PPP Project Annual Report 2018
The PPP-projects that have been established under the direction of the top sectors must submit an annual report on their technical and financial progress. This format is to be used for reporting the technical progress. A separate format ('PPP final report') is available for PPP-projects that have been completed in 2018.
The annual reports will be published in full on the websites of the TKIs/top sector, excluding the blocks 'Approval coordinator/consortium' and 'Planning and progress' . Please ensure that no confidential matters are left in the remaining blocks.
The PPP Project Annual Reports must be submitted by 15 February 2019 to Hans van der Kolk

General information	
PPP number	DFI-AF-18019 formerly AF-15216
Title	Use cases 3D Food Printing (DFI)
Theme	Slimme Technologie
Executive knowledge institution(s)	WFBR
Research project leader (name + e-mail address)	Martijn Noort, martijn.noort@wur.nl
Coordinator (on behalf of private parties)	N/A
Government contact person	Cor Wever/Frans Lips
Total project size (k€)	151 kEUR incl VAT / 125 kEUR excl VAT
Address project website	https://www.wur.nl/en/Research-Results/Themes/Nutrition-Health/Food-innovation/3D-food-printing.htm
Start date	01/10/2018
End date	31/12/2019

Approval coordinator/consortium The annual report should be discussed with the coordinator/the consortium. The TKIs appreciate being informed of possible feedback on the annual report.	
The coordinator has assessed the annual report on behalf of the consortium:	□ approved □ rejected N/A, consortium to be established
Possible feedback on the annual report:	

Short content description/aim PPS What is going on and how is this project involved? What will be delivered by the project and what is the effect of this?
Innovation in food and agriculture has come a long way in the past century, resulting in the production of more food than ever before. However, the food industry is facing new challenges due to rapid societal changes: in 2040 there will be 9 billion people to feed; there is an increasing demand for personalized, nutritious, and healthy food; and food production should be done in an affordable way without harming the environment. Radical innovations are required to meet the demands of the near future. 3D printing provides the food industry the opportunity to adapt and change. In order to accelerate and facilitate the application of 3D food printing processes in the food industry, we want to assist a group of leading food industrial partners to define use- and business cases using 3D printing, along with gaining initial practical experiments based on WFBR state of the art 3D printing facilities. The aim of the project is to create use-cases for targeted 3D printed food applications (first phase), and to test these applications in a real-life commercial setting (next phases). Some of the possible application areas are personalized nutrition in the healthcare domain and specific applications in food

service and retail. For these use cases we will develop a prototype 3D printing system, we will work on product formulation, we will perform consumer research, and we will jointly further develop the targeted business cases.

Planning and progress (if there are changes to the project plan, please explain)	
Is the PPP going according to plan?	Yes, although some delay in finding partners (2 out of 4)
Have there been changes in the consortium/project partners?	We are still composing the consortium
Is there a delay and/or deferred delivery date?	We expect to finalize phase 1 in 2019 as planned and initiate phase 2 during 2019.
Are there any substantive bottlenecks?	no
Are there any deviations from the projected budget?	no

Results in 2018/ so far Give a short description of the high-lights and (most important) project deliverable in 2018 / so far and their target group
The project started later than expected with the first industrial partners. Presentations were made for knowledge dissemination about state of the art of 3D food printing, equipment, applications, ingredients and formulations, software and user interfaces as well as current business models. First dissemination meeting and printing experiments at WFBR printing lab were performed and reported.

Number of delivered products in 2018 / so far *(in an appendix, please provide the titles and/or description of the products or a link to the products on public websites)*			
Academic articles	Reports	Articles in journals	Introductions/workshops
0	4	0	1

Appendix: Names of the products or a link to the products on a public website
Presentation: 3D food printing USE CASE initial phase, Exploration of fdm Printing potato dough, Martijn Noort
Presentation: 3D food printing state of technology, Kjeld van Bommel
Presentation: Materials and formulations for 3D food printing, Jerome Diaz
Presentation: Shaping, software and design, Mathijs de Schipper

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