# Revised Appendix To Annex III of the Plan for ongoing monitoring and verification.

## Items to be notified under the Export / Import Mechanism approved by SCR1051

### **Provisions related to Biological Items**

# 1. Microorganisms, other organisms, toxins or genetic material, as specified in List 1 (Explanatory Note, see attached).

Microorganisms means bacteria (including mycoplasma, and rickettsiae), viruses, or fungi, whether natural, enhanced or modified, either in the form of isolated live cultures, including live cultures in dormant form or in dried preparations, or as material including living material which has been deliberately inoculated or contaminated with such cultures.

Toxins include purified or crude material.

#### 2.1 (Commodity Designator Code: BA002100)

Facilities, rooms or other enclosures that meet the physical containment criteria for P3 or P4 (BL3, BL4, L3, L4) biological containment as specified in the WHO Laboratory Biosafety Manual (Geneva, 1993).

#### 2.2 (Commodity Designator Code: BA002200)

Biological safety cabinets, which allow manual operations to be performed within, whilst providing an equivalent to Class I, II or III biological protection, as specified in the <u>WHO Laboratory Biosafety Manual</u> (Geneva, 1993) as follows:

<u>Class I cabinet:</u> an open-fronted, ventilated cabinet for personal protection with an unrecirculated inward air flow away from the operator. It is fitted with a HEPA filter to protect the environment from a discharge of microorganisms;

<u>Class II cabinet</u>: an open-fronted, ventilated cabinet for personal, product and environmental protection, which provides an inward air flow and HEPA-filtered supply and exhaust air. There are two main variations: the Class IIA type recirculates 70 per cent of the air; the Class IIB type recirculates 30 percent of the air; and

<u>Class III cabinet</u>: a totally enclosed ventilated cabinet, which is gas-tight and is maintained under negative air pressure. The supply air is HEPA-filtered and the exhaust air is passed through two HEPA filters in series. Work is performed with attached long-sleeved gloves.

Kits to upgrade Class I biosafety cabinets to Class II or III.

Specially designed long sleeved gloves for Class III biosafety cabinet.

#### 2.3 (Commodity Designator Code: BA002300)

Flexible film isolators, glove boxes, anaerobic chambers, dry boxes and secondary containment systems using HEPA air filtration, and having access ports for control, manipulation and decontamination.

#### 2.4 (Commodity Designator Code: BA002400)

HEPA filters of a frame area of 0.0625 m<sup>2</sup> or greater and which have a DOP rating of 99.997 % (at 0.3 micron) or higher.

#### 2.5 (Commodity Designator Code: BA002500)

Autoclaves designed to sterilize infectious material, with an internal volume equal to 1.0 m<sup>3</sup> or greater.

#### 2.6 (Commodity Designator Code: BA002600)

Positive pressure air-fed suits, half suits, helmets and respirators designed for biological use.

#### 3.1 (Commodity Designator Code: BA003100)

Fermenters, bioreactors, chemostats, and continuous flow fermentation systems with a vessel capacity of 50 litres or more and the following specially designed components:

top plates; vessels; pH probes; and pO<sub>2</sub> probes.

#### 3.2 (Commodity Designator Code: BA003200)

Specially designed tissue culture cultivation vessels in which each vessel has an effective growth surface area of 450cm<sup>2</sup> or greater.

#### 3.3 (Commodity Designator Code: BA003300)

Orbital or reciprocal shakers with a total flask capacity greater than 250 litres, designed for use with biological material.

Shaking incubators with a total flask capacity greater than 250 litres, designed for use with biological material.

#### 4.1 (Commodity Designator Code: BA004100)

Centrifugal separators (or decanters) designed for use with biological material capable of continuous operation at a flow rate of 50 litres per hour or greater and specially designed rotors therefor.

#### 4.2 (Commodity Designator Code: BA004200)

Batch centrifuges with a rotor capacity of 25 litres or greater, designed for use with biological material.

#### 4.3 (Commodity Designator Code: BA004300)

Cross-flow and tangential filtration equipment designed for use with biological material with a filter area equal to or greater than  $2m^2$  and component filter cartridges therefor.

#### 4.4 (Commodity Designator Code: BA004400)

Spray drying equipment designed for use with biological material and the following specially designed components:

Spray/atomiser unit;

Cyclones;

Classifiers; and

Electronic control units.

#### 4.5 (Commodity Designator Code: BA004500)

Freeze-drying (lyophilisation) equipment with a condenser capacity greater than 5 kg of ice in 24 hours, and specially designed vacuum chambers therefor.

#### 4.6 (Commodity Designator Code: BA004600)

Size reduction equipment (including milling and grinding equipment) capable of producing powders with a mean particle size of 15 microns or less, and the following specially designed components:

Grinding head;

Milling head;

Milling body;

Grinder; and

Classifier.

#### 5. (Commodity Designator Code: BA005000)

Formulated powdered complex growth media prepackaged in a container size of 5 Kg or greater.

Formulated concentrated liquid complex growth media prepackaged in a container size of 5 litres or greater.

Microbiological grade yeast extract when prepackaged in a container size of 5 Kg or greater.

#### 6.1 (Commodity Designator Code: BA006100)

Immunological assay systems for microorganisms, toxins, or genetic material in List 1, with specially designed reagents.

#### 6.2 (Commodity Designator Code: BA006200)

Gene probe assay systems for micro-organisms, toxins, or genetic material in List 1, with specially designed reagents.

#### **6.3** (Commodity Designator Code: BA006300)

Biological agent detection systems for microorganisms, toxins, or genetic material in List 1, designed for biological defense or civil defense applications.

#### 6.4 (Commodity Designator Code: BA006400)

Nucleic acid sequencing equipment.

#### 6.5 (Commodity Designator Code: BA006500)

Nucleic acid synthesizers.

#### 6.6 (Commodity Designator Code: BA006600)

Electroporation or biolistics equipment.

#### **6.7** (Commodity Designator Code: BA006700)

Thermal cyclers designed for use in molecular biology.

#### 7.1 (Commodity Designator Code: BA007100)

Aircraft sprayers capable of dispersing aerosols with an ultimate mean size of 15 microns or less at a flow rate exceeding 1 litre of liquid suspension per minute or 10 g of dry material per minute, and the following specially designed components:

spray tanks; certified pumps; and spray nozzles.

#### 7.2 (Commodity Designator Code: BA007200)

Aerosol disseminators (other than aircraft sprayers and foggers), capable of dispersing aerosols with an ultimate mean size of 15 microns or less at a flow rate exceeding 1 litre of liquid suspension per minute or 10 g of dry material per minute.

Note: This entry excludes dry powder fire extinguishers.

#### 7.3 (Commodity Designator Code: BA007300)

Foggers including pulse jet disseminators capable of dispersing aerosols with an ultimate mean size of 15 microns or less at a flow rate exceeding 1 litre of liquid suspension per minute or 10 g of dry material per minute, and the following specially designed components:

head unit; and nozzle assembly.

#### 8.1 (Commodity Designator Code: BA008100)

Aerosolization drums, cabinets, chambers, rooms or other enclosures usable in the study of aerosols.

#### 8.2 (Commodity Designator Code: BA008200)

Nose-only aerosolisation equipment but excluding devices for personal prophylaxis or therapy for medical conditions.

#### 8.3 (Commodity Designator Code: BA008300)

Aerodynamic particle-sizing equipment.

#### 9. (Commodity Designator Code: BA009000)

Vaccines to microorganisms or toxins described in List 1 (excluding subcategories 1.4, 1.5, and 1.6) for use with humans and animals except for the following entries:

Shigella dysenteriae
Foot and mouth disease virus
Lyssa virus
Newcastle disease virus
Peste des petits ruminants virus
Rinderpest virus
Yellow fever virus

Note: Vaccines containing viable microorganisms included in List 1 are notifiable under the List 1 entry.

#### 10. (Commodity Designator Code: BA010000)

Documents, information, software or technology for the design, development, use, storage, manufacture, maintenance or support of entries 1 to 9 above, excluding that in the public domain, published basic scientific research or the minimum necessary for the use of the goods detailed in entries 1 to 9.

NOTE: "Document" means blueprints, plans, diagrams, models, formulae, tables, engineering designs or specifications, manuals or instructions, pertaining to micro-organisms, toxins and genetic material except those containing information generally available to the public.

# **Explanatory Note**

# LIST 1 - Microorganisms, Viruses and Toxins Subject to Notification under the Export/Import Monitoring Mechanism

## 1.1 Microorganisms

| Entry<br>Number | Name                             | Other Names  | Commodity<br>Designator |
|-----------------|----------------------------------|--|-------------------------|
|                 |                                  |  | Code                    |
| 1.1.1           | Bacillus anthracis               |  | BA001101                |
| 1.1.2           | Bacillus cereus                  |  | BA001102                |
| 1.1.3           | Bacillus licheniformis           |  | BA001103                |
| 1.1.4           | Bacillus megaterium              |  | BA001104                |
| 1.1.5           | Bacillus pumilis                 |  | BA001105                |
| 1.1.6           | Bacillus subtilis                |  | BA001106                |
| 1.1.7           | Bacillus thuringensis            |  | BA001107                |
| 1.1.8           | Bartonella quintana,             | Rochalimaea quintana,<br>Rickettsia quintana   | BA001108                |
| 1.1.9           | Brucella abortus                 |  | BA001109                |
| 1.1.10          | Brucella melitensis              |  | BA001110                |
| 1.1.11          | Brucella suis                    |  | BA001111                |
| 1.1.12          | Burkholderia mallei              | Pseudomonas mallei   | BA001112                |
| 1.1.13          | Burkholderia pseudomallei        | Pseudomonas pseudomallei   | BA001113                |
| 1.1.14          | Chlamydia psittaci               |  | BA001114                |
| 1.1.15          | Clostridium botulinum            |  | BA001115                |
| 1.1.16          | Clostridium perfringens          |  | BA001116                |
| 1.1.17          | Coxiella burnetii                |  | BA001117                |
| 1.1.18          | Erwinia amylovora                |  | BA001118                |
| 1.1.19          | Escherichia coli O157:H7         |  | BA001119                |
| 1.1.20          | Francisella tularensis           |  | BA001120                |
| 1.1.21          | Mycoplasma mycoides              |  | BA001121                |
| 1.1.22          | Ralstonia solanacearum           |  | BA001122                |
| 1.1.23          | Rickettsia prowazekii            |  | BA001123                |
| 1.1.24          | Rickettsia rickettsii            |  | BA001124                |
| 1.1.25          | Salmonella typhi                 | Salmonella enterica var typhi  | BA001125                |
| 1.1.26          | Serratia marcescens              |  | BA001126                |
| 1.1.27          | Shigella dysenteriae             |  | BA001127                |
| 1.1.28          | Staphylococcus aureus            |  | BA001128                |
| 1.1.29          | Vibrio cholerae                  |  | BA001129                |
| 1.1.30          | Xanthomonas albilineans          |  | BA001130                |
| 1.1.31          | Xanthomonas campestris pv. citri | Xanthomonas campestris pv. citri types<br>A, B, C, D, E; Xanthomonas citri;<br>Xanthomonas campestris pv.<br>aurantifolia; Xanthomonas campestris<br>pv. Citrumelo | BA001131                |
| 1.1.32          | Yersinia pestis                  | Yersinia pseudotuberculosis var pestis   | BA001132                |

## 1.2 Viruses

| Entry<br>Number  | Name                                  | Other Names                              | Commodity Designator Code |
|------------------|---------------------------------------|--|---------------------------|
| 1.2.1            | African horse sickness virus          |  | BA001201                  |
| 1.2.2            | African swine fever virus             |  | BA001202                  |
| 1.2.3            | Avian influenza virus                 | Fowl plague virus                        | BA001203                  |
| 1.2.4            | Blue tongue virus                     |  | BA001204                  |
| 1.2.5            | Camel pox                             |  | BA001205                  |
| 1.2.6            | Chikungunya virus                     |  | BA001206                  |
| 1.2.7 Congo      | o-Crimean haemorrhagic fever virus    |  | BA001207                  |
| 1.2.8            | Dengue fever virus                    |  | BA001208                  |
| 1.2.9 E          | astern equine encephalitis virus      |  | BA001209                  |
| 1.2.10           | Ebola virus                           |  | BA001210                  |
| 1.2.11           | Enterovirus 70                        |  | BA001211                  |
| 1.2.12           | Foot and mouth disease virus          |  | BA001212                  |
| 1.2.13           | Goat pox virus                        |  | BA001213                  |
| 1.2.14           | Hantaan virus                         |  | BA001214                  |
| 1.2.15           | Human influenza virus                 |  | BA001215                  |
| 1.2.16 Infection | ous haemorrhagic conjunctivitis virus |  | BA001216                  |
| 1.2.17           | Japanese encephalitis virus           |  | BA001217                  |
| 1.2.18           | Junin virus                           |  | BA001218                  |
| 1.2.19           | Kyasanus Forest virus                 |  | BA001219                  |
| 1.2.20           | Lassa fever virus                     |  | BA001220                  |
| 1.2.21           | Louping ill virus                     |  | BA001221                  |
|                  | mphocytic choriomeningitis virus      |  | BA001222                  |
| 1.2.23           | Lyssa virus                           | Rabies virus                             | BA001223                  |
| 1.2.24           | Machupo virus                         |  | BA001224                  |
| 1.2.25           | Marburg virus                         |  | BA001225                  |
| 1.2.26           | Monkey pox virus                      |  | BA001226                  |
| L                | Iurray Valley encephalitis virus      |  | BA001227                  |
| 1.2.28           | Newcastle disease virus               |  | BA001228                  |
| 1.2.29           | Nipah virus                           |  | BA001229                  |
| 1.2.30           | Oropouche virus                       |  | BA001230                  |
| 1.2.31 I         | Peste des petits ruminants virus      |  | BA001231                  |
| 1.2.32           | Porcine herpes virus                  | Aujeszky's disease virus                 | BA001232                  |
| 1.2.33           | Powarsan virus                        | , ,                                      | BA001233                  |
| 1.2.34           | Rift Valley fever virus               |  | BA001234                  |
| 1.2.35           | Rinderpest virus                      |  | BA001235                  |
| 1.2.36           | Rocia virus                           |  | BA001236                  |
| 1.2.37           | Rotaviruses                           |  | BA001237                  |
| 1.2.38           | Sheep pox virus                       |  | BA001238                  |
| 1.2.39           | Sin Nombre virus                      |  | BA001239                  |
| 1.2.40           | St. Louis encephalitis virus          |  | BA001240                  |
| 1.2.41           | Sugar cane Fiji disease virus         |  | BA001241                  |
| 1.2.42           | Swine fever virus                     | Hog cholera virus                        | BA001242                  |
| 1.2.43           | Swine influenza virus                 | 5  | BA001243                  |
| 1.2.44           | Swine vesicular disease               | Porcine enterovirus type 9               | BA001244                  |
| 1.2.45           | Teschen disease virus                 | <u> </u>                                 | BA001245                  |
|                  | Tick-borne encephalitis virus         | Russian Spring-Summer encephalitis virus | BA001246                  |
| 1.2.47           | Variola virus(es)                     | Smallpox virus                           | BA001247                  |
|                  | nezuelan equine encephalitis virus    | î  | BA001248                  |
| 1.2.49           | Vesicular stomatitis virus            |  | BA001249                  |
|                  | estern equine encephalitis virus      |  | BA001250                  |
| 1.2.51           | White pox virus                       |  | BA001251                  |
| 1.2.52           | Yellow fever virus                    |  | BA001252                  |

## 1.3 Toxins

| Entry  | Name                             | Other Names                             | Commodity  |
|--------|----------------------------------|---|------------|
| Number |                                  |   | Designator |
|        |                                  |   | Code       |
| 1.3.1  | Abrin(s)                         |   | BA001301   |
| 1.3.2  | Aflatoxin(s)                     |   | BA001302   |
| 1.3.3  | Botulinum toxin(s)               |   | BA001303   |
| 1.3.4  | Bungarotoxin(s)                  |   | BA001304   |
| 1.3.5  | Ciguatoxin(s)                    |   | BA001305   |
| 1.3.6  | Clostridium perfringens toxin(s) |   | BA001306   |
| 1.3.7  | Conotoxin(s)                     |   | BA001307   |
| 1.3.8  | Microcystin(s)                   | Yanoginosins; Cyanginosin               | BA001308   |
| 1.3.9  | Modeccin(s)                      |   | BA001309   |
| 1.3.10 | Pseudomonas exotoxin(s)          |   | BA001310   |
| 1.3.11 | Ricin(s)                         | Ricins, Ricine                          | BA001311   |
|        | [CAS No.9009-86-3]               |   |            |
| 1.3.12 | Saxitoxin(s)                     | 1H,10H-Pyrrolo[1,2-c]purine-10,10-      | BA001312   |
|        | [CAS No. 35523-89-8]             | diol, 2,6-diamino-4-                    |            |
|        |                                  | [[(aminocarbonyl)oxy]methyl]-           |            |
|        |                                  | 3a,4,8,9-tetrahydro-,[3aS-              |            |
|        |                                  | (3a.a,4a,10aR*)]-, Saxitoxin hydrate,   |            |
|        |                                  | Mussel poison, Clam poison, Paralytic   |            |
|        |                                  | shellfish poison, Gonyaulax toxin, STX. |            |
| 1.3.13 | Shiga toxin(s)                   |   | BA001313   |
| 1.3.14 | Staphylococcus enterotoxin(s)    | Staphylococcus aureus entertoxin        | BA001314   |
|        |                                  | Staphylococcus aureus toxin             |            |
| 1.3.15 | Tetrodotoxin(s)                  |   | BA001315   |
| 1.3.16 | Trichothecene toxin(s)           |   | BA001316   |
| 1.3.17 | Verotoxin(s)                     |   | BA001317   |
| 1.3.18 | Volkensin(s)                     |   | BA001318   |

## 1.4 Fungi

| Entry  | Name  | Other Names  | Commodity  |
|--------|---|--|------------|
| Number |   |  | Designator |
|        |   |  | Code       |
| 1.4.1  | Aspergillus flavus                                    |  | BA001401   |
| 1.4.2  | Aspergillus nidans                                    |  | BA001402   |
| 1.4.3  | Cochliobolus miyabeanus                               | Helminthosporium oryzae                              | BA001403   |
| 1.4.4  | Colletotrichum coffeanum var. virulans                |  | BA001404   |
| 1.4.5  | Dothistroma pini                                      | Scirrhia pini  | BA001405   |
| 1.4.6  | Fusarium oxysporum                                    |  | BA001406   |
| 1.4.7  | Magnaporthe grisea                                    | Pyricularia grisea, Pyricularia oryzae               | BA001407   |
| 1.4.8  | Microcyclus ulei                                      | Dothidella ulei                                      | BA001408   |
| 1.4.9  | Peronospora hyoscyami de Bary f.sp. tabacina skalicky | Peronospora hyoscyami de Bary f.sp.<br>Adam skalicky | BA001409   |
| 1.4.10 | Puccinia graminis                                     | Puccinia graminis f. sp. Tritici                     | BA001410   |
| 1.4.11 | Puccinia striiformis                                  | Puccinia glumarum                                    | BA001411   |
| 1.4.12 | Tilletia carnis                                       |  | BA001412   |
| 1.4.13 | Tilletia foetida                                      | ·  | BA001413   |
| 1.4.14 | Tilletia indica                                       |  | BA001414   |

# 1.5 Other Organisms

| Entry<br>Number | Name  | Other Names | Commodity<br>Designator<br>Code |
|-----------------|---|-------------|---------------------------------|
| 1.5.1           | Eukaryotic (non-microbial) organism which produce any listed toxins |             | BA001501                        |

# 1.6 Genetically Modified Organisms

| Entry<br>Number | Name   | Other Names | Commodity<br>Designator<br>Code |
|-----------------|--|-------------|---------------------------------|
| 1.6.1           | Genetically modified microorganisms listed above.  |             | BA001601                        |
| 1.6.2           | Genetically modified microorganisms or genetic material containing nucleic acid sequences derived from any of the listed microorganisms, above or that contain nucleic acid sequences associated with pathogenicity determinants of any listed microorganism; or that contain nucleic acid sequences associated with any listed toxin. |             | BA001602                        |
| 1.6.3           | Genetically modified variants of eukaryotic (non-microbial) organisms which produce any listed toxin.  |             | BA001603                        |