

VI 3DP Pilot Plenary Meeting 15.12.2021 – Agenda (Members)

Online Meeting – Register <u>here</u>

An event to put forward demonstration expertise and needs across borders

The <u>VI 3DP Pilot</u> generated, among others, the following outcomes in the year 2021:

- A sustainable **matchmaking tool** was created and launched. Organisations (located in members regions) active in any segment of the 3DP Value Chain can now make their services and equipment visible, towards the generation of innovation projects across borders.
- Nine SMEs-led **cross regional demonstration projects were funded** and implemented, delivering major developments in some of the structural cooperation areas implemented by the VI 3DP Pilot.
- The network has been particularly active in terms of targeting funding opportunities for its demonstration projects, with over six **proposals for Horizon Europe prepared** and other opportunities targeted and <u>secured</u> (Cornet, Ira-SME, Trinity, TAF, etc.).

The VI 3DP Pilot plenary meeting will be about delivering added value to our members and preparing the year 2022, for more industry-relevant impacts being generated. Partners will have the opportunity to:

- 1. Pitch a new project idea, **putting forward expertise** and finding partners to address their remaining needs (*see email sent on 26.11.2021*);
- 2. Be informed about **funding opportunities** (associated to innovation projects in the field of 3DP and, more generally, 'advanced manufacturing') and find complementary partners for dedicated Calls;
- 3. Join or co-develop further the 3DP Pilot structural cooperation areas.

The detailed agenda is available on the **next page**. Please register <u>here</u> and you will receive the connection details before the event.



Detailed Agenda – An event structured around the main services offered by VI 3DP Pilot

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Timing	Session	Short description (sessions particularly relevant for SMEs/end-users are market with a "SMEs!" logo)	
09.30 - 10.10	State of play and way forward	General presentation of the VI 3DP Pilot, incl. the services portfolio	
10.10 - 10.40	Structural areas of cooperation ('Demo Cases')	 Short pitches of all nine demo cases. Progress and follow up activities for the following Demo Cases: 3DP for maintenance (Demo Case leaders: <u>Coen de Graaf</u> (Brainport) and <u>Ales Hancic</u> (Tecos) Efficient collaborative robot through 3D printing optimization (Demo Case leader: <u>Oscar Alonso</u> (Leitat) Smart AM for Sustainable production' (Demo Case leader: <u>Bianca Maria Colosimo</u> (Polimi) Possibility of joining demo cases as service provider / possible end-user 	
10.40 - 11.00	The matchmaking tool for 3DP actors	- Short presentation and call for registrations SMEs !	
11.00 - 11.30	The pitching platform for <u>new</u> project ideas	- New project ideas and associated expertise put forward SMEs :	
11.30 - 12.00	Funding Opportunities (General presentation and focus on grants for SMEs)	- Presentation of opportunities - Opening of Matchmaking tools	
12.00 - 13.00	Lunch Break and promotion, by our members, of events, studies, projects, etc.		
13.00 - 13.40	Funding Opportunities (Selected Horizon Europe RIAs and IAs and I3)	 Presentation of opportunities Opening of Matchmaking tools 	
13.40 - 14.00	Support for project design	 General presentation Outcomes of the TAF project focusing on the 'repairing demo case' (Demo case leaders: <u>Paolo Gregori</u>) 	
14.00 – 15.00	Demo Case Session 1 - Multi-material 3D printing: Structural integrated electronics in 3D printed parts (<i>Demo</i> <i>Case leader: <u>Hannes Fachberger</u> (Profactor)</i>	 General presentation, progress made and next steps Participants willing to do so can prepare a short presentation focusing on expertise/possible technical contributions or possible use cases associated to the scope of the Demo Case (see more information in Annex). Please send an email to jean- francois.romainville[at]ideaconsult.be and hannes.Fachberger[at]profactor.at if interested (by 8th of December at the latest). 	
15.00 – 15.45	Demo Case Session 2 - Multi-materials components by hybrid 3D Printing manufacturing (<i>Demo Case Leader:</i> <u>Luca Tomesani</u> (Unibo)	 General presentation, progress made and next steps Participants willing to do so can prepare a short presentation focusing on expertise/possible technical contributions or use cases associated to the scope of the Demo Case (see more information in Annex). Please send an email to jean-francois.romainville[at]ideaconsult.be and luca.tomesani[at]unibo.it if interested (by 8th of December at the latest). 	
15.45 – 16.30	Demo Case Session 3 - Innovative hybrid (subtractive/additive) manufacturing approach for repairing added value damaged objects (Demo case leaders: <u>Paolo Gregori</u> (Trentino Sviluppo/Prom), <u>Damjan Klobcar</u> (University of Ljubljana)	- General presentation, progress made and next steps - Participants willing to do so can prepare a short presentation focusing on expertise/possible technical contributions or use cases associated to the scope of the Demo Case (see more information in Annex). Please send an email to jean-francois.romainville[at]ideaconsult.be and paolo.gregori[at]trentinosviluppo.it if interested (by 8 th of December).	
16.30 – 17.00	Demo Case Session 4 - 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 and next steps Participants willing to do so can prepare a short presentation focusing on expertise/possible technical contributions or use cases associated to the scope of the Demo Case (see more information in Annex). Please send an email to jean-francois.romainville[at]ideaconsult.be and joseantonio.dieste[at]aitiip.com if interested (by the 8th of December) 	
17.00 - 17.15	Closing session	- Next steps	

Connection details will be sent to registered participants. Please register here.



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

	- More information about structural cooperation areas ('Demo Cases')
Title	Scope of the Project
Innovative hybrid	The main objective is to combine subtractive and additive manufacturing in one step and make the process
(subtractive/additive)	automated. This will fasten up the repairing process, make it more reliable and repeatable. Using 3d printing to
manufacturing approach for	repair parts instead of replacing the entire component can be very convenient and cheaper for the company.
repairing added value damaged objects	Demo case leaders: Paolo Gregori (Trentino Sviluppo/Prom), Damjan Klobcar (University of Ljubljana)
objects	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
Multi-materials components by	management of a common platform. The main focus is currently focusing on a combination of 3D printed metal
hybrid 3D Printing manufacturing	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)
	Objective is to smartly combine AM and digital technologies towards sustainable productions, considering the
Smart AM for Sustainable	whole chain, from design to end of life.
production' (former Add-Subtr	This demo case would focus on mapping and making available existing (TRL6 and beyond) solutions available
demo case)	(to SMEs) in view of facilitating the green transitions.
	Demo Case Leader: Bianca Maria Colosimo (Polimi)
	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
AM in the Built Environment	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.
2D Drinted large seats and	Demo case leader: Theo Salet (TUE)
3D-Printed large parts and	The objective is to make a one-stop-shop offering SMEs with relevant solutions to test and validate 3D Printing-
complex shapes (mono-material) through emerging 3DP	based solutions for large parts.
technologies	
comorog.co	Demo Case leaders: José Antonio Dieste (Aitiip) and Giulia Marchisio (CIM40)
	"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
Automated removal of support	structures and to automatically smoothen inner and outer surfaces. Possible partners can 1) identify case
structures and surface smoothing	studies (laser beam melting and electron beam melting), then 2) 3D print case study demonstrators via LBM
of 3D printed metal parts	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)
	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.
Efficient collaborative robot through 3D printing optimization	Business perspective: Support SMEs through the design of lightweight multi-material grippers combining
through 3D printing optimization	polymers and silicones of different hardness for advanced functionalities to solve customized needs in the
	industrial production environment.
	Dama Casa Landari Occar Alansa (Laitat)
	Demo Case Leader: Oscar Alonso (Leitat) The main chiesting is to go from 2D printed electronics to 2D printed electronics using multi-material inkint
	The main objective is to go from 2D printed electronics to 3D printed electronics using multi-material inkjet
Multi-material 3D printing:	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
Structural integrated electronics	multi-material 3DP of integrated electronics.
in 3D printed parts	
	Demo Case leader: Hannes Fachberger (Profactor)
	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,
3DP for maintenance	reduce CO2 footprint.
SDP for maintenance	
SDF for maintenance	Demo Case leaders: Coen de Graaf (Brainport) and Ales Hancic (Tecos)