

MEP Paul Rübiger  
STOA Chair  
ASP 08F146

cc STOA panel Members: Tiziana Beghin, Renata Briano, Carlos Coelho, Mady Delvaux, Vicky Ford, Andrzej Grzyb, Danuta Jazłowiecka, Eva Kaili, Andrew Lewer, Bogusław Liberadzki, Mairead McGuinness, Anthea McIntyre, Clare Moody, Momchil Nekov, Marijana Petir, Georgi Pirinski, Virginie Rozière, Claudia Schmidt, Kay Swinburne, Evzen Tosenovsky, Cora van Nieuwenhuizen, Theodoros Karapiperis

Brussels, 17 November 2016

*Subject: Precision agriculture*

Dear chairman, dear Paul,  
Dear colleagues,

As I promised during our last meeting of the STOA panel, please find enclosed a short text developing some ideas I announced; they are grounded in my political convictions, and also in my own modest experience as a non-professional grower of vegetables and a saffron farmer in the Cilento region of South Italy, some years ago. Please excuse my delay. We all live and work in the very busy European Parliament.

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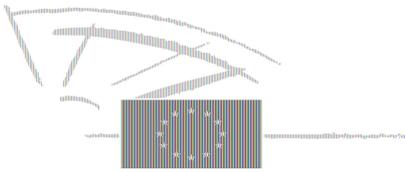
The technological revolution in agriculture highlights some needs to be taken into consideration from the European Union perspective.

In my view, the most important one is a firm decision to promote open, non-proprietary technologies. This applies to many technological fields in our world under quick transformation, but I'll reason briefly why this is especially important for agriculture.

## SOFTWARE

Openness is necessary at a data/software level. The inputs and outputs of precision agriculture (down to the time/amount pattern of watering / fertilizers dose for every single plant, just to fix the idea with an example) should be accessible to the public, and in exchangeable formats, ensuring interoperability, avoiding lock-in effects with this or that item of software.

## AVOIDING THE WRONG HORSE



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The main reasons are two: if we want to stimulate innovation across Europe, many tools are going to be developed, some of them will thrive, many won't have success, and all the surviving ones will need to interact very intensively with each other.

If we want our farmers to take that leap forward, and go for a transformed, intensely technological model, they need to do it without been afraid about the risk of "betting on the wrong horse", and having to start again from scratch in a few years, supporting costs out of their capabilities. This is especially important taking into account the land property structure which characterizes most Europe, which in turn is linked to resource constraints affecting most of our farmers.

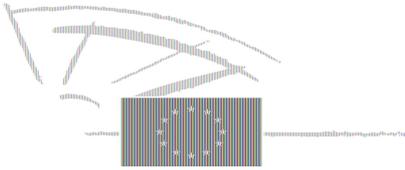
## HARDWARE

Beyond data/software, open standards, manuals, components and projects are needed for hardware (robots, drones, sensors, whatever you want to add to the list). This is essential to help medium, small and micro enterprises. For empowering them, not just to be users but also to dare to be developers. They are the men & women who know the terrain, who must be trained properly (all these issues need to become urgently an important part of the curricula of Agrarian Professional Schools and Faculties and similar learning institutions), and who should push forward decentralized autonomous system, where they are able to act with maximum freedom in order to operate their hardware, to maintain and repair it, to transform/adapt it, to integrate it with other pieces/systems, and eventually to use it as the basis for developing something new, individually or more likely in cooperation with others (perhaps with their neighbours in the field next to theirs, or perhaps with other European farmers two thousand kilometres away). All these needs can be channelled down to the motto "innovate!", and play together with the needs to avoid lock-in and hedge economic risks that I was commenting for the software/data part.

## BEYOND XX CENTURY IDEOLOGIES AND ECONOMIC/PRODUCTION MODELS

My point is: here we cannot afford to think ideologically. We need to develop politically and legislatively a resilient system which will be able to surf successfully not only climate change and shrinking natural resources, but also the big massive wave of technological evolution that is coming our way. This approach is neither left-wing nor right-wing. This is a call to a new approach that must be able to hit simultaneously some very ambitious goals: to keep smart, motivated young people in the agricultural sector; to avoid a domination of the sector by huge foreign powers; to guarantee our food quality, safety, security; to conserve our territory and environment; and many more...

Tools for materializing this project? I am open to your ideas, since you are much more experienced than me. An European Agency? A Charter for European Agriculture? A targeted, synergic combination of existing tools (H2020, Structural Funds, PAC, ...)?



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I do hope that STOA is able, with its unique transversal perspective and its acknowledged prestige within the EP, to influence significantly this endeavour. Please consider these few, quickly drafted lines as a humble grain of sand contributed to our common interests.

Yours,

Dario Tamburrano