



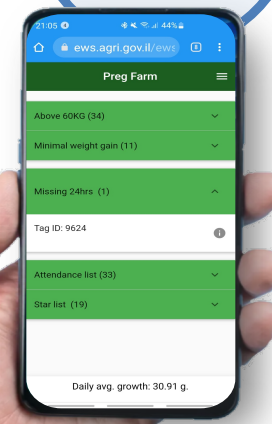
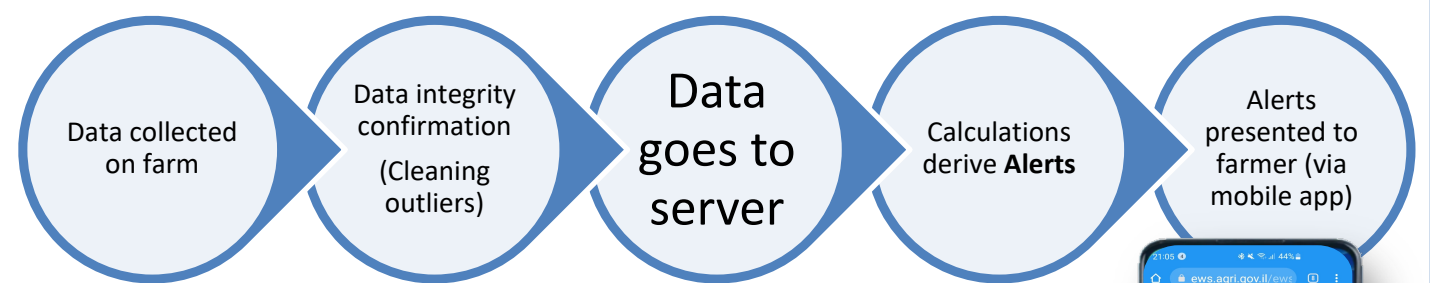
INTRODUCTION

TechCare project aims to demonstrate innovative approaches to monitor and improve welfare management in small ruminants' farming systems. An integral part of this approach is the Early Warning Systems (EMS) for the timely alert on welfare issues on an individualized base, particularly in large herds and reduced labor availability.

EARLY WARNING SYSTEMS

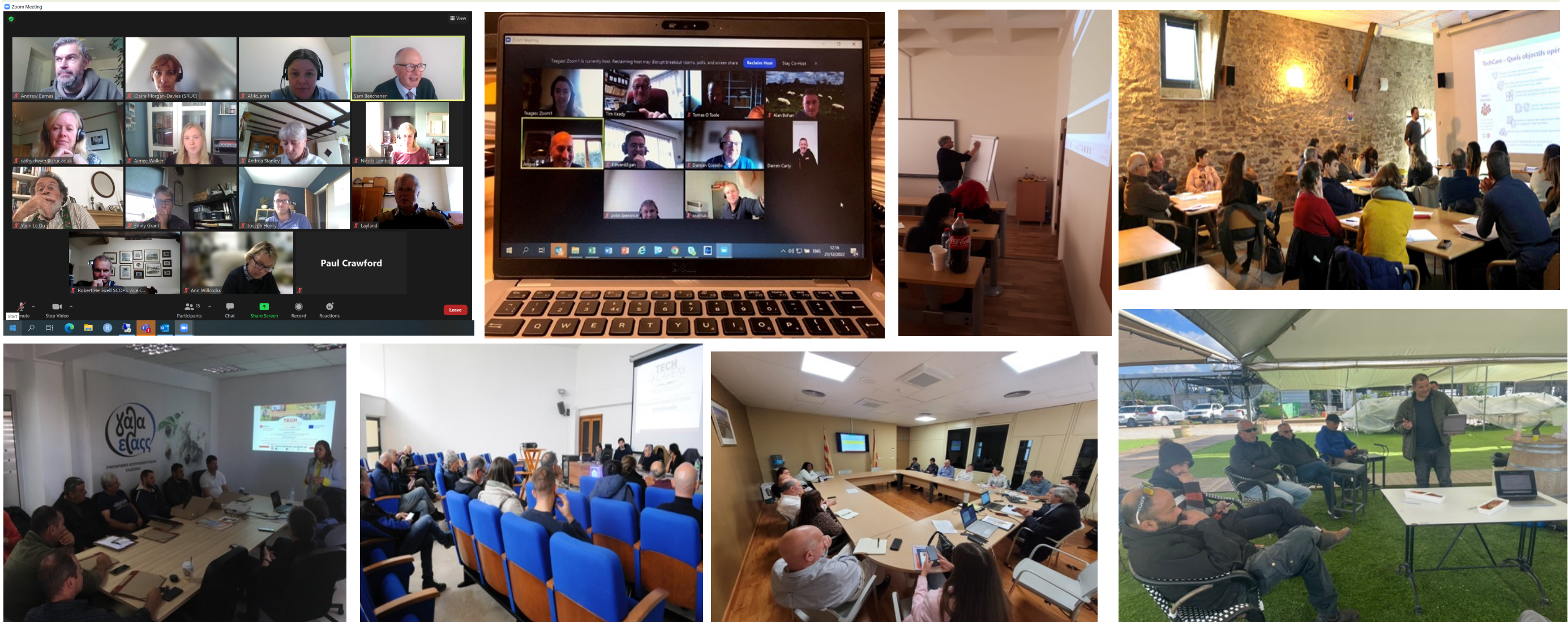
- send alerts on meaningful events to farmer
- are based on farm collected information
- have complex logic calculated in realtime (comparing historic/current data, group vs. individual)
- can be customized per farmer/production needs
- serve to develop actionable list, benchmarking, and along the chain

System Flow (by Alon Bar Shamai)



EWS should overcome the main barriers in stakeholders' acceptance and to be useful to end-users' demands. Along these line, **TechCare project adopts an integrated multi-actor approach, which involves all relevant stakeholders**, to constantly collect feedbacks and co-design the EWS through a series of National Workshops.

The 3rd series of TechCare National Workshops engaged all relevant stakeholders, from farmers to transporters, slaughterhouse, consumers and regulators, and collected their feedback on the critical aspects of developing the EWS in a co-design/co-innovation approach.



From the left to the right, 3rd National Workshops held in partner countries:
UK, Ireland, Romania, France
Greece, Italy, Spain, Israel

MAIN OUTCOMES FROM 3RD NATIONAL WORKSHOP

Despite the different background, the stakeholders from all countries recognized specific features of the EWS as highly favorable:

- the ability to track and trend history and past trendlines of critical data;
- the integration of novel EWS with existing tools and data management applications;
- the option to manually add data recordings and other information (i.e. mortality data, diets' information);
- the ability to group animals; that the EWS should be customizable to the specific needs of each farming system;
- that the EWS should be easily expandable to include new Precision Livestock Farming (PLF) tools or welfare indicators;
- and that the interface should be simple and concise.

The outcomes of the TechCare National Workshops are currently under evaluation to explore attitudes, behavioral dynamics and perceptions of stakeholders, while the TechCare EWS are under development incorporating the stakeholders' opinions and suggestions.

Acknowledgements

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