

Standard Methods and Rules (SMR) for Control of Trade Related Transboundary Animal Diseases (TADs)

A region wide plan for trade-related TAD control to facilitate both export and intra-regional trade in livestock and livestock products

Framework Discussion Document

Introduction

This document is a draft for consideration by Chief Veterinary Officers of both exporting and importing nations for a benchmark-setting regional program that:

- 1. Begins with the reality of the present situation in animal health and trade;**
- 2. Accepts what is currently being done by exporting nations in relation to each TAD of concern;**
- 3. Can be built upon from current realities, as need arises;**
- 4. Enhances negotiation between the exporters and importers, always being mindful of OIE recommendations in the Judgment of Equivalence section of the 2010 edition of the OIE Terrestrial Code, Chapter 5.3.1-8;**
- 5. Addresses live animal health as related to both live animal trade and trade in animal products commodities;**
- 6. Can be made flexible for meeting changing needs and situations, and for responding to new developments in disease diagnosis and control;**
- 7. Coordinates region-wide animal health prevention and disease control activities.**
- 8. Forms livestock health and disease control programs that provide foundation for Health Certification in livestock trade.**

Literature about livestock trade in Eastern Africa repeatedly mentions “harmonization” and “coordination” of animal health and import/export rules as a high priority issue.

This proposed Standard Methods and Rules is a standard-setting approach based on coordination of national Department of Veterinary Services programs and field activities, creating uniformity for local, intra-regional, inter-regional, and intercontinental livestock trade. The program is tailored so that each disease has a separate program with elements specific to its etiology and dynamics.

The SMR approach can be used for the Horn of Africa nations exporting to the Arabian Peninsula, Middle East, and Indian Ocean nations, and within the Eastern Africa region. It also may have potential as the SPS basis for COMESA livestock trade generally. It may be made to specifically fit the needs of the GHoA/GCC-Middle East and/or intra-COMESA livestock trade that is so important to the well-being and economies of these trading blocs.

The OIE Principle of Equivalence in Chapter 5.3.1-8 (2010 Edition of the Code) accepts that there can be different approaches to the same goal of *Safe Trade with Appropriate Level of Protection* (ALOP) for the importer, and this proposed program can be designed to accept that sort of flexibility with the different Departments of Veterinary Services in the exporting nations.

As discussion and negotiation take place, it is worthy of note that making the system overly complex, difficult to accomplish, and expensive to operate is destructive to its success. The most streamlined, cost effective, and useable design will work better than one that is not achievable. If the system fails, trade will go on regardless, as it always has, but with higher risk to the importer. The idea of this approach, as specified in the OIE Principle of Equivalence, is protection of the importer.

This entire document is draft and its ideas are subject to discussion, negotiation, and revision. It is intended as a framework to be tailored to the needs of the primary users - Chief Veterinary Officers of both exporting and importing nations - and is entirely open to change.

The SMR approach to Transboundary Animal Disease management under OIE recommendations

The animal health basis of trade in livestock and livestock products between the nations of the Greater Horn of Africa (GHOA) and the nations of the Arabian Peninsula and Middle East, and within the COMESA trading bloc, is the concept of Safe Trade with Appropriate Level of Protection (ALOP).

Chapter No. 5.3.1-8. of the 2010 Terrestrial Code of the World Organization for Animal Health (OIE) provides a structure for negotiation about Safe Trade considerations under the heading "OIE Procedures Relevant to the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization" and notes "Before trade in animals or their products may occur, an importing country must be satisfied that its animal health status will be appropriately protected." Chapter 5.3.2. goes on to clarify that "..... different animal health and production systems can provide equivalent animal and human health protection for the purpose of international trade, with benefits to both the importing and the exporting country."

Additionally, Chapter 5.3.3 stipulates that "International recognition of the legitimacy of different approaches to achieving the importing country's appropriate level of protection (ALOP) has led to the principle of equivalence being included in trade agreements, including the Agreement of Application of Sanitary and Phytosanitary Measures (the SPS Agreement) of the World Trade Organization (WTO).

The following Standard Methods and Rules (SMR) program is intended to provide a framework for surveillance, prevention, and control of the certain Transboundary Animal Diseases (TADs) that are important to trade and exportation of livestock from the nations of the Greater Horn of Africa (GHOA) to the nations of the Arabian Peninsula and Middle East. The SMR approach acknowledges that the exporting nations may have individual differences in their structures but that compliance with the SMR program will uniformly create the conditions necessary for Safe Trade with Appropriate Level of Protection (ALOP) under Chapter 5.3.1-8.

The intention of the SMR program is to standardize procedures for detection of and response to specified trade-related transboundary animal diseases so that the disease status of the importing nations is protected. OIE Chapter 5.3.1. strongly encourages the use of Risk Assessment, Risk Analysis, Risk Management - and by inference, Risk Communication - as primary tools for dealing the TAD prevention and control.

Components of an SMR Program

Legal authority to implement the SMR program

The Chief Veterinary Officer of a nation exporting livestock to another nation under this agreement must be vested with legal authority under the laws of the exporting nation to carry out the animal disease surveillance and control programs for the diseases specified hereunder.

Transboundary Animal Diseases to be considered for inclusion in the SMR program - specificity for trade-related transboundary animal disease (TADs)

Note - not all these diseases need be included. Which ones are included is a subject of negotiation. Each disease will have a section of specified procedures to be followed under the SMR agreement.

Diseases of primary consideration

1. Rift Valley Fever (RVF)
2. Foot and Mouth disease (FMD)
3. Peste des Petites Ruminants (PPR)
4. Brucellosis in Sheep and Goats - *Brucella melitensis* (BM)
5. Rinderpest (RP)

Diseases of secondary consideration

6. Sheep and Goat Pox (SGP)
7. Camel Pox (CP)
8. Contagious Bovine Pleuropneumonia (CBPP)
9. Contagions Caprine Pleuropneumonia (CCPP)
10. Other(s)???

Reporting of disease status

The Chief Veterinary Officer all nations shall report the existence of OIE reportable diseases in a timely manner. The Chief Veterinary Officer of an exporting nation shall periodically report, at intervals of one year (12 months) or less, the status of these diseases in the exporting nation, the structure and findings of the surveillance program, and the activities of control programs in that nation for each of these specified animal diseases.

Personnel authorized to implement the SMR program

The Chief Veterinary Officer of a nation exporting livestock to another nation under the SMR agreement shall be responsible for authorization of personnel of the Department of Veterinary Services of that nation, personnel of any laboratory carrying out testing of any animal samples associated with the SMR program, any private veterinary practitioner, or any other person associated with program technical work to carry out functions related to the program so as to ensure that the work done is within the scope and rules of the program.

Laboratories authorized to perform testing in the SMR program

All laboratories conducting diagnostic tests on animal samples for purposes of the SMR program must be authorized by the Chief Veterinary Officer of the exporting nation for which the testing is being done.

Animal disease surveillance and reporting for the SMR program

Background surveillance and reporting system

Each nation shall carry out a livestock disease surveillance and reporting system of their own design at frequency and intensity as is considered appropriate to their disease status situation.

Animal disease reporting procedures

Each nation shall have a system for reporting of TADs of trade importance by authorized personnel. Such reporting shall be integrated with the Department of Veterinary Services information collection system so that it can be analyzed in a timely manner and dealt with as necessary.

Response to positive surveillance report

Each nation shall have a plan for responding to a report of occurrence of a TAD of importance to livestock trade under the SMR program, and if the disease is reportable to the OIE shall make that report in a timely manner. The response plan shall include elements of confirmation laboratory testing, epidemiology, tracing, and appropriate disease control response.

Disease control measures in response to positive surveillance testing

Quarantine and/or other movement restrictions

A herd or flock of animals wherein an outbreak of a TAD on importance to livestock trade under the SMR program is diagnosed shall be quarantined and/or movement restricted as appropriate to prevent infected and/or exposed animals from entering the marketing system.

Testing procedures

Disease testing shall be undertaken to determine extent of disease involvement and spread, and shall include considerations for, as determined by standard procedures for the disease of concern; percentage of animals tested or whole herd testing in a herd or flock, adjacent herds testing, area testing, appropriate decisions on test positive individuals, appropriate decisions on test positive herds, and any other testing for discovery measures specific to the given disease.

Vaccination and/or other measures

Consideration shall be given to appropriate disease control measures such as area vaccination and/or ring vaccination, and a system be for identification of vaccinates be considered.

Risk assessment procedures in response to finding an active disease outbreak

Determination of enzootic and disease free areas

Quantitative risk assessment

If necessary technical and numerical/statistical information is available, a quantitative risk assessment may be carried out to determine disease status of a given nation or area. The risk assessment shall be used for purposes of decision making concerning herd and area disease status as related to TADs of importance to livestock trade under the SMR program

Qualitative risk assessment

If technical or numerical/statistical information is not available or is insufficient for a quantitative risk assessment, a qualitative risk assessment may be carried out to analyze the disease occurrence and incidence. The risk assessment shall be used for purposes of decision-making concerning herd and area disease status as related to TAD of importance to livestock trade under the SMR program.

Movement of animals from enzootic areas

Animals in an area determined to be enzootic for a TADs of importance to livestock trade under the SMR program may be tested with appropriate and approved tests and undergo approved quarantine period methodologies after which, if proven negative, may move into the marketing system.

Testing regimen to allow movement out of enzootic areas

Approved tests and testing regimens used for each disease shall be determined by the program and executed by the DVS of the exporting nation.

Movement of animals from free areas

There shall be no restriction on animals originating in areas free of disease as determined by a risk assessment.

Period of quarantine/separation/isolation prior to exportation

Time in marketing corridors may under some circumstances be considered as applying to the period of quarantine agreed to under SMR program rules. Such quarantine allowance shall be negotiated and agreed upon for each disease.

Total time of quarantine/separation/isolation prior to exportation shall be determined using science based information on the specific TADs and negotiated and agreed upon under program rules.

Ownership identification of animals being held in quarantine facilities shall be determined by agreement between the owner of the animals and the quarantine facility operator.

Quarantine station testing regimen

Identification of animals for testing purposes shall accurately identify each individual animal tested so that any test-positive animal can be re-identified and removed for further testing or disposal. Specific identification techniques shall be determined by the operator of the quarantine station and shall take into consideration accuracy, ease of application, and reduction of stress to animals.

Screening (presumptive) testing

The program will stipulate screening tests for specific diseases and each laboratory doing program testing will carry out the testing with protocols approved by the SMR program. Individual animal positive screening tests will be followed by supplemental confirmation tests stipulated by the SMR program. Negative cohort animals shall be held until the supplemental testing is completed and decisions related to disposal made according to program rules and agreements.

Supplemental (confirmation) testing

Supplemental tests for screening test positive individual animals will be stipulated by the program and each laboratory doing program testing will carry out the testing with approved protocols. Program specifications for each disease will deal with disposal of individual animals that are positive to supplemental tests, and for cohort animals of the supplemental test positive animal.

Identification of animals and certification of health status

Necessities for identification and certification are subject to consideration of the needs of the importers to be assured of testing and health status of the animals, and needs of the exporters for disease control tracing and epidemiology. In some cases individual identification may be needed and in other cases group identification is sufficient.

Identification and certification need to be thoroughly thought through and negotiated so that the system developed is sufficiently accurate, affordable, and useable. An overly complex and expensive system is very subject to failure.

Animal welfare concerns

Adequate feed, water, rest, and space

Each animal in trade corridors associated with the SMR program shall be provided with adequate feed, water, rest, and space to assure freedom from unnecessary discomfort and stress.

Humane handling in markets, quarantine stations, and during transport

Each animal in trade corridors associated with the SMR program shall be handled in such a manner as to assure freedom from unnecessary discomfort and stress. The use of blunt instruments to strike animals is not acceptable under the program. Blood and tissue sampling procedures and application of identification devices will be done using minimally stressful methods.

Specific Diseases: elements of surveillance, testing, and control protocols

Each disease has a separate program. Following are elements of a TAD disease control program to be considered for each disease separately, and relevant elements applied

1. Use of predictive tools, e.g. satellite imagery for RVF, recurrence in known enzootic areas, etc
2. Surveillance and diagnosis:
 - a) continuous surveillance and reporting by all field veterinary personnel
 - b) syndromic surveillance potential
 - Stomatitis/enteritis complex (RP, FMD, PPR)
 - Pneumonia complex (CCCP, CBPP)
 - Abortion complex (Brucellosis, RVF)
 - Pox complex (SGP, CP)
 - c) any suspicious cases isolated, quarantined
 - d) diagnostic testing undertaken using OIE approved protocols
3. Epidemiological investigation in case of a positive diagnosis:
 - a) stop movement and/or quarantine orders;
 - b) epidemiology and increased testing to determine boundaries of affected area;
 - c) epidemiological tracing to determine source and exposure;
4. Risk Assessment:

In the case of any outbreak of a TAD, a risk assessment should be carried out in cooperation with the surveillance and epidemiological investigation program to determine extent and effects of the outbreak and assist with designing the Risk Management strategies
5. Disease control: interventions appropriate and specific to disease being dealt with
 - a) mass vaccination and/or ring vaccination, as appropriate
 - b) testing, isolation, quarantine
 - c) destruction of affected animals, if necessary, with compensation to owner
 - d) continued surveillance testing to determine extent of outbreak
6. Quarantine and movement control:

Depending on the disease, quarantine of affected animals and/or wider area stop-movement orders until outbreak is contained and controlled
7. Identification of animals:

If possible, animals dealt with in vaccination campaigns and/or any other disease control interventions should be marked so that their status is known, e.g. branding, tagging, tattooing
8. Class of animals:

Disease control programs can be different, depending on the intended use of the animal.

 - a) slaughter stock - some non-zoonotic diseases are not an issue
 - b. feeding (fattening) stock - some epizootic diseases e.g. reproductive diseases, not an issue
 - sexually intact animals and castrates may be treated differently
 - c. breeding stock - thorough testing to ensure disease freedom increasingly important
9. Other concerns specific to a particular disease