

## *Horizon 2020 Programme*

# **INFRAIA-02-2017 Integrating Activities for Starting Communities**



**SmartCow: an integrated infrastructure for increased research capability and innovation in the European cattle sector**



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## EXECUTIVE SUMMARY

<b>Background</b>	H2020 Project n°730924 - SmartCow – DoA, pages 8 and 26 – 27. The participation to scientific conferences depends of task 4.3 of the project, its aim is to ensure the dissemination of SmartCow information and results to the scientific communities.
<b>Objectives</b>	The 1st Report on scientific conferences aims at summarizing what has been done during the two first years of the project to disseminate the information concerning the project (TNA calls for proposals, Trainings, etc) and its first results to the scientific communities through communications in scientific conferences and congresses.
<b>Methods</b>	Consultation of the partners of the consortium: SmartCow outcomes are regularly presented at European and international conferences. A travel and accommodation budget for each partner has been planned so that they can participate in the most visible and important congresses.
<b>Results &amp; implications</b>	<p>The outcomes are:</p> <ul style="list-style-type: none"> <li>- Oral presentations in the frame of symposia</li> <li>- Organization of specific SmartCow sessions and workshops, in the frame of major animal agriculture congresses, or in tandem with other projects or partners.</li> <li>- Other forms of communication and dissemination actions (such as poster presentations or booths) in the frame of conferences, annual meetings in international or national contexts.</li> </ul>

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## 1 Introduction

Active participation to scientific congresses is part of SmartCow's Work Package n°4: "Fostering innovation through dissemination and knowledge transfer to SmartCow stakeholders and scientific community", and more specifically of the Task n°3 of this WP: "Dissemination to the scientific community". EAAP (European Federation of Animal Science) is the task leader. Disseminating to the scientific community has two aspects:

- Research conducted as part of SmartCow is highlighted internationally through high-quality peer review publications in open access (a budget line for each partner has been planned for that purpose)
- SmartCow outcomes are presented at European and international conferences, and a travel and accommodation budget for each partner has been planned for the participation of the consortium's scientists to these conferences.

The present deliverable report concerns only the second of these sub-tasks.

The dissemination to the scientific community through scientific conferences concerns mainly three different kinds of content:

- The information concerning the project itself: TNA calls, catalogue of trainings (on line and face to face), and the relations with the stakeholders.
- The information concerning the European research infrastructures in the cattle field (inventory of these infrastructures, and the interactive map built on them on SmartCow's website).
- The scientific results themselves: both of the Joint Research Activities, and of the projects selected through SmartCow calls for proposals.

The participation to scientific conferences can also take several forms:

- The communication can take place either in an international conference (in or out of Europe), or in a national conference (in the country of a member of the consortium).
- It can take the form of a scientific session with several communications
- Or it can be a single communication in a session or a workshop
- Posters can also be presented either in international or national conferences
- And booths can be set up to disseminate the information on TNA calls, trainings, or to contact the stakeholders present at the conference.

The scientific communication strategy and the broad lines of the program of the conferences to which SmartCow has decided to participate have been built up by the Executive Committee. But the consortium partners have often seized the opportunities which arose to them, particularly at national level.

In addition, SmartCow has joined in September 2018 the Common Dissemination Booster “Fitter Livestock Farming”, and participated with the other projects of this booster to the organization of scientific sessions and meetings. It turned out to be a very positive and fruitful experience, but which was not budgeted initially (since it was set up only in April 2018 and with no additional resources).

## 2 First results of the participation to scientific conferences

During its first year of activity, SmartCow had hardly any results to disseminate yet, but as an infrastructure project it had information to communicate to the scientific community, and to the young researchers: information on the network itself, on the TNA calls and on the catalogue of trainings. So, having SmartCow participating to the main scientific conferences, such as EAAP’s annual meeting and ICAR’s annual conference was plainly legitimate.

The main objectives of the Task 4.3 (as concerns the conferences) have been achieved, no main deviations appeared during the first two years. SmartCow has:

- Participated in 14 different conferences with a total of 26 different kinds of presentations
- Organized 2 scientific sessions in European and international congresses (EAAP 2018, ISNH 2018)
- Co-organized 2 scientific sessions in EAAP 2019 and CDB-ATF meeting 2019
- Presented 7 other communications in international conferences (5 in Europe, 2 out of Europe)
- And 1 participation in national conferences (in European countries)
- 4 posters have been presented in international conferences, and 2 in national symposia (translated in local languages: German and Spanish).
- SmartCow has also been presented with a booth in 3 international annual meetings (with posters and leaflets).

The global results show that an intensive effort of dissemination and communication has been realized since the beginning of the project, and the fact that SmartCow is now a project which is well-known within the scientific community confirms that this effort has been fruitful (with an average number 1600 visits / month, the project website shows that there is a strong interest for the project).

During the first two years most of the information communicated to the public has concerned the project itself and its activities (calls and trainings). SmartCow has begun to disseminate on its proper results only during the second year, but most of the scientific results of the JRA will be achieved only at the end of the project, which will leave a quite short period for the scientific dissemination of the results itself during the course of the project.



### 3 Summary of the different participations

For the titles and the references of the presentations, see the Annex of this document.

Kind of activities	Key results
<b>Organization of Sessions and oral presentations in international conferences</b>	<p><b>2018</b></p> <ul style="list-style-type: none"> <li>• Presentations at Agri Research Conference - Innovating for the future of farming and rural communities – Brussels, Belgium, 2<sup>nd</sup> – 3<sup>rd</sup> May 2018 (R. Dewhurst)</li> <li>• 69<sup>th</sup> EAAP annual meeting in Dubrovnik, Croatia 27<sup>th</sup> – 31<sup>st</sup> August 2018 <ul style="list-style-type: none"> <li>○ Organisation of a session of presentation of SmartCow (R. Baumont, F. Macherez, B. Esmein, P. Dumonthier), 80 participants.</li> <li>○ One intervention in EU H2020 project GenTore stakeholders’ workshop (F.Macherez), about 100 participants.</li> </ul> </li> <li>• 10<sup>th</sup> International Symposium on the Nutrition of Herbivores in Clermont-Ferrand, France, 2<sup>nd</sup> – 6<sup>th</sup> Sept 2018: a specific session was organized to present the project (R. Baumont), the transnational access (R. Dewhurst) and the joint research activities (C. Martin), about 60 participants.</li> </ul> <p><b>2019</b></p> <ul style="list-style-type: none"> <li>• Presentation at International Committee for Animal Recording (ICAR) 2019 Conference in Prague, Czech Republic, 17<sup>th</sup> – 21<sup>st</sup> June 2019, presentation of the project, of the 2<sup>nd</sup> Call for proposals, and of the SmartCow’s developments on phenotyping (R. Baumont), 200 participants.</li> <li>• Participations in 70<sup>th</sup> EAAP annual meeting in Ghent, Belgium, 26<sup>th</sup> -30<sup>th</sup> August 2019, <ul style="list-style-type: none"> <li>○ 1 Presentation on the first results of the mapping activities in WP1 (R. Baumont)</li> <li>○ Co-organization of one session with the CDB (see below), during this session presentation of the phenotyping offer of SmartCow (R. Baumont)</li> </ul> </li> <li>• Presentation at 13<sup>th</sup> ISRP (International Symposium on Ruminant Physiology) in Leipzig, Germany: 3<sup>rd</sup> -6<sup>th</sup> September 2019: presentation of the project with a focus of the methodological and phenotyping activities (R. Baumont)</li> <li>• Oral communication from WP6.1 on “Urinary nitrogen excretion prediction from the combination of natural 15N abundance in plasma and urea content in milk of dairy cows” (Nasrhoralli et al, 2019) at the 6<sup>th</sup> ISEP (International Symposium on Energy and Protein Metabolism and Nutrition), 9<sup>th</sup> – 12<sup>th</sup> September 2019 in Belo Horizonte, Brazil.</li> </ul>

	<ul style="list-style-type: none"> <li>• Presentation by R.Baumont on SmartCow's results on climate mitigation in livestock farming at CDB Fitter Livestock Farming &amp; Animal Task Force conference: "What R&amp;I can deliver to support climate mitigation and adaptation in livestock farming?", 6<sup>th</sup> November, Brussels, Belgium</li> </ul>
<b>Posters in international conferences</b>	<ul style="list-style-type: none"> <li>• Poster at ISNH (International Symposium on the Nutrition of Herbivores) conference in Clermont-Ferrand, France, during the scientific session on feed efficiency (2nd – 6th Sept <b>2018</b>)</li> <li>• Poster during the 17<sup>th</sup> International Conference on Production Diseases in Farm Animals, 27-29<sup>th</sup> June <b>2019</b> in Bern, Switzerland.</li> <li>• Poster from the WP6.1 on "Faecal-NIRS for predicting digestibility and intake in cattle: efficacy of two calibration strategies" (Andueza et al) at 70<sup>th</sup> EAAP annual meeting in Ghent, Belgium, 26-30 August <b>2019</b></li> <li>• Poster on SmartCow at CDB-ATF meeting "What R&amp;I can deliver to support climate mitigation and adaptation in livestock farming?", 6th November <b>2019</b> in Brussels, Belgium.</li> </ul>
<b>Presentations at national conferences</b>	<ul style="list-style-type: none"> <li>• UK: BSAS (British Society of Animal Science) annual conference, Edinburgh, 9<sup>th</sup>-11<sup>th</sup> April <b>2019</b>, 400 participants</li> </ul>
<b>Posters in national conferences</b>	<ul style="list-style-type: none"> <li>• Germany: Poster during the National nutritional physiology conference (Gesellschaft für Ernährungsphysiologie, GfE), 13-15<sup>th</sup> March <b>2018</b> in Göttingen, 270 participants.</li> <li>• Spain: Poster at National Animal Science Meeting (Jornadas ITEA, Zaragoza on 7-8th May <b>2019</b>), 150 participants</li> </ul>
<b>Booths in international conferences (with poster and different flyers on the project, on TNA calls, training courses &amp; stakeholders' participation)</b>	<ul style="list-style-type: none"> <li>• Booth in EAAP annual meeting <b>2018</b> in Dubrovnik, Croatia: information on training courses, TNA calls &amp; inventory of infrastructures (B. Esmein)</li> <li>• Booth at ICAR conference 2019 in Prag: information on training courses, TNA calls &amp; inventory of infrastructures (R. Baumont)</li> <li>• Booth in EAAP annual meeting <b>2019</b> in Ghent, Belgium: information on training courses, TNA calls &amp; inventory of infrastructures (B. Esmein)</li> </ul>
<b>Participation to CDB (Common Dissemination Booster) Fitter Livestock Farming (in partnership with five other projects: Gentore, Feed-a-gene, GPlusE, Image and Saphir)</b>	<ul style="list-style-type: none"> <li>• Co-organization of two workshops: <ul style="list-style-type: none"> <li>○ 1 half a day CDB session on "Burning issues in biodiversity: fitter livestock farms from better gene banks", in EAAP 70<sup>th</sup> annual meeting in Ghent, Belgium, <b>2019</b> (R. Baumont)</li> <li>○ 1 half a day session "What R&amp;I can deliver to support climate mitigation and adaptation in livestock farming?", co-organized between CDB and ATF Animal Task Force on 6<sup>th</sup> November <b>2019</b> in Brussels, Belgium (R. Baumont)</li> </ul> </li> </ul>





## 4 Conclusion: plan of action for the next two years

The plan of action for the next two years includes:

### At EAAP conferences

- The participation to the 71<sup>st</sup> EAAP annual meeting in Porto, Portugal, 31<sup>st</sup> August to 4<sup>th</sup> September **2020**
- The organization in 2021 of a specific SmartCow session at the 72<sup>nd</sup> EAAP annual meeting in Davos, Switzerland (30<sup>th</sup> August – 3<sup>rd</sup> September 2021). The program of this session will contain:
  - o Presentations of the main results of the JRAs
  - o A selection of results from the TNA projects developed within SmartCow from the first and the second calls.
- SmartCow shall begin to prepare this session at the beginning of 2020.

This session will help disseminating the final results in the relative short period of time which will be left for that task.

### At other European or international conferences

ICAR2020 (Leuwarden, The Netherlands): a communication from WP7 will be presented: **A validation study of eating duration assessment from automatic feeder systems**  
Ternman E., Terré M., Bouchon M., Meunier B., Munksgaard L., Veissier I.

ADSA conference in Florida (USA), June 21-24 2020: A poster to present SmartCow will be presented

EGF 2020 (28th GENERAL MEETING OF EUROPEAN GRASSLAND FEDERATION in Helsinki, Finland, 18<sup>th</sup>-22<sup>nd</sup> October): Flyers of the project will be distributed

### During the next two years SmartCow will also develop the participation to national conferences (with information in local languages).

- Germany: Poster during the National nutritional physiology conference (Gesellschaft für Ernährungsphysiologie, GFE), 3-5<sup>th</sup> March **2020** in Göttingen
- A workshop during the “24<sup>e</sup> Congrès international francophone 3R - Rencontres autour des Recherches sur les Ruminants”, 2<sup>nd</sup> – 3<sup>rd</sup> December **2020** in Paris, France (in discussion)

## Annex

### Titles and references of the publications in conference proceedings / workshops

- R. Baumont, R. Dewhurst, B. Kuhla, C. Martin, L. Munksgaard, C. Reynolds, M. O'Donovan and A. Rosati, "SmartCow: integrating research infrastructures to foster innovation in the European cattle sector", in *Book of Abstracts of the 69th Annual Meeting of the European Federation of Animal Science (Dubrovnik, Croatia, 27-31 August 2018)*, p.142, EAAP Book of abstracts Vol. 24, Wageningen Publ. 2018, (eISBN: 978-90-8686-871-1 | ISBN: 978-90-8686-323-5), Repository: <https://prodinra.inra.fr/record/484555> (peer-reviewed, not in OA).
- B. Esmein, R. Dewhurst, L. Munksgaard, R. Baumont, "Transnational access to leading European cattle research facilities in the EU project SmartCow", in *Book of Abstracts of the 69th Annual Meeting of the European Federation of Animal Science (Dubrovnik, Croatia, 27-31 August 2018)*, p.142, EAAP Book of abstracts Vol. 24, Wageningen Publ. 2018, (eISBN: 978-90-8686-871-1 | ISBN: 978-90-8686-323-5), Repository: <https://prodinra.inra.fr/record/484556>, (peer-reviewed, not in OA).
- P. Dumonthier, B. Esmein, R. Baumont, "SmartCow's training and capacity building activities", in *Book of Abstracts of the 69th Annual Meeting of the European Federation of Animal Science (Dubrovnik, Croatia, 27-31 August 2018)*, p.143, EAAP Book of abstracts Vol. 24, Wageningen Publ. 2018, (eISBN: 978-90-8686-871-1 | ISBN: 978-90-8686-323-5), Repository: <https://prodinra.inra.fr/record/484557>, (peer-reviewed, not in OA).
- F. Macherez, B. Esmein, R. Baumont, "Stakeholders engagement in SmartCow", in *Book of Abstracts of the 69th Annual Meeting of the European Federation of Animal Science (Dubrovnik, Croatia, 27-31 August 2018)*, p.143, EAAP Book of abstracts Vol. 24, Wageningen Publ. 2018, (eISBN: 978-90-8686-871-1 | ISBN: 978-90-8686-323-5), Repository: <https://prodinra.inra.fr/record/484558>, (peer-reviewed, not in OA).
- Baumont, R., Dewhurst, R. J., Kuhla, B., Martin, C., Munksgaard, L., Reynolds, C., O'Donovan, M., Rosati, A., Tourneur, L., "SmartCow, an integrated infrastructure for increased research capability and innovation in the European cattle sector", Intervention at the 10th International Symposium on the Nutrition of Herbivores (ISNH10 Clermont-Ferrand, France, - (2-6th September 2018), in *Advances in Animal Biosciences 9 (3)*, p.323, Cambridge University Press, 2018, (ISSN : 2040-4700), Repository: <https://prodinra.inra.fr/record/447787>, (peer-reviewed, Gold OA).
- M. O'Donovan, R. Baumont, E. Kennedy, C. Guy, C. Fossaert, P. Madrange and B. Esmein, "SmartCow: fostering synergies through mapping cattle research infrastructures and research", in *Book of Abstracts of the 70th Annual Meeting of the European Federation of Animal Science (Ghent, Belgium, 26-30 August 2019)*, p. 380, EAAP Book of Abstracts, Vol. 25, Wageningen Publ. 2019, (eISBN: 978-90-8686-890-2 | ISBN: 978-90-8686-339-6, ISSN: 0259-322X), Repository: <https://prodinra.inra.fr/record/484559>, (peer-reviewed, not in OA).



- R. Baumont, R. Dewhurst, B. Kuhla, C. Martin, L. Munksgaard, C. Reynolds, M. O'Donovan and B. Esmein: "SmartCow: integrating European cattle research infrastructures to improve their phenotyping offer", in *Book of Abstracts of the 70th Annual Meeting of the European Federation of Animal Science (Ghent, Belgium, 26-30 August 2019)*, p.442, EAAP Book of Abstracts, Vol. 25, Wageningen Publ. 2019, (eISBN: 978-90-8686-890-2 | ISBN: 978-90-8686-339-6, ISSN: 0259-322X), Repository: <https://prodinra.inra.fr/record/484560>, (peer-reviewed, not in OA).
- D. Andueza, P. Nozière, S. Herremans, A. De La Torre, E. Froidmont, F. Picard, J. Pourrat, I. Constant, C. Martin and G. Cantalapiedra-Hijar, "Faecal-NIRS for predicting digestibility and intake in cattle: efficacy of two calibration strategy", in *Book of Abstracts of the 70th Annual Meeting of the European Federation of Animal Science (Ghent, Belgium, 26-30 August 2019)*, p.475, EAAP Book of Abstracts, Vol. 25, Wageningen Publ. 2019, (eISBN: 978-90-8686-890-2 | ISBN: 978-90-8686-339-6, ISSN: 0259-322X), Repository: <https://prodinra.inra.fr/record/484561>, (peer-reviewed, not in OA).
- René Baumont, Richard Dewhurst, Sadjad Danesh Mesgaran, Catherine Hurtaud, Abraham Orchard, Björn Kuhla, Cécile Martin, Lene Munksgaard, Chris Reynolds, Michael O'Donovan, Bernard Esmein, "SmartCow: A project aimed at improving phenotyping capacity across cattle research infrastructures in Europe", in *Proceedings of the ICAR Conference held in Prague, CZ, 17-21 June 2019*, ICAR Technical Series no. 24, Publ. ICAR Rome, (ISSN: 1563-2504 ISBN: 92-95014-20-0), Repository: <https://prodinra.inra.fr/record/484562>, (peer-reviewed, not in OA).
- R. Baumont, R. Dewhurst, B. Kuhla, C. Martin, L. Munksgaard, C. Reynolds, M. O'Donovan, B. Esmein, "SmartCow: an integrated infrastructure for increased research capability and innovation in the European cattle sector", in *Advances in Animal Biosciences, Proceedings of the XIIIth International Symposium on Ruminant Physiology (ISRP 2019), 3-6 September 2019, Leipzig, Germany*, Vol. 10 Issue 3, Cambridge University Press, 2019, (ISSN: 2040-4700), Repository, (Peer-reviewed, in Gold OA).
- S. M. Nasrollahi, P. Nozière, R. J. Dewhurst, C. Chantelauze, L. Cheng, E. Froidmont, C. Martin, G. Cantalapiedra-Hijar, "Natural 15N abundances in plasma and urea-N concentration in milk as biomarkers of urinary N excretion in dairy cows: a meta-analysis", in *Program Book of the 6th International Symposium on Energy and Protein Metabolism and Nutrition, September 9-12<sup>th</sup> 2019, Belo Horizonte, Brazil*, also publ. on HAL: hal-02306171, Repository: <https://prodinra.inra.fr/record/484964>
- René Baumont, "SmartCow: integrating European cattle research infrastructures to improve their phenotyping offer" (part of session n°43: "Burning issues in biodiversity: fitter livestock farms from better gene banks"), in *Book of Abstracts of the 70th Annual Meeting of the European Federation of Animal Science (Ghent, Belgium, 26-30 August 2019)*, EAAP Book of Abstracts, Vol. 25, Wageningen Publ. 2019, (eISBN: 978-90-8686-890-2 | ISBN: 978-90-8686-339-6, ISSN: 0259-322X), Repository: <https://prodinra.inra.fr/record/488944> (Peer-reviewed, not in OA).

- Bouchon, M., Bach, A., Meunier, B., Ternman, E., Van Reenen, K., Veissier, I., Munksgaard, L., “A checklist to validate sensor output for the recording of cattle behavior”, published in 2019 by SmartCow on its website, accessible at <https://www.smartcow.eu/guidelines-for-validation-of-sensor-ouput/>

