VI 3DP Pilot Plenary Meeting – 22nd and 23rd of June 2022

Join us in Eindhoven and put forward your expertise, contribute to the development of key demonstration areas and embrace upcoming funding opportunities!!! Register here.
Meeting Venue: 'Microlab' (Kastanjelaan 400, 5616 LZ, Eindhoven)

The VI 3DP Pilot is a structural network composed of 32 member regions across Europe. The VI 3DP Pilot Plenary Meetings aim at connecting these regional innovation ecosystems, with the ultimate goal to generate and implement industry-led demonstration projects, in strategic fields.

The next VI 3DP Pilot plenary meeting will be organised on the 22nd of June (*starting at 12.30*) and on the 23rd of June (*ending at 1pm*). The meeting is organised in Eindhoven, in the context of the 3D Delta Week. Participants in the Plenary Meeting will have the opportunity to participate in other activities from the 3D Delta Week.

More specifically, the VI 3DP Pilot Plenary Meeting will offer the following main opportunities to participants (see next page for a detailed agenda):

1. Pitch a new project idea, **putting forward expertise** and finding partners to address your remaining needs.

2. Learn about relevant **funding opportunities** and, more importantly, have access to a framework for facilitating matchmaking and proposals generations.

3. Join or **co-develop further the 3DP Pilot structural cooperation areas**.

As mentioned, we organise this year the VI 3DP Pilot in Eindhoven, in the context of the 3D Delta Week. Those interested will be able to attend activities organised in the context of this initiative. See here for more information on the overall programme of the 3D Delta Week. In particular, you are invited to attend the 3D Delta Week Conference Dinner. An excellent occasion to get connected again. All info about location and price here. Registration on the same page.

Interested in the VI 3DP Pilot Plenary Meeting? Please register here!

Please find the detailed agenda on the next page!

Detailed Agenda VI 3DP Pilot Plenary Meeting

Timing	Session	Short description and requests for contributions
22nd of June 2022		
12.30-13.30	*Welcome "Walking Lunch"*	
13.30 -14.00	State of play and way forward (incl. matchmaking tool)	- General presentation of the VI 3DP Pilot. Open to all, including non-members regions.
14.00-14.30	The <u>current</u> structural areas of cooperation	- Short pitches (and invitation to join as members) about all current structural areas of cooperation ('demo cases') • Incl. "Predictive models for Additive Manufacturing process control and part quality assessment" (led by Leitat, Catalonia); "Automated removal of support structures and surface smoothing of 3D printed metal parts" (led by Fotec, Lower Austria); "Flexible Manufacturing Platform"(led by Leitat, Catalonia) etc.
14.30-15.00	The pitching platform for <u>new</u> project ideas	- New project ideas, associated expertise put forward and invitation to express interest (<u>an email with additional information will follow</u>!)
15.00-15.15	*Coffee Break*	
15.15-16.00	Demo Case Session 1 - 3D-Printed large parts and complex shapes (mono-material) through emerging 3DP technologies *(Demo Case leaders: José Antonio Dieste (Aitiip) and Giulia Marchisio (CIM40)*	- Progress made (incl. best practices in targeting cascade funding opportunities) and next steps - <u>Participants willing to do so can prepare a short presentation</u> focusing on: - Their own innovative solutions to print large parts AND/OR; - Requests/questions related to printing large parts (clusters or end-users willing to receive technical considerations on e.g. available techniques/properties to print specific large parts). If interested to present, please send an email to jean-francois.romainville[at]ideaconsult.be and joseantonio.dieste[at]aitiip.com (by the 3rd of June)
16.00-17.00	Demo Case Session 2 - Multi-materials components by hybrid 3D Printing manufacturing *(Demo Case Leader: Luca Tomesani (Unibo)*	- Progress made and next steps. More information about the scope of the demo case can be found in Annex. - <u>Participants willing to do so can prepare a short presentation</u> focusing on expertise/possible technical contributions or use cases associated to the scope of the Demo Case. If interested to present, please send an email to jean-francois.romainville[at]ideaconsult.be and luca.tomesani[at]unibo.it (by 3rd of June).
17.00-17.30	Demo Case Session 3 - *Smart AM for Sustainable production (Demo Case leader: Bianca Maria Colosimo (Polimi), Marco Luigi Grasso (Polimi)*	- Presentation of emerging activities in the field of Smart and Sustainable Additive Manufacturing. The presentation will focus on a recent national funding programme. - <u>Participants interested to do so</u> can put forward recent national/regional funding programmes dealing with 'Smart AM for Sustainable production'. The session will provide information about these regional/national opportunities and investigate possible synergies. <u>If interested to present</u>, please send an email to jean-francois.romainville[at]ideaconsult.be and biancamaria.colosimo[at]polimi.it (by 3rd of June).
18.00 onwards	*Networking Dinner (for all participants in the 3D Delta Week). For more information (price, location, etc.) and registrations, please see here.*	
23rd of June 2022		
09.00-09.30	*Welcome Coffee*	
09.30-10.15	<u>Funding</u> Opportunities *(Focus on grants for SMEs)*	- Presentation of opportunities - Opening of Matchmaking tools
10.15-11.00	<u>Funding</u> Opportunities *(Selected Horizon Europe RIAs and IAs)*	- Presentation of opportunities - Opening of Matchmaking tools
11.00-11.15	*Coffee break*	
11.15-12.00	Demo Case Session 4 - Innovative hybrid (subtractive/additive) manufacturing approach for repairing added value damaged objects *(Demo case leaders: Paolo Gregori (Trentino Sviluppo/Prom), Damjan Klobcar (University of Ljubljana)*	- Progress made, in particular recent technical achievements (based on repaired samples). See annex for more information about the demo case. - <u>Participants willing to do so can prepare a short presentation</u> focusing on: - Recent technical achievements related to the use of AM in order to repair parts AND/OR; - Specific challenges or requests you/your members have regarding repairing parts (i.e. putting forward a possible 'use case'). Please send an email to jean-francois.romainville[at]ideaconsult.be and paolo.gregori[at]trentinosviluppo.it if interested (by 3rd of June).

12.00-12.45	Demo Case Session 5 - 3DP for maintenance (Demo Case leaders: Coen de Graaf (Brainport) and Ales Hancic (Tecos)	- Progress made and next steps. See annex for mor information about the demo case. - Participants interested can present/provide information about possible new showcases and use cases: are you (or your members) considering the use of AM for maintenance? Which requirements/technical concerns do you have? If interested to present, please send an email to jean-francois.romainville[at]ideaconsult.be and ales.hancic[at]tecos.si if interested (by 3rd of June).
12.45-13.00	*Closing session*	

Please register here.

Please also have a look at the 3D Delta Week agenda here, to attend sessions/activities on the 21st, 22nd, 23rd of June 2022!

Annexes – More information about structural cooperation areas ('Demo Cases')

Title	Scope of the Project
Innovative hybrid (subtractive/additive) manufacturing approach for repairing added value damaged objects	The main objective is to combine subtractive and additive manufacturing in one step and make the process automated. This will fasten up the repairing process, make it more reliable and repeatable. Using 3d printing to repair parts instead of replacing the entire component can be very convenient and cheaper for the company. *Demo case leaders: Paolo Gregori (Trentino Sviluppo/Prom), Damjan Klobcar (University of Ljubljana)*
Multi-materials components by hybrid 3D Printing manufacturing	The demo-case aims at facilitating the uptake and deployment of 3D Printed innovative ultra-light hybrid components based on different materials and structure combinations. In order to do so, the demo case connects existing and complementary innovation facilities in the Regions through the creation and management of a common platform. The main focus is currently focusing on a combination of 3D printed metal inserts with composite combinations for different industrial applications such as hard trim interior products, structural elements, external components, and powertrain elements. *Demo Case Leader: Luca Tomesani (Unibo)*
Smart AM for Sustainable production' (former Add-Subtr demo case)	Objective is to smartly combine AM and digital technologies towards sustainable productions, considering the whole chain, from design to end of life. This demo case would focus on mapping and making available existing (TRL6 and beyond) solutions available (to SMEs) in view of facilitating the green transitions. *Demo Case Leader: Bianca Maria Colosimo (Polimi)*
AM in the Built Environment	The objective of the demo case is to explore new possibilities for the transition in the building and construction sector to digitization, robotization. The demo case focuses on deploying 3D Printed solutions in the construction sector in order to redirect the focus from object oriented to process-oriented industry. In this project, a particular attention is devoted to (among others); virtual design and testing, the digital twins/Moch-ups concepts, the investigations of various solutions for design and prototyping to be then taken up by possible end-users, sensors, 'building information management', etc. *Demo case leader: Theo Salet (TUE)*
3D-Printed large parts and complex shapes (mono-material) through emerging 3DP technologies	The objective is to make a one-stop-shop offering SMEs with relevant solutions to test and validate 3D Printing-based solutions for large parts. *Demo Case leaders: José Antonio Dieste (Aitiip) and Giulia Marchisio (CIM40)*
Automated removal of support structures and surface smoothing of 3D printed metal parts	"Reduction of time and costs for post treatment of 3D printed metal parts by using hirtisation. Hirtisation is a new and patented process by RENA Austria (Lower Austria) to automatically remove inner and outer support structures and to automatically smoothen inner and outer surfaces. Possible partners can 1) identify case studies (laser beam melting and electron beam melting), then 2) 3D print case study demonstrators via LBM and EBM (post treatment via hirtisation at FOTEC/Hirtenberger) and 3) characterise parts, cost analysis and cost comparison with status quo. Also, other new emerging solutions for post treatment could be integrated in the demo case! *Demo Case Leader: Helmut Loibl (FOTEC)*
Efficient collaborative robot through 3D printing optimization	Technical/technological perspective: Design, develop and manufacture on demand and customized new concepts and solutions of production tools for helping in the automation of industrial processes (e.g. gripping, handling, assembling…) of components in collaborative robotic stations with advanced grippers. Business perspective: Support SMEs through the design of lightweight multi-material grippers combining polymers and silicones of different hardness for advanced functionalities to solve customized needs in the industrial production environment. *Demo Case Leader: Oscar Alonso (Leitat)*
Multi-material 3D printing: Structural integrated electronics in 3D printed parts	The main objective is to go from 2D printed electronics to 3D printed electronics using multi-material inkjet 3DP technology. By making use of freedom of design offered by 3DP and avoiding assembly steps few prototypes of different use-cases should be elaborated in order to demonstrate the capability of inkjet based multi-material 3DP of integrated electronics. *Demo Case leader: Hannes Fachberger (Profactor)*
3DP for maintenance	Increase the use of Additive Manufacturing in Maintenance, by creating a catalogue/toolbox for maintenance we want to show how AM can contribute to become more flexible, quicker, cost effective, lower stock levels, reduce CO_2 footprint. Demo Case leaders: Coen de Graaf (Brainport) and Ales Hancic (Tecos)