



**PhotonDelta**

Gateway to Integrated Photonics

## Funding criteria PhotonDelta

Submission and evaluation criteria

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Bestuur Stichting PhotonDelta  
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VERSION 1.2

## Summary

PhotonDelta is the national ecosystem that aspires global leadership in the area of integrated photonics and applications. The vision of PhotonDelta is that generic InP and TriPlex technology provides the essential solution for next generations photonic integrated circuits. Our mission is to be a global leader in innovation, production and assembly of these InP and TriPlex based solutions. The ambition is to grow our young industry to a level of EUR 1 billion in 2026 by making our production platform a mature leading player in the development of next generation integrated photonic circuits. A key instrument of PhotonDelta which supports our ambition is our funding program. This funding program is accessible by means of submitting a request for funding Proposal.

This document provides the main evaluation criteria whether or not to fund proposals. The assessment and advising on the submitted proposals will always be contingent on the proposal's contribution to the PhotonDelta ambition and to strengthen the Dutch innovative position and industry in this domain. In addition, the boundaries of the state aid support framework, objectives and general principles of the strategic pillars of the National Integrated Photonics Plan apply (see attachment).

### **Mainly, proposals will be evaluated on:**

- *Fit with national plan PhotonDelta* (connection to pillars of national plan Integrated Photonics)
- *Impact and market perspective* (market potential, technology and market readiness, projections)
- *Innovation* (quality of innovation, technical and commercial feasibility, business model)
- *Implementation* (quality of collaboration/consortium, capability, motivation, innovation strategy)

Besides, the Investment Committee advises and recommends the management of PhotonDelta on:

- the eligibility for funding
- the feasibility and quality of the Proposal, especially in reference to the alignment of the Photon Delta national plan
- the financial stability of the company in case of a Pillar 1 application

### **Process:**

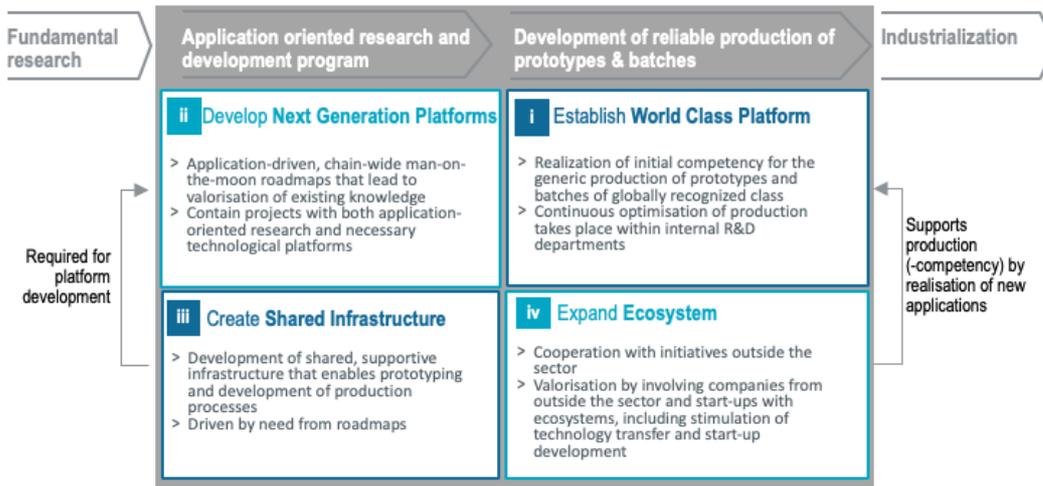
- Project Proposals can be submitted throughout the year
- Project Proposals must be declared admissible (phase 1)
- Proposals are scored on a number of criteria (phase 2) and
- Proposals are, if applicable, furthermore subject to a financial, technical and legal Due Diligence and a brief research whether or not the proposal meets State aid regulation (phase 3)
- Proposals are subject to evaluation by an independent Investment Committee (IC) (phase 4)
- Per year, a minimum of 4 IC meetings will be held
- A formal decision is made by the management of PhotonDelta (phase 5)
- The funding decision of a Proposal by PhotonDelta is not open for appeal

## Inhoudsopgave

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## 1. What do we fund?

The goals of the national plan PhotonDelta are established by means of four strategic pillars:



Pillar 1: Establish world class platform

- Realizing a reliable platform for world class production of prototypes and small batches of PIC enabled products

Pillar 2: Develop Next Generation Platforms

- Developing the next generation of technology and applications, driven by market-driven roadmaps and R&D programmes

Pillar 3: Create shared infra

- Developing shared infrastructure to support the roadmaps and R&D programs, both in prototyping and in the development of new production processes

Pillar 4: Expand ecosystem

- The development of the ecosystem by connecting parties inside and outside the (Dutch) sector, thus valorised knowledge and new applications and activities.

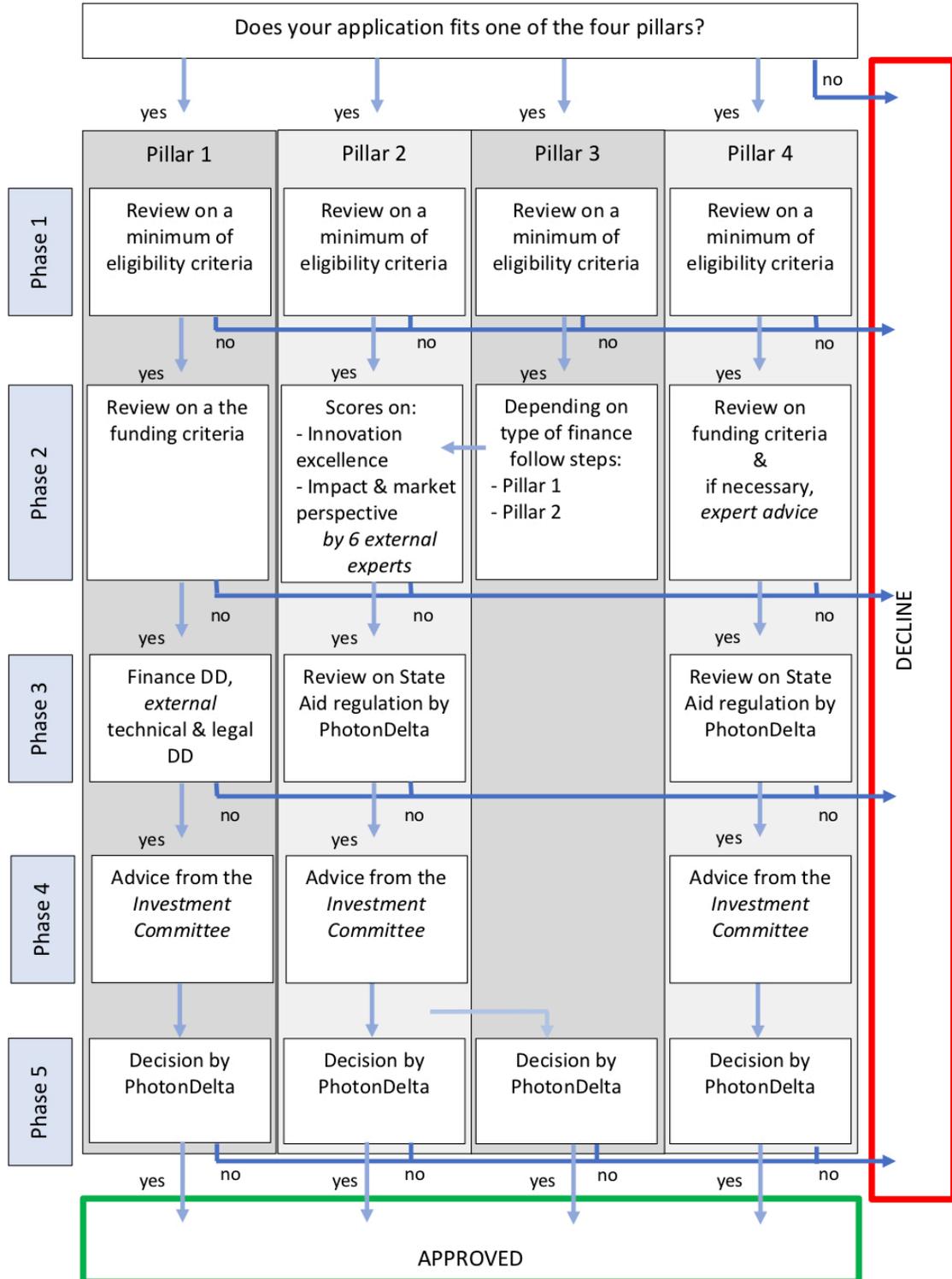
Every pillar has its own specific ambitions and activities. Therefore, the funding possibilities that Stichting PhotonDelta provides are different as well. An overview of the funding possibilities:

<b>ii Develop Next Generation Platforms</b> A subsidy, loan or a combination	<b>i Establish World Class Platform</b> A (convertible) ordinary loan
<b>iii Create Shared Infrastructure</b> A loan	<b>iv Expand Ecosystem</b> A subsidy

Funding is possible after the applicant fills in the application form (see the website), setting out a proposal. Below you can find more information about the procedure and the specific funding criteria.

## 2. The assessment procedure

The assessment procedure for the approval of your proposal includes five phases. An overview per phase is provided below:



### 3. Minimum of eligibility criteria (phase 1)

After the applicant has made a proposal, first PhotonDelta will review if the application is to declare admissible. The minimum eligibility criteria for accepting a proposal are:

1. Applicant is a legal entity (corporation or a legal person)
2. Applicant is not in financial difficulties
3. Applicant is a Dutch organization, more precise a:
  - a. University or a University of applied sciences (hogeschool)
  - b. Regionaal Opleidings Centrum (ROC),
  - c. knowledge institute,
  - d. non-profit organization or
  - e. company (BV). The company must be physically located in the Netherlands and must have a significant contribution to the ecosystem and employment opportunities for the Netherlands. Only companies directly contributing to the design, development and manufacturing of integrated photonics PICs/modules are eligible for funding. Other companies (i.e. system/solution integrators, equipment manufacturers) can be the applicant, as part of the consortia, but are not directly eligible for reimbursement by PhotonDelta. Also non-Dutch companies can be part of the consortia, working together with partners in the ecosystem.
4. A proposal must contribute to the goals of the National Plan, as worked out in the four strategic pillars.
5. Involvement-by-contribution of PhotonDelta ecosystem partners and/or Covenant partners

### 4. The funding criteria (phase 2)

Depending on the kind of proposal, different kind of criteria apply. In the next overview, the main criteria and process is listed per Pillar.

#### Funding criteria for Pillar 1: establish world class platform

Focus	Concepts
<b>On optimization value chain</b>	
<ul style="list-style-type: none"> <li>• Business investment with a marketable business case</li> <li>• Coherence with and impact for the entire chain</li> <li>• Positive cash flows within 4 years</li> </ul>	<ul style="list-style-type: none"> <li>• Financial support for development to enable stable production</li> <li>• To be deployed for required expertise, working capital and equipment</li> </ul>
Conditions	
<ul style="list-style-type: none"> <li>• Ticket size: min. 1 mln. / max. 5 mln. euro</li> <li>• Repayment term within 48months after closing</li> <li>• Financing by means of (convertible) ordinary loans under market-conform conditions</li> <li>• External leveraged funding min. 50% of the total required investment value</li> <li>• Specific terms &amp; conditions apply, including making contributions to strengthening the ecosystem and warrants/collateral</li> <li>• The timing of private co-financing should take place more or less simultaneously with the PhotonDelta funding</li> </ul>	

#### Process Pillar 1

The proposals for Pillar 1 are subject to due diligence, go to Phase 3.

## Funding criteria for Pillar 2: develop Next Generation Platforms

Focus	Concepts										
<p><b>Market driven research &amp; development projects based on roadmap</b></p> <ul style="list-style-type: none"> <li>• Next generation applications and technology</li> <li>• Projects contribute substantially to the execution of market driven roadmaps</li> <li>• As of TRL 3 (not fundamental research)</li> </ul>	<ul style="list-style-type: none"> <li>• Public-private partnerships, in collaboration with knowledge institution</li> </ul>										
Conditions											
<ul style="list-style-type: none"> <li>• The proposal must be based on roadmap driven market demand. In case a roadmap isn't available (due to 'work in progress'), the proposal must fit the priorities within the business strategy of PhotonDelta (predefined platform market combinations)</li> <li>• Funding in the form of a project subsidy, a loan or a combination of max. 2,5 mln. euro</li> <li>• Project duration max. 48months after closing</li> <li>• Specific terms &amp; conditions apply, including making contributions to strengthening the ecosystem</li> <li>• Min. of 50% private co-financing in cash is required (cash is obliged, partial in-kind contribution is possible)</li> <li>• Proposals that make use of funding are always subject to State aid regulation</li> <li>• PhotonDelta supports open innovation model of collaboration. Due to the fact that your project is based on collaboration with several participants, matters related to access rights, i.e. licences and user rights to foreground and background IP, are of utmost importance and should be duly addressed in the Consortium Agreement. In general, requests to access another participant's background or foreground IP should be done in writing. The exact format must be defined in the Consortium Agreement. The following table gives an overview of the general conditions concerning the granting of access rights.</li> </ul>											
<table border="1"> <thead> <tr> <th data-bbox="300 1310 600 1346">Purpose</th> <th data-bbox="600 1310 995 1346">Access to background IP</th> <th data-bbox="995 1310 1391 1346">Access to Foreground IP</th> </tr> </thead> <tbody> <tr> <td data-bbox="300 1346 600 1491">Implementation of the project</td> <td data-bbox="600 1346 995 1491">Royalty-free, unless otherwise agreed by participants before their accession to the grant agreement</td> <td data-bbox="995 1346 1391 1491">Royalty- free</td> </tr> <tr> <td data-bbox="300 1491 600 1568">Exportation of project results</td> <td colspan="2" data-bbox="600 1491 1391 1568">Subject to agreement, access rights shall be granted under fair and reasonable conditions</td> </tr> </tbody> </table>			Purpose	Access to background IP	Access to Foreground IP	Implementation of the project	Royalty-free, unless otherwise agreed by participants before their accession to the grant agreement	Royalty- free	Exportation of project results	Subject to agreement, access rights shall be granted under fair and reasonable conditions	
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Exportation of project results	Subject to agreement, access rights shall be granted under fair and reasonable conditions										
<p>To stimulate rapid development of innovative applications by providing easier access to IP within the ecosystem, PhotonDelta Foundation gets a non-revocable, royalty-free, non-exclusive license with sub-licensing rights outside of the project scope and/or field of use, for all the Foreground IP generated with the project, subject to agreement with relevant consortium partners.</p> <ul style="list-style-type: none"> <li>• To a maximum of 6 mln. euro (total investment volume) in 2019</li> </ul>											

### *Process Pillar 2*

The proposals for Pillar 2 will be evaluated and scored by 6 external experts. The experts come from industry, the scientific community and applied research organizations. The experts evaluate the proposal on the categories (1) Innovation excellence and implementation and (2) Impact and market perspective. For their individual evaluation, they receive the following specific questions.

#### 1) Innovation excellence and implementation

- a. Is the objective of this project clearly described? Please comment on the development challenge, novelty, importance and relevance of the proposal
- b. Are competing solutions to the described problem presented and is logically made clear why the proposed approach has been chosen?
- c. What is your assessment of the design of the project, including the goals, the description and feasibility of the development challenge and the proposed method to deal with that?
- d. What is your assessment of the coherence and time schedule?
- e. How do you assess the fit with or alignment of this proposal to industry and academic driven roadmaps?
- f. How do you judge the quality of the consortium partners? Do(es) the research group(s) have a relevant position to this development project?
- g. Are the number and category of requested personnel, budget for materials and investments adequate? Is the available infrastructure adequate?
- h. What are the potential pitfalls of the proposal and how do the applicants propose to circumvent these?

#### 2) Impact and market perspective

- a. What is your assessment of the description of the commercial potential impact of the development project in the proposal?
- b. What is your assessment of the plan to reach the possible commercial impact, taking into account the indicated TRL level if indicated?
- c. What is your assessment of the contribution and commitment of the market parties and the business lead content of the proposal?
- d. What is your assessment of the importance of this proposal in the short and long term for the domain of photonic integration?
- e. What is your assessment of the importance of this proposal innovation on the innovation capacity and capability of the PhotonDelta ecosystem
- f. What is your assessment on motivation of the current TRL level of the topic, including the motivation of the industry parties to join his consortium?

A score of 1 to 5 is applicable per question (5 = excellent, 1 = poor). Per category the average score must be 3,5 or higher. If the total score meets the average of a minimum of 3.5 points, then the proposal is applicable for the next phase.

### Funding criteria for Pillar 3: create shared infra

Focus	Concepts
<b>Shared infrastructure</b> <ul style="list-style-type: none"> <li>Financing for infrastructure to support the execution of roadmap driven projects for application and technology development.</li> </ul>	<ul style="list-style-type: none"> <li>Infrastructure is available to multiple users ('shared infra').</li> <li>Subject to user fees</li> </ul>
Conditions	
<ul style="list-style-type: none"> <li>Financing is available in the form loans</li> <li>Loan duration max 8 year</li> <li>At least 50% private co-financing in cash and/or in-kind</li> <li>A businessplan is required</li> <li>Proposals that make use of funding are always subject to State aid regulation</li> <li>To a maximum of 5 mln. euro (total investment volume) in 2019</li> </ul>	

#### Process Pillar 3

Proposals for Pillar 3 will be evaluated according to the process for Pillar 2 if the proposal is part of a development project for next generation applications and/or technology. If the Pillar 3 proposal is based on a (potential) business case and exploitation model for infrastructure, then a Due Diligence process as meant for Pillar 1 proposals is required.

### Funding criteria for Pillar 4: expand ecosystem

Focus	Concepts
<b>Ecosystem development</b> <ul style="list-style-type: none"> <li>Development and implementation of an ecosystem development program that ensures connection within and outside the value chain with (future) end users / application developers. The goal is strengthening the ecosystem with new companies, especially active in application development.</li> <li>Attract (international) companies to work with Dutch ecosystem to develop applications</li> <li>Further strengthening of IPSR-I (integrated photonics World Roadmap)</li> </ul>	<ul style="list-style-type: none"> <li>Realize specialized Application Centers for close-to-market application development in connection with the existing supply chain partners and the R&amp;D organizations</li> <li>Easy access to ecosystem functionalities like – among others - design services and MPW's through voucher systems</li> <li>Integrated Photonics valorization program, focused on creating innovative applications and new companies in close cooperation with end users and public and private funding parties</li> <li>Organization/participation of IPSR-I</li> </ul>
Conditions	
<ul style="list-style-type: none"> <li>Subsidy, max 250.000 euro per proposal</li> <li>To a maximum of 2mln euro (total investment volume) in 2019</li> <li>50% Co-funding is required, cash and/or in-kind</li> <li>Costs that are subject to subsidy, are defined in <a href="#">kaderbesluit nationale EZ subsidies</a>, art. 10</li> <li>For the calculation of costs: <a href="#">kaderbesluit nationale EZ subsidies</a>, art. 12</li> <li>Proposals that make use of funding are always subject to State aid regulation</li> </ul>	

#### *Process Pillar 4*

Pillar 4 proposals are evaluated by on their contribution to the development and further strengthening of the ecosystem. The nature of this pillar does generate a variety on proposals, from valorization activities in application centers to startup events with universities. Dependent on the content of the proposal, PhotonDelta management consult the relevant appropriate experts for external advice.

## 5. Further steps, towards a final decision (phases 3, 4, 5)

### Additional research (phase 3)

After the proposal is evaluated and/or scored in phase 2, additional information is required in the next phase (3). The kind of information depends on the funding type that is applicable for the proposal.

- In case of a loan: Stichting PhotonDelta will execute a financial, technical and legal Due Diligence on both the Proposal as well the applicant. The magnitude of the Due Diligence is dependent on a) the proposal size and b) strategic pillar of the proposal. A Due Diligence report will be made and presented as part of the decision-making process to the management of PhotonDelta and Investment Committee. Costs are paid by the applicant, after the proposal has been approved.
- In case of a subsidy: if applicable, Stichting PhotonDelta will execute a brief research whether or not the proposal meets State aid regulation is needed. Costs are paid by the applicant, after the proposal has been approved.

### Get an advice from the Investment Committee (phase 4)

The management of Stichting PhotonDelta will be advised by an Investment Committee, which consists of experts with a different background: academia, industry, finance and policy makers. Per year, a minimum of four Investment Committee meetings will be held.

The Investment Committee advises the management of PhotonDelta on the eligibility for funding of the submitted proposal. They will, among other parameters, base their advice on priority setting in perspective of the available budgets, the feasibility and quality of the Proposal, especially in reference to the alignment with the Photon Delta national plan, the dynamics in the ecosystem, alignment with other proposals and projects in the ecosystem, the quality of the consortium team, project leadership and in case of Strategic Pillar 1 application, the financial stability of the applicant.

In the Investment Committee meeting the applicant will present his Proposal to the Investment Committee. The Investment Committee uses the Due Diligence report, the Proposal, the presentation of the Proposal by the applicant and at its own discretion possible domain referees at arrive to an independent conclusive positive of negative funding advice to the management of PhotonDelta.

## Final decision (phase 5)

The management of Stichting PhotonDelta makes their formal funding decision based on the Investment Committee's advice. In case the management does not follow the advice of the IC, escalation to RvT follows. The management of PhotonDelta are at their own discretion able to make policy consideration.

If your project is eligible for a subsidy or a loan, you will receive a written notice of this in the form of a decision. It states how much funding you will receive, which conditions may apply and which provisions you must comply with.

## Appeal

What happens if your application is rejected? Prior to any decision making by PhotonDelta, all proposals that meet the minimum eligibility criteria (Phase 1) are submitted and evaluated by independent experts and/or a due diligence (DD) process. After every phase the submitting organization will receive a written notification in the case the particular evaluation phase is not past. If all phases are successfully completed and the submitting organization can present to the investment committee, then the outcome of the final decision by PhotonDelta is communicated directly after the IC meeting. Decisions of PhotonDelta are not open for appeal. Please note that any costs already incurred will not be eligible for support in the event of a second submission.

## 6. Implementation and monitoring

If your project is eligible for a subsidy or a loan, you will receive a written notice of this in the form of a decision. It states how much funding you will receive, which conditions may apply and which provisions you must comply with.

### Subsidy

#### *Advances*

You will receive the subsidy amount in parts. Applicants and participants receive a first advance within two weeks after the start of the activities. The advance is paid to the relevant participant. For participants who apply for a grant of less than € 125,000 in projects that last a year or less, it will remain with this first advance. You will receive 90 or 100 percent of the grant awarded.

#### *Delay*

If the project is delayed, you are obliged to report this and request permission via a change request so that the advance payment can also be adjusted.

#### *Obligations*

Bear in mind that you must meet a number of obligations if your project receives a subsidy. The most important are:

- You keep a proper project administration, including an hour administration and, in the case of participation by research organizations, an administration of how the intellectual property rights arising from the project have been dealt with;
- You carry out the project according to the project plan and the provisions in the decision;
- For any changes to the implementation of the project, you must request prior written permission from PhotonDelta;

- You report in writing on the progress of the project after the end of each year (activities and financing report).
- At the end of the project you send us a request to determine the subsidy and a final report within thirteen weeks. For participants who receive a grant of € 125,000 or more, you also provide a control statement.

#### *Publication requirement*

You are required to provide with each publication (in the context of the subsidized project) by or with the cooperation of the participants in the project or their employees that the project is made possible by PhotonDelta.

#### **Loan**

In case of a loan, the applicant delivers PhotonDelta the following information with respect to the applicant and each of its direct and indirect subsidiaries:

- 21 days after the end of the month a report for the month including the actual order book (for the month and year to date) and a comparison between the year-to-date and the budget, including P&L balance sheet, cash flows (turnover, gross margin, EBITDA, net result, net debt), month by month liquidity forecast, DSO & DPO Report and the management commentary.
- Before the end of November of each calendar year a copy of its proposed annual budget together with explanatory notes thereto for the subsequent calendar year.
- Before the 1st of April of every calendar year the full audited annual accounts of the year before including a balance sheet, a profit and loss account and the explanatory notes thereto for such financial year, including the management letter and any proposal for the allocation of the net income.

#### *Publication requirement*

You are required to provide with each publication (in the context of the subsidized project) by or with the cooperation of the participants in the project or their employees that the project is made possible by PhotonDelta.