Herd Recording Managers Workshop
Traceability – Electronic system applications

Introduction of identification systems in South Eastern Europe

Dr. Ferdinand Schmitt
Managing Director
ADT Projekt GmbH, Bonn, Germany

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Identification and Traceability in the focus of international TA (EU, World Bank, FAO)

- animal health and food safety
  - management of disease outbreaks
  - surveillance and notification systems
  - vaccination programmes
  - zoning/compartmentalisation, animal movement control
  - utilisation of veterinary drugs

- Other functions
  - herd husbandry
  - animal recording and genetic improvement
  - payment and control of premiums
  - animal theft
  - Maintaining/Obtaining international market access
Donor funded projects on identification and traceability in South Eastern Europe

- from 2001 more than 15 TA projects
  - in new member states (Bulgaria, Romania, Slovenia)
  - in candidate countries (Croatia, fYR Macedonia, Turkey)
  - In potential candidate countries (Albania, Bosnia & Herzegovina, Montenegro, Serbia, Kosovo under UN Security Council Resolution 1244/99)

- one country approach
- large budgets (up to 2 Mio €/project)
- short project duration
Typical Design of a TA project: Planning, Preparation and Operation

**Planning Phase**
- Preliminary Studies
- Strategic plan
- Legal base (I&R law, book of rules incl. controls and penalties)
- Institutional development
- Cost-Benefit Analysis/Financing
- Operational procedures
- Technical design

**Preparation Phase**
- Tender hardware and software
- Procurement of Animal I&R items
- Hardware and software installation - Going live of the IT system
- Communications and public relation
- Set-up I&R unit and training
- Preparation of manuals and instructions
- Preparation of an action plan, Timetable, resources etc.

**I&R Operation**
- Holding registration, ear tagging and initial animal registration
- Ongoing operations and and movement registration
- I&R Control
Framework / Specific Conditions in the countries of SE Europe

- Small-scale farm structures
- Mountainous and remote areas
- Overaged and relatively low skills of small scale livestock farmers
- High share of home slaughtering (incl. home slaughtering of young calves)
- Prevalence of relevant diseases
- High intensity of transhumant or cross-border animal movements
Who does the tagging?

- The **farmers** themselves or **veterinarians / personnel** of other support services
- Considerations:
  - Responsibility of the keeper
  - Relevant aspects
    - farm structure
    - skills of the keepers
  - Coverage and access to keepers
  - Decision of the competent authority on commissioning I&R services
  - Execution of I&R services with other routine tasks (preventive animal health measures)
  - Costs and financing of the system and services

  ➢ **Preference for personnel of veterinary ambulances**
Approach for data capture?

- Paper-based data capture system or automated data capture with PDA devices
- Considerations:
  - Error rate with handwritten forms
  - Automated scanning of barcodes allows for almost error free data capture
  - Delays between data capture and data entry by paper-based procedures
  - Costs of data capture devices

  ➢ Good experience in fYR Macedonia and Montenegro with using PDAs
Specific issues/challenges of Animal ID system implementation in SE Europe

- Weak reporting of slaughtering / movements (ghost animals)
- Weak control on livestock markets (untagged animals, no documents)
- Organisation of I&R control
- I&R unit personnel and IT system operation
- Co-operation and data exchange between stakeholders
- Costs and adequate budgetary provisions / sustainability
### Cost structure (aggregated from several projects)

<table>
<thead>
<tr>
<th>description</th>
<th>€, per new born calf</th>
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<tbody>
<tr>
<td>Ear tags and forms</td>
<td>0,55</td>
</tr>
<tr>
<td>I&amp;R unit, regional offices for data entry</td>
<td>0,65</td>
</tr>
<tr>
<td>Depreciation/maintenance of hard- and software</td>
<td>0,30</td>
</tr>
<tr>
<td>Tagging and mov. recording service incl. transport fee</td>
<td>1,00-3,00</td>
</tr>
<tr>
<td>I&amp;R control</td>
<td>0,90</td>
</tr>
<tr>
<td><strong>Total costs</strong></td>
<td><strong>3,40-5,40</strong></td>
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Introduction of electronic identification for small ruminants in SE Europe?

- Derogation of Regulation (EC) No 21/2004 for States with less than 600,000 sheep and goats: electronic identification optional for animals not involved in intra-Community trade
- Application of RFID tags and utilisation of RFID readers by commissioned veterinary ambulances
  - Increased accuracy and timeliness of data
  - Synergy with preventive measures (for ex. Brucellosis)
  - Strengthening disease surveillance
  - No direct benefit for livestock farmer

- Costs
  - More expensive than eartag/paper based system
  - Prices for RFID-tags are falling
  - Reduced loss rate
Electronic Identification as part of an IT-supported veterinary surveillance network: Interoperability of data exchange and between databases
Summary/Conclusion for Animal Identification and Traceability in SE Europe

- Basic tool to achieve EU compliance in veterinary and food safety; important subject of EU Technical Assistance
- **Tailor made approach** for each country better than direct transfer of EU member state I&R system for optimum response to local conditions
- Inclusion of all stakeholders from the outset
- **Control measures** on stock markets and abattoirs are pivotal
- Strengthening of **regional co-operation** in all aspects of animal identification and traceability system development
- Electronic Identification as part of a IT-supported **veterinary surveillance network** becomes a useful and beneficial option