Preliminary observations on the AMR status of OIE Members of the Asia and the Pacific Region

A. Tool-based observations

1. WHO self-assessment tool:

- (1) Advantages:
 - a. Correlates quite well with the OIE strategies;
 - b. Most of the AP MCs responded to it (30 in 2016; 29 in 2017);
 - c. Results from two rounds of survey are available, some comparisons between them can be made:
 - d. Most updated information.

(2) Disadvantages:

- a. Subjective evaluation;
- b. Still a few gaps to be further addressed (citizen awareness, R&D for alternatives to AM, and PPP in research and risk management);
- c. Several questions in 2017 questionnaire are different from those of the 2016 questionnaire, one must be cautious when comparing the results from these two years;
- d. Chinese Taipei and New Caledonia who are not WHO MCs were not included in the survey.

2. Questionnaire for Technical Item I of the 85th General Session:

(1) Advantages:

- a. Designed based on OIE strategies on AMR;
- b. Breakdown questions, more detailed information;
- c. Reflects the vet sector better than the other tools:
- d. Questions are designed to cover past and current situations and short-term and middle-term future perspectives;
- e. Chinese Taipei and New Caledonia who were not included in the WHO self-assessment survey responded to it.

(2) Disadvantages:

- a. Subjective evaluations;
- b. Responses from AP MCs are currently not available, adding to that, only 18 (59%, lowest among the OIE Regions) AP MCs responded to the questionnaire;
- c. Scales of measurement to each question are variable and are different from the other tools, adjustments would be required to compare the result obtained to those from other tools.

3. SEARO tool

- (1) Advantages:
 - a. Objective evaluation;
 - b. Complementary to WHO self-assessment tool in awareness targeting general public and R&D.

(2) Disadvantages:

- a. Results from only 10 AP MCs are available;
- b. Questions related to vet sector are rather generic, no detailed information;

4. JEE

(1) Advantages: An objective evaluation to serve as a reference for other more subjective evaluations.

(2) Disadvantages:

- a. Evaluating the general performance of a MC in both its human health and animal health sectors. The JEE scores of a MC do not directly reflect its VS performance in AMR;
- b. Results from only 13 AP MCs are available.

B. Item-based observations

- 1. In the table, similar items from self-assessment tool, SEARO tool and JEE are put together. However, they might not be totally comparable. In addition, time difference should be considered as well.
- 2. WHO self-assessment results are roughly comparable to the more objective evaluation results, e.g. SEARO AMR report 2016. Nevertheless, a few gaps can be identified between the self assessment results and the other tools.
- 3. MCs tend to become more conservative in 2017 by not responding to some of the self-assessment questions. "Optimization of AMU" and "IPC in animal and plant production" are the two questions to which the most countries (10 each) did not respond. Are these the areas that MCs least satisfied with?
- 4. In both 2016 and 2017, MCs were most satisfied with their progress in the development of NAP. In addition, this area is also considered by the MCs as the area that they have made most progress.
- 5. In 2017, MCs were least satisfied with their performance in "Training and education in farming, food production, food safety and environment sectors" and "Optimization of AMU", compared to 2016 in which MC were least satisfied with "Optimization of AMU" and "National surveillance for AMR".

C. MC-based observations

- 1. Mongolia did not respond to any of the self-assessment questions in 2017.
- 2. Vanuatu only responded to one question of the self-assessment questions in 2017.
- 3. Generally speaking, the MCs considered progresses have been made in their respective countries, but there are several downgrade evaluations, among which a minus 3 downgrading from 2016 to 2017 by Bhutan in their "National monitoring on AMU" is noted.
- 4. New Zealand downgraded itself most. In 2017, four items were considered less advanced than in 2016, i.e. training and education in vet sector (-2), national monitor on AMU (-2), optimization of AMU (-2) and IPC (-1).
- 5. Republic of Korea and Malaysia gained the best overall score in the self assessment in 2017. However, Malaysia did not provide information regarding their performance in "Training and education in farming, food production, food safety and environment sectors".
- 6. Japan gained the best overall score in the self assessment in 2016, but it did not respond to 3 relevant questions and hence got lower score in 2017.

D. Tentative conclusions

- 1. Generally speaking, the MCs considered progresses have been made in their respective countries in 2017 compared to 2016.
- 2. "Optimization of AMU" and "Training and education in farming, food production, food safety and environment sectors" in MCs are recommended as the priority aspects to which the OIE interventions target.
- 3. RRAP is recommended to collaborate with VS of those MCs who have not yet developed a NAP (Brunei, Vanuatu, Micronesia and Mongolia) to establish one, based on their respective situation in the country.
- 4. Most of the MCs have established their own NAPs. Currently, implementation of the NAP and monitoring of the effectiveness are the most important things to do for the MCs.
- 5. There is a broad spectrum of AMR status of the Fleming-funded MCs, spanning from 8th (Philippines) to 27th (Laos) places in 2017 self-assessment survey. One can expect to see the difference in intervention strategies that the OIE applies to the individual MCs and the difference in the outcomes. This, in turn, will also help the OIE to find out the most cost-effective way to allocate its resources.