

Various systems used to record and process AI data on farms summary of the ICAR questionnaire

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Introduction

- A questionnaire of the AI & RT WG
 - getting a better view of use of computing equipments by AI technician,
 - the exchanges with central or national database
 - the use of additional technologies to have an identification of straws with an automatic reading.



Answers

- We sent a questionnaire to the major actor of AI in a very large number of countries.
- Quite low number of answers
 - Not enough to establish statistics
 - But large variety = good indicator
 - describe a large number of situations
 - different continents (Europe, Oceania, and America).
- Our picture is
 - Quite good for AI centres providing technician AI service.
 - Less quality for
 - farmers practicing Do It Yourself
 - freelance AI technician.



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Answers

Structure	Country	AI activity considered	Nb of technician	freelance
A.N.A.F.I.	Italy	2500000	1000	
Swissgenetics	Switzerland	922033	186	
CIAQ	Quebec	57800	205	
FABA Service Coop	Finland		249	
ABLN	Portugal	121690	38	
Gencor	Canada		64	
SHIUZ Sp. Z o.o.	Poland	537720	1595	
West gen	USA		7	1200
LIC	NZL	3400000	900	
UNCEIA	France	6000000	1700	
AI Services NI	North Ireland	50 000	30	
GENEX	USA	2 000 000	400	10



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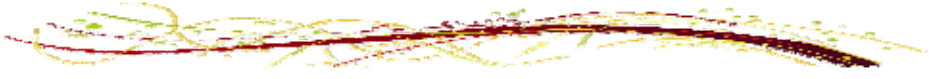
Type of equipment of AI technicians



Structure	PDA	Laptop
A.N.A.F.I.	99%	
Swissgenetics	95%	
CIAQ		100%
FABA Service Coop		100%
ABLN	100%	
Gencor	98%	5%
West gen	100%	
LIC	100%	
UNCEIA	35%	60%
AI Services NI	100%	
GENEX	50%	25%

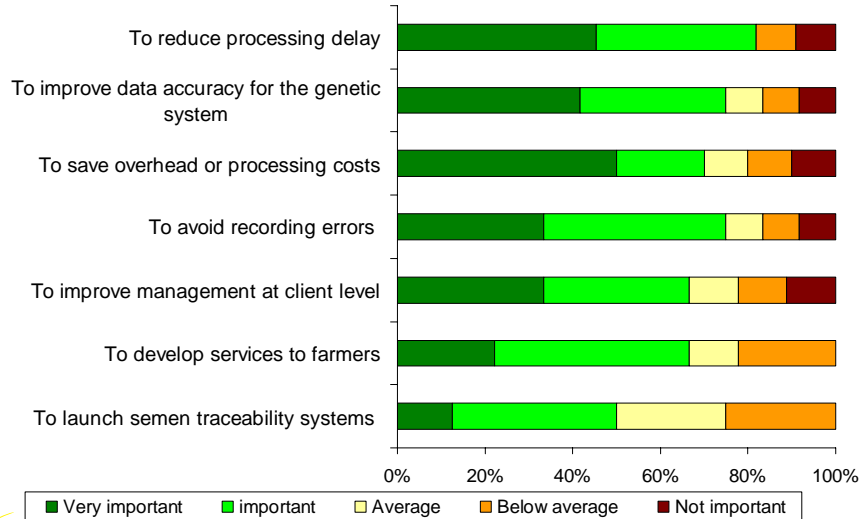
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Computing equipment of technicians of AI centers

- 
- Laptops or PDA are used
 - The 2 systems seems to have a similar popularity
 - But proportion of PDA is increasing during the last 5 years

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Motivations to develop the equipment



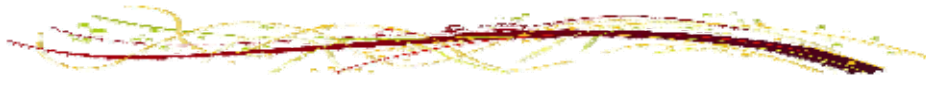
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Motivations to develop the equipment

- **By descending interest :**
 1. To reduce processing delay
 2. To improve accuracy of data recording for the genetic system
 - pedigree-fertility EBV
 3. To avoid recording errors
 4. To save overhead or processing costs

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Use of equipment and specific softwares

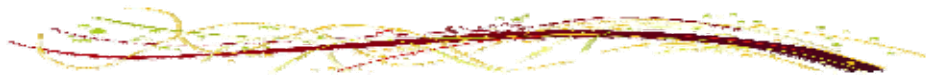


- **High frequency**
 - To record and validate AI
 - by checking against a data base
 - embedded on the device or remote computer
 - Direct connection
 - To print AI forms on farm
- **With a lower frequency**
 - To store reproduction records of herds.
 - To match AI data with other data stored in the technician data base
 - calving, movements of straws
 - To manage the semen storage and movements
 - for the technician container only



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Data exchange



- **Between technician's computers**
 - For all types of data (technical, financial, trade)
 - With the Central data base of the company.
- **Technician has a direct access to a central database**
 - National or shared with other structures
 - Only in some situations or countries,
- **Exchanges are daily**
 - 1 case of on line system



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AI information participates to...

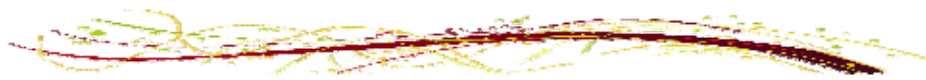


- **3 types of valorisations**
 - validation by the system processing data for genetic purposes
 - consistence-integrity....
 - Use for genetic evaluation of fertility
 - Use for parentage recording and pedigree printing
- **In all the answers**



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The automatic reading of the straw Id



- **An additional tool in development ?**
- **In the answer of this survey :**
 - Use only routinely in France
 - Planned in Switzerland
- **A recommendation under construction in AI & RT WG of ICAR**



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DIY breeders

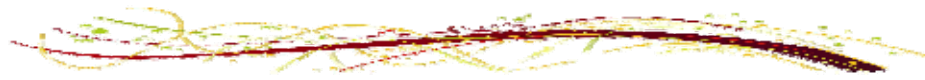


- It's very difficult to have sound information regarding
 - The equipment of the DIY breeders
 - The way of management of AI activity.
- In every country
 - A part of the services of DIY farmers is notified by paper forms.
 - Exchange of data using specific software's or internet portal is in progress.



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DIY breeders

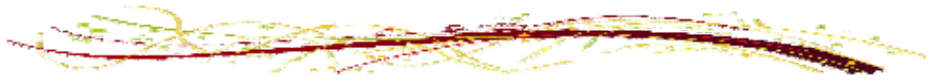


- Sending of data is
 - Less frequent for farmers than for the AI technicians
 - generally once a month.
 - Data transmitted to
 - regional data base processing any technical records (parentage, milk recording...)
 - or to herd book data base
- The use of this information
 - Is exactly the same than for the information coming from AI companies



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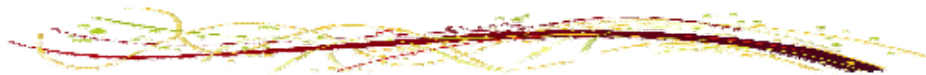
Conclusion



- It should be worth to improve the description of the situation
 - New answers to the questionnaire are welcomed
 - ICAR WG AI&RT will
 - update the summary
 - publish it at the ICAR web site.
- Computing solution using laptop or PDA
 - Is now very frequent for AI technicians
 - The functionalities are v
 - very similar
 - except the adaptation of the specific country's legislation or database organisation.



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- Thanks for your attention
- Thanks for the companies and organisation who answered



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