## Animal based measures for a 'Welfare-plus' certification scheme for long distance transport

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Animal welfare during transportation is currently regulated through environment based parameters such as space per animal. However, to properly assess welfare, animal based measures (ABM's) are more appropriate. This study is part of a European project 'Quality Control Posts', aiming to create a scientific basis for certification of long distance transportation of cattle, sheep, pigs and horses. Identification of measures was based on the available literature, following the Welfare Quality® approach. Training courses were developed and assessors trained. They subsequently tested the feasibility of measures in 5 countries, during unloading of 50 transports per species. Finally, ABM's were scaled using a Delphi procedure involving over 60 experts from 10 countries. They were asked to provide threshold values per measure for 'welfare certification' (values < TH1) and for 'acceptability' (values < TH2). The initial selection of measures suggested some Welfare Quality<sup>®</sup> criteria cannot be applied (e.g. absence of thirst). Furthermore, the test phase identified less feasible ABM's (e.g. shivering during unloading of pigs). The final lists presented to the experts consisted of 10 ABM's for sheep, 14 for cattle, 14 for horses and 12 for pigs. Delphi results suggest that the variation in threshold values decreases in subsequent steps (e.g. sheep: '% slipping' TH1: 1<sup>st</sup> round median = 2.0, range 0-70; 2<sup>nd</sup> round: median 2.0 and range 0-10. TH2:  $1^{\text{st}}$  round median = 5.0, range 0-90;  $2^{\text{nd}}$  round: median 5.0, range 0-40). The outcomes are presented to a certification body for possible inclusion in a 'Welfare-plus' transport scheme.

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