VANGUARD INITIATIVE
New growth through smart specialisation

Pilot Mid-Term Review Pitch 2026

VI 3DP Pilot

September 25, 2026

Pilot Approach

1. Societal & Industrial Challenge(s) To Be Addressed

- Strengthen European manufacturing resilience & competitiveness
- Bridge the gap from demonstration to industrial deployment
- Connect industrial challenges with cross-regional technology capabilities
- Accelerate uptake of advanced manufacturing solutions
- Our addressed market failures: Information asymmetries; Fragmented ecosystems & coordination failures; de-risking; Technology-to-market / deployment gap, etc.

2. Pilot Objectives in 2026

- Broader scope
- Stronger industrial engagement
- Coherent project portfolios
- Funding pipeline and market-ready outcomes

Pilot Approach

3. Pilot Governance

- Co-led by South Netherlands, Flanders & Norte
- 21 member regions
- Board Meeting every two weeks; Steering Group Meeting every 4 months; “Plenary”/BIM every 6 months
- Four strategic Demo Cases with dedicated leaders/action plans
- Coordination with regional representatives & ecosystems
- Increasing cross-Pilot cooperation, particularly with ESM
- Outreach beyond event: Gateway and standard communications

Pilot Activities – Learn & Connect

JAN

22 Jan · Funding Webinar

Horizon Europe funding opportunities, project ideas and partner searches.

74 registered participants

MAR

24 Mar · Onboarding & Funding Opportunities

Introduction of newcomers to the Pilot and upcoming 3DP / Advanced Manufacturing opportunities.

34 registered participants

26–27 Mar · 4 Call-Dedicated Meetings

Project concept generation and consortium building around four Horizon Europe calls.

36–44 registered participants per meeting

with ESM Pilot

JUN

9 Jun · On-Demand Spare Parts & Repair

Demo Case community building and definition of interregional priorities and follow-up actions.

25 registered participants

30 Jun · NRW Internationalisation Webinar

Dedicated outreach to NRW stakeholders and European Advanced Manufacturing cooperation opportunities.

7 registered participants

30 Jun · European Parliament

Participation in "3D Printing – The Future of Medicine": policy dialogue and European-level visibility.

JUN–JUL

30 Jun–9 Jul · 4 Proposal-Building Meetings

Second-stage meetings to refine concepts and strengthen consortia for four Horizon Europe Cluster 4 calls.

9–15 registered participants per meeting

Advanced Manufacturing

Human/AI

AI Innovation

De-/Re-manufacturing

SEP

15 Sep · Advanced Manufacturing Business Innovators Meeting — Genk

Industrial challenges, technology demonstrations, company showcases and Horizon Europe / bottom-up project building.

50+ organisations

~15 regions

9 countries

~60% companies

2026

Continuous · Gateway management & community animation

Funding-opportunity monitoring, Gateway updates, newsletters / targeted emails, stakeholder engagement and technical follow-up.

Pilot Activities

2. Two highlights of 2026

- **VI Advanced Manufacturing Business Innovators Meeting**
  - 50+ organisations | 15 regions | 9 countries
  - Approx. 60% companies
  - Industrial challenges from ASCO, Materialise, CastLab
  - Technology demonstrations + project building
  - Industrial matchmaking around Advanced Manufacturing priorities

  ➔ ***BIM increasingly recognised as a successful event format***
- **VI 3DP Pilot enabling the deployment and market uptake of innovative Advanced Manufacturing solutions**
  - Lower-cost / more efficient metal printing processes
  - Automated AM production and inspection modules
  - Repair and hybrid manufacturing solutions
  - Smart and functional AM products

  ➔ ***Several solutions progressed to TRL 9 and commercial deployment, through VI 3DP Pilot holistic innovation support approach: pitching, connecting, designing, implementing, activating funding mixes (incl. VInnovate), etc.***



Pilot Activities – Demonstrate and commercialise

- 4 Advanced Manufacturing Demo Cases restructured
- Portfolio of I3, VInnovate & Horizon Europe projects in targeted priorities (+ New HE, I3 & VInnovate targets)
- Focus on TRL progression and industrial deployment, incl. privately funded !

On-Demand Spare Parts & Repair Manufacturing

OBJECTIVE Repair and spare-part AM to reduce downtime, extend asset lifetime and support secure distributed manufacturing.

Funded implementation stream

- Secure original spare parts delivered on demand (VInnovate 2024)
- WAAM repair technologies for large metal components (I3 3DOP)
- Hybrid DED + CNC repair and precision machining (I3 3DOP)
- Recycled metal powder/granule feedstocks for metal AM (I3 3DOP)
- ValCUN MMD for lower-cost aluminium printing (I3 3DOP)

High-Performance Industrial Components

OBJECTIVE Advanced AM design, materials and manufacturing routes for lighter, more efficient and higher-performance components.

Funded implementation stream

- ABEP space propulsion components (VInnovate 2025)
- Lower-cost metal printing and new alloys (I3 3DOP)
- RESHAPE metal AM heat exchangers (VInnovate 2025)
- AddCat catalytic reactor / air-purification unit (I3 3DOP)
- Recycled thermoplastics and short-fibre AM (VInnovate 2024)
- Cold Metal Fusion titanium process chain (I3 3DOP)
- Validation workflows for high-performance AM (I3 3DOP)

Autonomous & AI-Driven AM Factories

OBJECTIVE Automation, robotics and AI-driven monitoring to make AM scalable, reliable and quality-assured.

Funded implementation stream

- AM-QUALITY™ inline AI inspection (I3 3DOP)
- Robotic bin-picking and AM handling systems (I3 3DOP)
- Additive software for green/digital transitions (HE Cluster 4 / DILAPRO)
- Automated metrology, sorting, feeding and bagging (I3 3DOP)
- Digital and near-lights-out AM workflows (I3 3DOP)

Smart & Functional Products with AM

OBJECTIVE Smart and multifunctional AM products integrating electronics, sensors, embedded systems and AI-enabled functionality.

Funded implementation stream

- S-CUBE CubeSat structures with embedded batteries (VInnovate 2025)
- Pilot lines: bioscaffolds, biosensors and personalised pharma (I3 Inkjet-bioAM)
- FSTP projects: BIOJET, BioXPLORER-QC, BIOSTRUCT, DiaPee-BioPrint, sInkScreen, SmartCare, InPharmaJet, SITG, 3Pharma (I3 Inkjet-bioAM)
- Kirigami LED panels, embedded-electronics panels and sensorised mould inserts (I3 3DOP)
- Automated dental AM production workflows (I3 3DOP)
- Hybrid AM / thermoforming / overmoulding / robotic QC chains (I3 3DOP)
- Integrated heating in a 3D-printed catalytic structure (VInnovate 2024)

Assessment of Pilot Progress

1. Pilot Engagement

- Participation in our 2026 events (strict « 3DP Pilot organised events only »!):
  - *Total event/session participations: 413*
  - *Unique individual participants: 179*
  - *Company participation: 37% in general, up to 60% for « companies oriented » activities*
- Gateway: 389 organisations
- Regions: updated mailing lists, dedicated engagement actions (NRW), onboarding « new » regions (Navarra, Galicia, Dalarna etc.)

Region	Estimated total participations (events only !)
Lombardy	88
Norte	44
Slovenia	39
South Netherlands	38
Emilia-Romagna	36
Flanders	31
Trentino	24
Navarra	21
Wallonia	11
Galicia	10
Friuli Venezia Giulia	9
Saxony	8
North Rhine-Westphalia	7
Aragon	6
Dalarna	5
East Netherlands	5
Etc.	

2. Key Advances

- Deploying recognised “Target Groups-Targeted Services” matrix
- Pilot repositioned from 3DP to broader 3DP-AI-Robotics scope
- Four Demo Cases restructured around clear industrial challenges
- Portfolio now combines I3, VInnovate and Horizon Europe projects
- Structured HE Cluster 4 / I3 / VInnovate project pipeline in place
- Several supported solutions reached TRL 9 / commercial deployment

Assessment of Pilot Progress

3. Key Challenges

- Uneven outreach potential across VI regions
- Mobilising more companies and industrial end-users
- Guaranteeing “priorities implementation” in current EU funding landscape: role of, among others, VInnovate
- Internal VI “fragmentation”: pilots/topics-VInnovate-etc.

Elements to use for VI Communication

1. Link to Policy level

- Contribution to EU priorities on Advanced Manufacturing, AI, automation and industrial resilience
- Participation in European Parliament dialogue on 3D printing and advanced manufacturing
- Support for cross-regional cooperation and deployment of strategic technologies

2. Link with Industrial Strategy

- Connecting industrial challenges with European technology capabilities
- Focus on AI, robotics/automation, advanced materials and advanced production technologies
- “Interconnecting ecosystems”, “Portfolios approach”, “Bottom-up”, “Deployment-oriented”, “Quadruple Helix”, etc. made real

3. Link with Innovation Implementation

- Critical mass public funding activated in our priorities (last 3 years: more than 18 million)
- 20+ innovations advanced through I3 and VInnovate projects, with clear additionality: VI 3DP Pilot support was instrumental in enabling projects that would otherwise have been unlikely to proceed.
- Several supported solutions reached TRL 9 / commercial deployment
- €16.4m private investment, €4.1m new sales, €26.1m follow-up public funding