

## **Most popular VERA test protocol revised: ‘Housing Systems’**

After four busy years with six official meetings in person, involving up to 15 international experts from six different European countries, the VERA test protocol ‘Housing Systems’ has been thoroughly revised to reflect the latest state-of-the-art.

As dairy farms are coming into focus in terms of ammonia emissions, the challenge of measuring in naturally ventilated animal houses shows up more frequently, and several VERA verification processes are targeting this application area. At several scientific conferences last year, the presentation of this work repeatedly caught the interest of the auditoriums.

Now, after final approval of the VERA Board, it is ready for publication. We are glad that the revised version, with all its detailed descriptions and recommendations, is now available for free download on our sub-page ‘test protocols’.

For your convenience, it comes with an **Excel spreadsheet** that provides detailed equations, including some assumptions for the calculation of the emissions when using tracer gas measurements.

This revised document was drawn up by nominated international experts of the International VERA Committee (IVC) for Housing and Management Systems and especially competent guests:

### IVC members:

Julio Mosquera Losada, WUR, the Netherlands  
Nico Ogink, WUR, the Netherlands  
Anders Peter Adamsen, SEGES, Denmark  
Bjarne Schmidt Bjerg, University of Copenhagen, Denmark  
Peter Kai, Aarhus University, Denmark  
Eva Gallmann, University of Hohenheim, Germany  
Eberhard Hartung, University of Kiel, Germany  
Ewald Grimm, KTBL, Germany

### Guests:

Peter Demeyer, ILVO Vlaanderen, Belgium  
Paul Robin, INRA, France  
Mélynda Hassouna, INRA, France  
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Ulrike Wolf, KTBL, Germany  
Sabine Schrade, Agroscope Taenikon, Switzerland

**Many thanks to these VERA experts for their effort and their excellent work on this particularly big task!**

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# VERA TEST PROTOCOL

for  
**Livestock Housing and  
Management Systems**

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