

Project Progress Summary

Section 1: PROJECT IDENTIFICATION Information to be provided for project identification		NOT CONFIDENTIAL
Title of the project Implications of the introduction of automatic milking on dairy farms		
Acronym of the project Automatic Milking		
Type of contract Cost-sharing contract		Total project cost (in euro) 3,630,104 Euro
Contract number QLK5-2000-31006	Duration (in months) 40 Months	EU contribution (in euro) 2,420,001 Euro
Commencement date December 1, 2000		Period covered by the progress report December 1, 2000 – November 30, 2002
PROJECT COORDINATOR		
Name K. de Koning	Title BSc	Address Runderweg 6 PO Box 2176 8203 AD Lelystad The Netherlands
Telephone +31 320 293211	Telefax +31 320 241584	E-mail address c.j.a.m.de.koning@pv.agro.nl
Key words Automatic milking, dairy technology, milk production, management		
World wide web address http://www.automaticmilking.nl		
List of participants		
Contractor 1 Kees de Koning, BSc, Research Institute for Animal Husbandry, Runderweg 6, PO Box 2176, 8203 AD Lelystad, The Netherlands Tel +31 320 293211 / Fax +31 320 241584 a.meijering@pv.agro.nl		
Contractor 2 Dr Karin Knappstein, Federal Dairy Research Centre, Institute for Hygiene and Food Safety, Hermann Weigmann-Strasse 1, PO Box 6069, D-24121 Kiel, Germany Tel +49 431 6091 / Fax +49 431 6092222 Knappst@bafm.de		
Contractor 3 Dr Morten Dam Rasmussen, Danish Institute of Agricultural Sciences, Department of Animal Health and Welfare, Research Centre, Foulum, PO Box 50, DK-8830 Tjele, Denmark Tel +45 89 991509 / Fax +45 89 991500 Mortend.rasmussen@agrsci.dk		
Contractor 4 Dr J. Eric Hillerton, Institute for Animal Health, Division of Environmental Microbiology, RG20 7NN Compton, Newbury, United Kingdom Tel +44 1635 577248/ Fax +44 1635 577286 eric.hillerton@bbsrc.ac.uk		

Contractor 5

Prof Dr Erik Mathijs, Catholic University Leuven, Department of Agricultural and Environmental Economics, Willem de Croylaan 42, Leuven, Belgium

Tel +32 16 1450 / Fax +32 16 1996

erik.mathijs@agr.kuleuven.ac.be

Prof Dr Keith Roe

Catholic University Leuven, Department of Communication sciences, Van Evenstraat 2A, 3000 Leuven, Belgium

Tel +32 16 3042/3218 / Fax +32 16 3312

Keith.roe@soc.kuleuven.ac.be

Contractor 6

Prof Dr Hans Wiktorsson, Sveriges Lantbruksuniversitet, Department of Animal Nutrition and Management, PO Box 7024, S-750 07 , Uppsala, Sweden

Tel +46 18 671646 / Fax +46 18 672995

Hans.Wiktorsson@huv.slu.se

Contractor 7

Dr Christel Benfalk, Swedish Institute of Agricultural Engineering, Ultunaallyn 4, PO Box 7033, S-750 07 Uppsala, Sweden

Tel +46 18 303300 / Fax +46 18 300956

Christel.benfalk@iti.slu.se

Contractor 8

Willem F. Smit, BSc, GM Technology BV, Kromme Spieringweg 289b, Postbus 34, 2140 AA Vijfhuizen, the Netherlands

Tel. +31 23 5589050 / Fax +31 23 5589051

Odegroot@prolion.nl

Contractor 9

Dr. Beate Maassen-Francke, Westfalia Landtechnik GmbH, Werner-Habig Strasse 1, D-59302 Oelde, Germany

Tel +49 2522 772228 / Fax +49 2522 772063

Maassen-Francke.Beate@Westfalia.com

Contractor 10

Aart van 't Land, BSc, Lely Industries NV, Weverskade 10, 3155 PD Maasland, the Netherlands

Tel +31 10 5996333 / Fax +31 10 5996434

avantland@lely.nl

Month 1-24 (December 1, 2000- November 30, 2002)

Objectives:

Objectives of the project are:

1. To identify determinants for the adoption of automatic milking on dairy farms in North-west European member states;
2. To assess the implications of the adoption of automatic milking systems, in the realms of farm-level social-economic aspects, public acceptance, milk quality, animal health, animal welfare and farm management support requirements;
3. To generate solutions for any adverse effects of a widespread use of automatic milking in an early stage of adoption;
4. To disseminate results among research centres, policy makers, farmers and farmers' services, manufacturers of milking equipment and dairy industry.

Results:

During five PMC-meetings all partners discuss the work in a pleasant and enthusiastic manner. Dynamic work plans of all work packages are discussed and adjusted during these PMC-meetings. In November 2002 the PMC-meeting was combined with a one-day Progress Seminar where the progress of the first two years was presented and reviewed in groups for every work package. Agreements have been made regarding tasks and activities to be performed in the last fase of the project.

Due to specific causes (i.g. FMD, change or illness of personnel, change of research plans based on experiences) there is a slight delay in the some of the deliverables (D9, D17, D19, D24). However there are no delays expected for the final project report nor any harm for the overall project results. Work done as well as future work promise results with scientific significance and results applicable in practice.

So far 10 deliverables are finished, covering the following topics: determinants and implications of technology adoption (D1), motivation and characteristics of farmers investing in automatic milking systems (D2), public acceptance of automatic milking (D4), the effects of automatic milking on the quality of produced milk (D8), the effectiveness of automatic cleaning of udder and teats and effects of hygiene management (D13), optimal cleaning of equipment of automatic milking (D16), a review of potential effects of automatic milking conditions on the teat (D21), a protocol on animal welfare and automatic milking (D23), automatic milking and grazing (applied grazing strategies) (D25) and automatic milking and grazing (motivation of cows to visit the milking robot) (D26).

List of Milestones:

- 1) Projects' descriptions and data collection protocols are discussed (month 6)
- 2) State of progress is evaluated (month 24)
- 3) Symposium is held (month 40)
- 4) Integrated report is written (month 40)

Benefits and Beneficiaries:Scientific publications, presentation, communication and patent filings

Dissimination of the project and its results has taken / will take place through articles in scientific and trade journals (21), and through posters (7) and papers (16) on congresses and symposia. Also presentations on the project and specific subjects are available and have been presented for target groups such as farmers, dairy- and AM-industry.

Through this and the internet-site of the project the project has received world-wide interest. All final deliverables are available on the internet-site.

So far, no patent filings resulted from the project.

Web-site (www.automaticmilking.nl)

The internet-site of the project contains general project information, news flashes, work package descriptions, list with deliverables and a list with partner information. The web-site is continuously updated with new information. All dissemination coming out of the project will be placed on the site, including articles (as far as permitted) and reports. On the news site the following items are and will be addressed: consultation between research partners on specific work packages, interesting meetings and conferences related to the project, abstracts on the minutes of the PMC meetings and notices of finished deliverables.

Attention of industry to results

So far the industrial partners within the project and other related industry have taken notice of the results but have done no specific exploitation. This is due to the fact that the first results currently available are inventories. Future results are expected to have a greater impact, e.g. results of work package 3 in which a redefinition of acceptable milk quality will be given. This subject is of big importance for AM-industry; it is expected that instruments will be developed or adjusted in order to separate onacceptable milk.

Future Actions:

For the last reporting period 16 more deliverables are expected, of which some are currently available within the PMC as draft manuscripts. Furthermore, in month 25-36 many experiments will continue or start and available results will be disseminated to target groups.

For the last fase of the project, one more PMC meeting will be held (June 2003).

Furthermore, for the future, the co-ordinator will guard the progress of the work and co-operation of the project management team and will co-ordinate the web-site. In January 2002, a start has been made with the organisation of the planned symposium 'Automatic Milking' in March 2004. Organisation will go on in the next fase.