ERFP WG Ex Situ, Belgrade, 4th May 2017

Sanitary and Veterinary Issues in Cryo-Conservation - New developments?

RFP EUROPE



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Content

EU-Legislation

OIE

- Possibilities and problems
- Whats new no attempt at completeness

Diagnosis opportunities

- Genetic opportunities
- **Conclusions and questions**





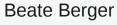
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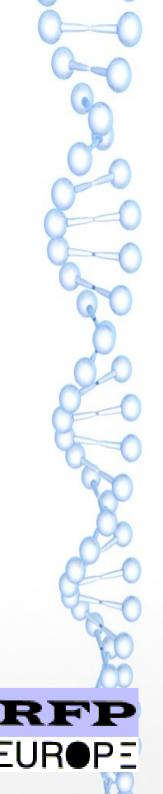
OIE

World Organisation for Animal Health

- Aims (selection)
 - Safeguard world trade by publishing health standards for international trade in animals and animal products
 - Improve the legal framework and resources of national Veterinary Services
 - 116 diseases listed for 2017
 - 23 multi-species diseases







OIE recommendations

- Base of legislation (national and international)
 - EU legislation sometimes exceeds OIE recommendations
- Consider commensurability

but

do not mention conservation of genetic resources!



EU legislation: Semen, Ova, Embryos

Bovine – frozen semen

Council Directive 88/407/EEC

Directive 2003/43/EC (intra Union trade)

Council Directive 2011/630/EEC (Import third countries)

Bovine – frozen ova & embryos

Council Directive 89/556/EEC

Directive 2008/73/EC (Trade, approved collection centres)

RFPCommission decision 2006/168/EU (Import)



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EU legislation: Semen, Ova, Embryos

Porcine – fresh semen

- Council Directive 90/429/EEC (intra Union trade)
- Directive 2008/73/EC (intra Union trade, appoved collection centres)
 - Commission Decision 2012/137/EU
- **Porcine** fresh and frozen ova & embryos
 - Council Directive 92/65/EEC (intra Union trade)
 - Directive 2008/73/EC (Trade, appoved collection and transfer teams)

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Commission Decision 2008/636/EC (Import third countries)

EU legislation: Semen, Ova, Embryos

Ovine & Caprine – fresh and frozen semen, ova, embryos

Council Directive 92/65/EEC

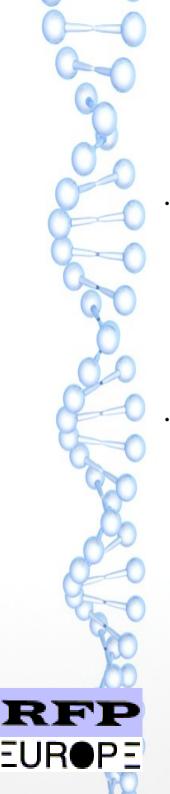
Commission Decision 2010/470/EU (certificate for intra Union trade)

Commission Decision 2010/472/EU (Import third countries)



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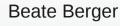
EU legislation: Semen, Ova, Embryos

Equine – fresh and frozen semen, ova, embryos

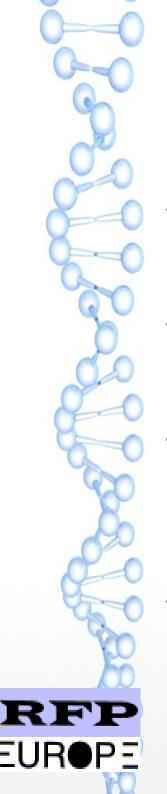
- Council Directive 92/65/EEC
- Directive 2008/73/EEC (intra Union trade)
- Commission Decision 2010/470/EU (Health certificates
- Commission Decision 2004/2011/EU (Import)

Other species - fresh and frozen semen, ova, embryos

National measures according to the general principles of Council Directive 92/65/EEC







Sanitary & Veterinary Issues

Sanitary conditions under which material is collected, stored, ...

Sanitary requests to be met by the donor animal

Veterinary issues according to current international and/or national regulations and laws

Genetic hygiene – hereditary defects, ...



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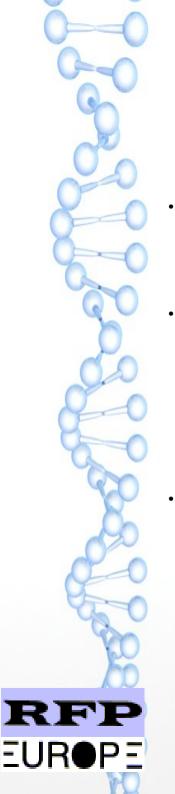
Possibilities of S & V

- Enable safe national and international exchange and use of material
 - Ensure harmonized practices in collecting, storing material
- Protect against the spread of infective diseases and zoonoses and hereditary defects



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Problems & Questions

- Regulations not tailored to genebanking
 - National derogations as solution?
- Regulations consider only mainstream breeds biotechnical infrastructure well established
 - Endangered local and (regional) transboundary breeds?

"Clumsiness" - cannot integrate newly developed methods for analyzing fast enough



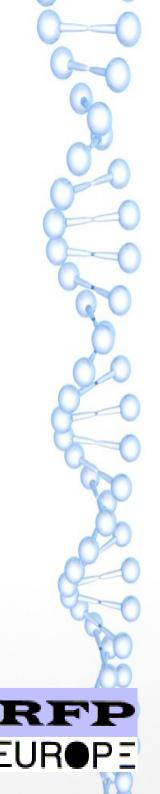


- Agent Reovirus 24 serotypes (so far)
- \cdot Very stable (years) in presence of protein
- · Limited to ruminantd, not transmittable to humans
- Sources of infection
 - Gnats
 - Blood
 - Semen (!)

Strict regulations for AI centres and use of semen in EU

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Example Bluetongue

- Strict limitations to tradeof semen in EU-legislation
- Depending on risk status of member country

but

- PCR diagnosis possible
- Just test semen charge and if o.k. use it = national derogation

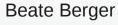


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Example *M.agalactiae*

- Infectious agent Mycoplasma
 - Mastitis, destruction of the udder in small ruminants
 - Male animals are transmitters
- · Transmissible by frozen semen!
- Economically very important, Animal Welfare issues
- Legislation demands ELISA not reliable in males, not available for old samples
- Solution: Species-specific PCR from semen
- But method still not accredited!

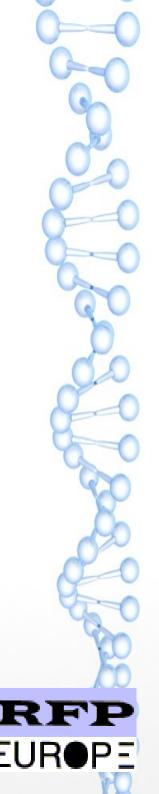




Conclusions and questions concerning genebanks

- EU legislative allows exceptions within limits
 - Priviledged premises AI centres, semen depots
 - Genebanks not mentioned
- National emergency plans (NEP)
- How to integrate into NEP discussion
- National derogations for gene bank material
- Old genebank material new diagnosis methods (like PCR for infectious agents)





Conclusions

- EU regulations on disease control may prevent use of genebank material
- National derogations increasingly important
- New methods and opportunitites for diagnosis can ensure not to use infective material.
- Should make derogations easier

Responsibility of countries – contact governments

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Thank you for

questions, comments, discussion





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