67. To achieve the objectives referred to in the above paragraph, the EU shall introduce projects consisting of the following measures:

- (a) organisation of outreach workshops, consultations and training for competent authorities in the relevant sectors and for laboratory managers/staff at the national, subregional and regional levels, aiming at a deeper understanding of bio-risk reduction practices and their effective implementation in laboratories and other facilities, including during transportation as appropriate;

² OFFLU is the OIE-FAO global network of expertise on animal influenzas working to reduce the negative impacts of animal influenza viruses by promoting effective collaboration between animal health experts and with the human health sector.

(b) assistance to a selected country to review public health response capacity in the context of enhancing national biological preparedness, to develop and implement a biorisk reduction management plan, particularly concerning laboratory practice and safety, and to harmonise it with integrated national preparedness plans, and to strengthen the performance and sustainability of national laboratories by connecting them with regional and international networks.

EpiSouth Plus

68. The activities of the EpiSouth Network started in October 2006 with the involvement of 9 EU . It worked for the past four years in enhancing communicable disease surveillance in the Mediterranean region and includes now 27 countries (9 EU and 17 non-EU, plus one candidate country). It is therefore the biggest inter-country collaborative effort of this kind in the region.

69. A new phase of the Network activities was approved and started on October 2010. Building on the knowledge of regional gaps and needs identified during the first EpiSouth implementation, the new **EpiSouth Plus Project** aims at increasing the health security in the Mediterranean Area and South-East Europe by enhancing and strengthening the preparedness to common health threats and biosecurity risks at national and regional levels in the countries of the EpiSouth Network.

70. The project, jointly co-lead by EU and non-EU countries, will ensure the following strategic objectives:

(a) To support common threat detection by developing a Regional Laboratories Network based on available resources in Mediterranean and South-East Europe.

(b) To enhance Mediterranean Early Warning functions allowing alerts and epidemic intelligence information sharing among EpiSouth countries through the development of interoperability with other Early Warning Platform and especially the European Early Warning and Response System (EWRS) as forecasted by the current EU legislation.

(c) To promote common procedures in interoperable Generic Preparedness and Risk management.

(d) To facilitate IHR implementation through assessments and surveys on national procedural and legislative aspects.

71. EpiSouth Plus is co-financed by the EU DG-SANCO and EU DG-EuropeAid for an amount of 3.9 million Euro together with the involved Public Health Institutes and Ministries of Health. The financial support of the Italian Ministry of Health and ECDC is also acknowledged.
