GENERAL AUDIT

REPORT OF A SPECIFIC AUDIT CARRIED OUT IN SPAIN FROM 20 TO 31 OCTOBER 2008 IN ORDER TO EVALUATE THE OPERATION OF THE BOVINE BRUCELLOSIS AND TUBERCULOSIS ERADICATION PROGRAMMES

PART B – SECTOR SPECIFIC ISSUES

In response to information provided by the Competent Authority, any factual error noted in the draft report has been corrected; any clarification appears in the form of a footnote.

3.2.5. Epidemiological investigations

Legal basis:

Point 3A (b) of Chapter I of Annex A to Council Directive 64/432/EEC require the CA to carry out epidemiological examinations following the suspension of the officially TB free herd status.

Point 3B (d) of Chapter I on Annex A to Council Directive 64/432/EEC requires the CA to trace and check any herd considered to be epidemiologically related.

Audit findings:

Epidemiological investigations were carried out by the LVU at holdings in which cattle infected with TB were detected. These investigations were performed in accordance with guidelines issued by the CCA which prescribe the use of a standard form.

Genotyping of *M. bovis* is performed in isolates from domestic animals (cattle, goats and pigs) and wild animals (deer, wild boar, roe deer, fallow deer, lynxes etc.) in the VISAVET laboratory at the Universidad Complutense de Madrid (which is also a Community reference laboratory) and in the national reference laboratory in Santa Fe (Granada). As a result the CCA had a comprehensive list with "the fingerprints" of all isolates that provides additional and useful information for the purpose of epidemiological investigations.

However, the mission team noted that:

- Accordingly to the EP-TB 2007, following the detection of a TB positive animal an epidemiological investigation is only to be carried out
  - in ACs with a herd prevalence below 1 % in T3 herds and in T2 herds if the herd is considered as intermittently infected and
  - in consequence, in some ACs with a high TB herd prevalence in 2007, epidemiological investigations were seldom performed: In Andalucía only 32 epidemiological inquiries were performed out of 195 newly infected TB herds and in Castilla y Leon only 184 epidemiological inquiries out of 557 newly infected TB herds. In 2007, in Andalucía, the TB herd prevalence was 4.15 % and in Castilla y Leon 4.16 % (data provided by *"Informe final técnico-financiero programa nacional de la tuberculosis bovina año 2007"* which was submitted to the Commission services)[44].
- As described in Chapter 3.3.2 and in Chapter 1 of Part A of this report, the Spanish version of Council Directive 64/432/EEC does not require epidemiological examinations to be carried out in herds from where cattle originate whose carcases are suspect of being affected by TB at *post mortem* examination.
- In one AC visited, no follow-up action was carried out in herds contiguous to TB outbreaks. The CA explained that testing of the contiguous herds had

[44] In their response to the draft report the CA provided figures of the epidemiological investigations in other ACs with high prevalence.

already been tested at the same time as in the outbreak herd. This approach does not take into account the incubation period of TB.

- In all epidemiological inquiries checked by the mission team there was limited evidence – if any – relating to the possible origin of the infection. In addition, at the ACs visited no data was provided to the inspection team about epidemiological investigations carried out in order to conclude on the different sources of new TB outbreaks detected either when performing the intradermal tuberculin test or during *post mortem* examination on cattle from T3 herds, despite several requests made.

- At the holdings visited with TB outbreaks within the recent years genetic fingerprinting was not used in order to allow distinguishing between different strains of *M. bovis* enabling patterns of origin, transmission and spread of *M. bovis* between cattle herds to be described[45].

- Significant delays were noted (up to 7 months) in respect of the initiation of the epidemiological investigation in 4 cases, checked by the mission team, due to late notification to the responsible LVU in another AC when suspect TB lesions had been found in carcases at a slaughterhouse.

Conclusions:

Deficiencies were identified in respect of the quantity and quality of the epidemiological investigations carried out following the detection of a TB positive animal after an intradermal tuberculin test or a *post mortem* examination on cattle.

The action taken by the Spanish CAs after the previous FVO mission on bovine tuberculosis has failed to address the problem of the insufficient number of epidemiological investigations (DG(SANCO)/9094/2005)[46].

The action taken by the Spanish CAs after the previous FVO mission on bovine brucellosis has failed to address the use of the results of epidemiological investigation as tool to speed up the EP (DG(SANCO)/ 7367/2007)[6].

3.2.6. Herd depopulation

Legal basis:

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[45] In their response to the draft report the CA stated that the genetic fingerprinting database covers the strains of *M. bovis* and *M. caprae* in domestic and wild animals, which is accessible to the official veterinary authorities of the autonomous communities. This database is run by the VISAVET laboratory, covering more than 7 000 strains of M. *bovis* and around 600 of *M. caprae*, which are profiled using DVR spoligotyping, there being around 350 distinct spoligotypes. This database allows the online consultation of all the strains isolated and profiled in Spain since 1996 by geographical area (municipality), pathogenic agent, animal species and year of isolation.

[46] In their response to the draft report the CA stated that a new unit, known as the Epidemiology Working Group, was formed in June 2008 (fully operational in 2009) carrying out a reduced-scale epidemiological investigation and gathering data about risk factors that will be entered in a national computer system, which is currently being designed.