

## 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<br>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<br>Cases')  | <ul> <li>Short pitches of all nine demo cases. Progress and follow up activities for the following Demo Cases:         <ul> <li>3DP for maintenance (Demo Case leaders: <u>Coen de Graaf</u> (Brainport) and <u>Ales Hancic</u> (Tecos)</li> <li>Efficient collaborative robot through 3D printing optimization (Demo Case leader: <u>Oscar Alonso</u> (Leitat)</li> <li>Smart AM for Sustainable production' (Demo Case leader: <u>Bianca Maria Colosimo</u> (Polimi)</li> <li>Possibility of joining demo cases as service provider / possible end-user</li> </ul> </li> </ul> |  |
| 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<br>- 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<br>Horizon Europe RIAs and IAs and I3)   | <ul> <li>Presentation of opportunities</li> <li>Opening of Matchmaking tools</li> </ul>  |  |
| 13.40 - 14.00  | Support for project design   | <ul> <li>General presentation</li> <li>Outcomes of the TAF project focusing on the 'repairing demo case'</li> <li>(Demo case leaders: <u>Paolo Gregori</u>)</li> </ul>   |  |
| 14.00 – 15.00  | Demo Case Session 1 - Multi-material<br>3D printing: Structural integrated<br>electronics in 3D printed parts ( <i>Demo</i><br><i>Case leader: <u>Hannes Fachberger</u><br/>(Profactor)</i>  | <ul> <li>General presentation, progress made and next steps</li> <li>Participants willing to do so can prepare a short presentation focusing<br/>on expertise/possible technical contributions or possible use cases<br/>associated to the scope of the Demo Case (see more information in<br/>Annex). Please send an email to jean-<br/>francois.romainville[at]ideaconsult.be and<br/>hannes.Fachberger[at]profactor.at if interested (by 8<sup>th</sup> of December at<br/>the latest).</li> </ul>  |  |
| 15.00 – 15.45  | Demo Case Session 2 - Multi-materials<br>components by hybrid 3D Printing<br>manufacturing ( <i>Demo Case Leader:</i><br><u>Luca Tomesani</u> (Unibo)  | <ul> <li>General presentation, progress made and next steps</li> <li>Participants willing to do so can prepare a short presentation focusing<br/>on expertise/possible technical contributions or use cases associated to<br/>the scope of the Demo Case (see more information in Annex). Please<br/>send an email to jean-francois.romainville[at]ideaconsult.be and<br/>luca.tomesani[at]unibo.it if interested (by 8<sup>th</sup> of December at the latest).</li> </ul>  |  |
| 15.45 – 16.30  | Demo Case Session 3 - Innovative<br>hybrid (subtractive/additive)<br>manufacturing approach for repairing<br>added value damaged objects (Demo<br>case leaders: <u>Paolo Gregori</u> (Trentino<br>Sviluppo/Prom), <u>Damjan Klobcar</u><br>(University of Ljubljana) | - General presentation, progress made and next steps<br>- Participants willing to do so can prepare a short presentation focusing<br>on expertise/possible technical contributions or use cases associated to<br>the scope of the Demo Case (see more information in Annex). Please<br>send an email to jean-francois.romainville[at]ideaconsult.be and<br>paolo.gregori[at]trentinosviluppo.it if interested (by 8 <sup>th</sup> of December).  |  |
| 16.30 – 17.00  | Demo Case Session 4 - 3D-Printed large<br>parts and complex shapes (mono-<br>material) through emerging 3DP<br>technologies (Demo Case leaders: José<br>Antonio Dieste (Aitiip) and Giulia<br>Marchisio (CIM40)  | <ul> <li>Progress made and next steps</li> <li>Participants willing to do so can prepare a short presentation focusing<br/>on expertise/possible technical contributions or use cases associated to<br/>the scope of the Demo Case (see more information in Annex). Please<br/>send an email to jean-francois.romainville[at]ideaconsult.be and<br/>joseantonio.dieste[at]aitiip.com if interested (by the 8<sup>th</sup> of December)</li> </ul>  |  |
| 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<br>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)<br>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)  |