

VACCINE BANKS: Policy options evaluated

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Outline

- Background
- Evaluation framework
- Approach
- Conclusions

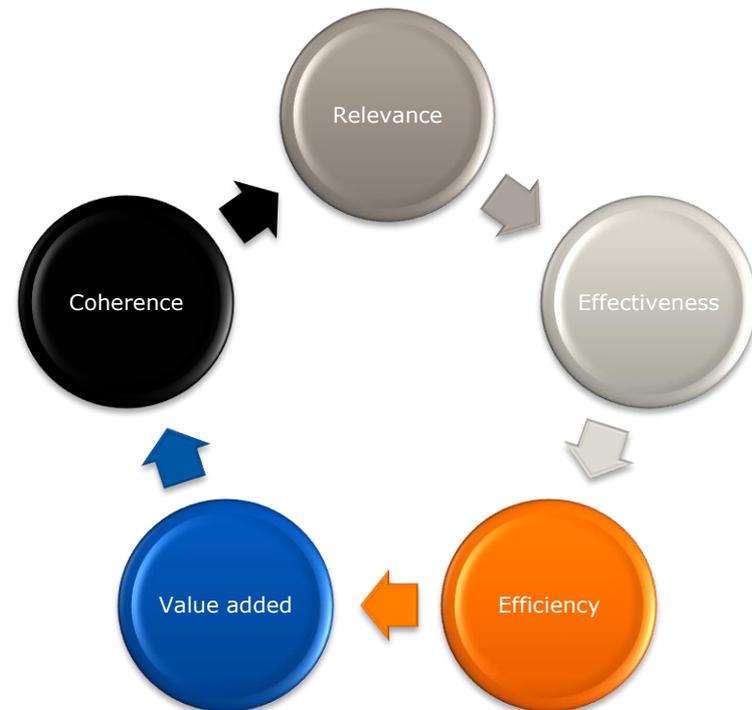


Background

- EU animal health law
 - Vaccination strategy should be part of MS's contingency plan
- Increased interested in vaccine banks (e.g. USA)
- Policy options: vaccination in increasing number of MS considered as part of the eradication strategy
- Vaccine bank options:
 - Intergovernmental: EU vaccine bank
 - MS vaccine banks
 - Larger networks of collaborating vaccine banks

Evaluation framework

- EU developed evaluation framework for *ex ante* and *ex post* policy evaluation
- The evaluation will use five evaluation criteria specified for evaluation of EU-funded programmes:
 - Relevance
 - Effectiveness
 - Efficiency
 - Value added
 - Coherence



Relevance

The extent to which an intervention's objectives are pertinent to needs, problems and issues.

- Q1: Is vaccination needed as part of the control strategy for FMD?
- Policy options: EU min or EU min + additional measures (preemptive culling or vaccination)
- Factors that contribute to decision to vaccinate: e.g. farm density and structure in the infected area, multifocal introduction, high risk of uncontrollable spread of infection, inadequate capacity or resources for control by non-vaccination, or measures economically, socially or ethically unacceptable (ref SANCO/7070/2010) → **epi-eco modelling**
- Answer: vaccination and access to vaccine banks **is/is not** relevant for an effective control of FMD outbreaks in my MS.
- But only access to EU vaccine bank or also own vaccine bank?

Effectiveness

The extent to which objectives pursued by an intervention are achieved.

- Q: is having an own vaccine bank more effective than having access to the EU vaccine bank?

Epidemiologic and economic consequences



Amount of vaccine available / time to prepare for vaccination

	# doses	Moment of availability of vaccine
European Union Vaccine Bank	36 million doses, all 7 serotypes, 16 strains	4- 14 days
Individual MS 5 EU MS; 3 non-EU MS	37,8 million doses 6 serotypes and 18 antigens	?

Efficiency

Best relationship between resources employed and results achieved in pursuing a given objective through an intervention.

- Q: What is the cost effectiveness of the two options?
- In case of an outbreak to evaluate difference between alternatives:
 - Outbreak costs/ probability of extreme costly outbreaks
 - Frequency of outbreaks
- In period without outbreaks:
 - Peace time costs (contracts) → annual costs per year with no outbreaks
 - Different forms of existing and future contracts
 - Alternative use of vaccine/ Availability for others
 - Stocks need to be replaced every 2-5 years

Value added

The value resulting from applying policy measures at the different levels, the value that would have resulted from applying similar measures at regional or national level or EU by public authorities or the private sector.

- Q: What is the added value of having a own vaccine bank
- Factors that contribute to decision:
 - The risk of having an outbreak
 - # doses available from different sources
 - Situation in other participants in vaccine bank
- → previous steps shows whether having an own vaccine bank has benefits for a your MS.

Coherence

The extent to which the intervention does have synergy and does not contradict other interventions with similar objectives

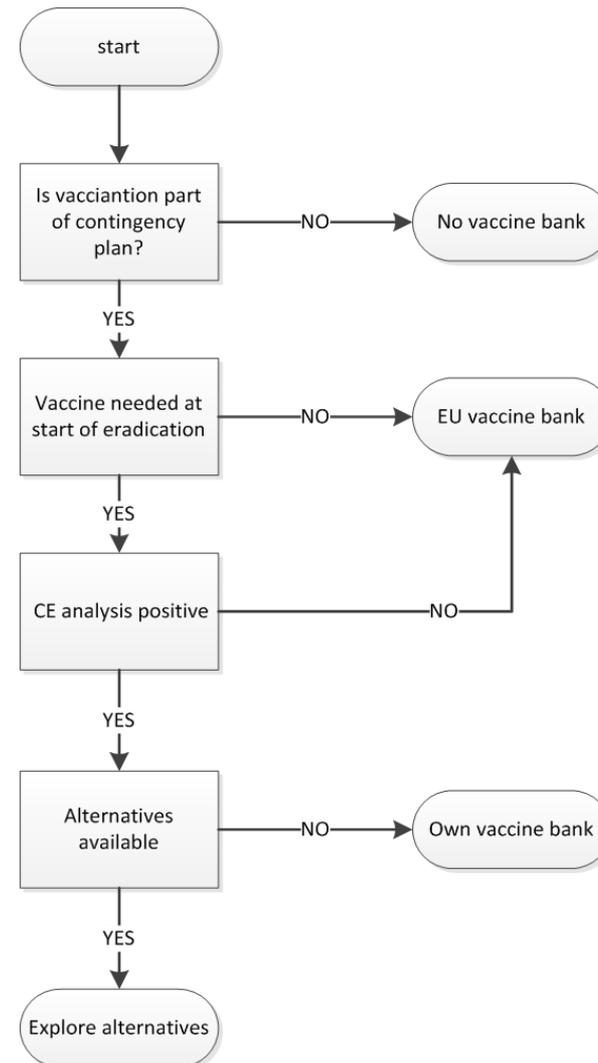
- Vaccination strategy and having access to vaccine banks is:
 - part of the new Animal health law (Regulation (EU) 2016/429)
 - has legal base for vaccine bank is Council Decision 91/666 and Council Directive 2003/85/EC
 - in line with OIE recommendations
 - in line with new insights on the control of FMD (vaccination to live strategies)

Other alternatives

- A 'global' and interactive vaccine bank association: agreeing a system of resource sharing that could orchestrate additional emergency cover with vaccine or antigen from the reserves of network members. ([Barnett et a, 2010](#))
 - Team-up with neighbor or with partners further away
 - The probability that you need your vaccine bank is decreasing with the success of our FMD eradication and control strategy: challenge to maintain funding
- Assured Emergency Supply Options(AESOP) -for FMD vaccines ([EUFGMD 2018](#))

Conclusions

- The presented evaluation framework can support the decision making process by structuring the evaluation.
- Optimal decision can differ between MS
- Are there other options to maintain access to vaccine stocks?



Thank for your attention

Questions?

