Terms of Reference

§ 1

GENERAL

(1) Photonics21 is a European Technology Platform as described in the Report EUR 21265 by the Commission Inter-Service Group on Technology Platforms of the European Commission\(^1\). It is a voluntary informal association of stakeholders in the field of photonics in Europe, primarily industrial enterprises and research institutions working at the industrial-scientific interface.

(2) Photonics21 has been founded on 1\(^{st}\) December 2005 in Brussels through the formation of the initial Board of Stakeholders (BoS), at that time composed of 62 individual members from leading organisations directly or indirectly involved with photonics research and development in Europe.

(3) Photonics21 is not registered as an independent legal entity. No individual, no group of individuals and no legal entity may engage in legal or financial transactions or responsibilities on behalf of Photonics21, nor may Photonics21 or any of its members be held responsible or liable for any such activities. Photonics21 holds no assets or possessions of any kind.

(4) Members of Photonics21 or of its bodies act on voluntary basis and are not entitled to financial compensation for their activities from Photonics 21.

(5) Shortly after the Establishment Decision, the Affiliations of the EB members (shall) have established an association named “Photonics21 Association”.

§ 2

DEFINITIONS

“Affiliation” shall mean the company, institute, university or other organisation, either employing a Photonics21 member and/or a BoS Representative and/or an EB Member, or, in case such employment relation does not exist, having a Photonics21/BoS/EB member representing it in Photonics21.

“Association” shall mean the association “Photonics21 Association.” established by its members in accordance with the Establishment Decision.

“BoS” shall have the meaning assigned to it in § 5.

“BoS Member” shall mean a member of the BoS.

“BoS Representative” shall have the meaning assigned to it in § 5 (3).

“Election Date” shall have the meaning assigned to it in §5(6) a).

“Establishment Decision” means the decision by the BoS that the Association shall be established, which decision was taken on 14 October 2014.

“Executive Board” and “EB” shall have the meaning assigned to it in § 6.

\(^1\) ISBN 92-894-8191-9 and published under cordis.europa.eu/technology-platforms
“Members Agreement”, shall mean the agreement executed by the Members of the Association, subsequent to the Establishment Decision.

“Group” shall mean either an Affiliation, or, if more than one Affiliation is controlled by a group of companies, institutes or other organisation: such group of companies, institutes of other organisations, where “to control” means having the power, whether or not normally exercised, to direct the management and affairs of another corporation or other legal entity, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise. In the case of a corporation, to have the direct or indirect ownership of more than fifty per cent (50%) of its outstanding share capital shall in any case be deemed to confer “to control”.

“Member of the Association”, shall mean a member of the Association in accordance with the Members Agreement and the articles of association of the Association.

“Mirror Group” shall have the meaning assigned to it in § 10.

“Photonics21” has the meaning assigned to it in §1(1)

“Photonics21 member” shall mean any participant in Photonics 21, as further defined in Article§ 7 (1).

“Photonics21 Secretariat” shall have the meaning assigned to it in § 9

“President” means the chairman of the Executive Board, as further described in § 6(5)

“Terms of Reference” shall mean this present document, including its Annexes, as adopted by the BoS in its present form on October 14, 2013

“Service Agreement” means the service agreement between a BoS member and the Association, for the services to be rendered by the Association to the interest of Photonics 21 and to all its participants and bodies, in the form attached hereto as Annex 1.

“Service Fee” shall have the meaning assigned to it in § 5 (10).

“SIG” shall have the meaning assigned to it in §7 (1)

“Work Group” “shall have the meaning assigned to it in § 8.

“Workgroup Member” shall have the meaning assigned to it in § 8(3)

§ 3
MISSION

(1) The mission of the European Technology Platform Photonics21 is the concerted strategic planning, the coordination and the facilitation of photonics industrial and research activities in Europe, encompassing education, basic research, applied research, development, manufacturing and application.

(2) To this end, Photonics21 will determine common industrial, scientific, technical, political, social and economic objectives and agree on actions to be taken in order to achieve them.

(3) These objectives and actions are reflected in a Strategic Research and Innovation Agenda (“SRIA”) and the prioritisation within such SRIA, which are formed and decided upon within Photonics 21 in accordance with the decision making process as set out in Annex 2 to these Terms of Reference. This process may be changed from time to time upon approval by the BoS.
§ 4

ORGANISATION

(1) Photonics21 is composed of the following bodies:

- The Board of Stakeholders (BoS)
- The Executive Board (EB)
- Work Groups

of which the constitution, function, responsibilities, internal way of working, position in the governance of Photonics 21, and, if applicable, the election and appointment, are set out in paragraphs 5, 6 and 8.

§ 5

BOARD OF STAKEHOLDERS

(1) The Board of Stakeholders (BoS) is the main decision-making body of the platform. In particular, the BoS bears responsibility for:

- the decision on all matters related to Photonics21, unless otherwise stated within these Terms of Reference;
- defining, pursuing and implementing the objectives of Photonics21 in accordance with its mission;
- establishing or discontinuing Work Groups and appointing the Work Group Chairs;
- appointing the other Executive Board members, in accordance with §6(2);
- excluding BoS members in accordance with §5(9) of these Terms of Reference;
- receiving and approving the annual activity report from the President, including the activities of the Vice Presidents, the Executive Board, the Work Groups and the Photonics21 Secretariat;
- all necessary decisions on Photonics21 Membership issues;
- approving the yearly Service Fee proposed by the EB;
- excluding Ph21 members in accordance with §7(4) and §5(9) and
- changing these Terms of Reference

(2) BoS members can only be companies, institutes, universities and other organisations that either are Photonics 21 members or employ a Photonics21 member.

(3)

a) Each BoS member shall have a representative to act, speak and vote on behalf of it in the BoS meetings and otherwise in relation to the tasks of the BoS set out herein, with the endorsement of the BoS member, hereinafter referred to as “BoS Representatives”. The BoS Member is the
Affiliation of such BoS Representative. A BoS member cannot have more than one BoS Representative, unless the BoS member represents more than one independent branch, application field and/or field of technology and two or more BoS Representative can each substantially contribute to the mission and strategy of Photonics 21 in two or equally more different Work Groups, in which case such BoS member may have equally more BoS Representatives, if approved upon by the Executive Board, as based on these criteria. In such case the BoS member will also have equally more votes in BoS meetings.

Not more than one Affiliation within a Group can be a BoS member, unless two or more Affiliations represent more than one independent branch, application field and/or field of technology, in which case the Executive Board will approve an additional Affiliation with its candidate BoS Representative to take part in the BoS election, described in §5(6) below.

b) Each BoS member enters into a Service Agreement with the Association.

(4) The BoS members commit themselves to taking an active part in the endeavours of Photonics21, to comply with the responsibilities of the BoS and with the Terms of Reference and to have their BoS Representatives attend all meetings of the BoS. In the case of being unable to be represented, a BoS member may transfer the vote by proxy to another BoS Representative or to another qualified replacement representative, upon written prior notice to the Photonics21 Secretariat. In case a BoS Representative has not been present, either in person or represented through proxy, in two consecutive meetings of the BoS, its Affiliation (the BoS member) will, unless absence was due to special circumstances, be assumed to have resigned from the BoS of which written notice will be given by the President. In case such assumption is not accepted by the relevant BoS member, it can object to the exclusion and explain its position to the Executive Board who may reconsider. In case the Executive Board does not change its decision, the relevant BoS member can appeal with the BoS who shall have the final decision on such membership.

(5) BoS members are elected in accordance with § 5(6) under the condition that the majority of the BoS members shall, at any time, represent industry and/or industrial organisations, respectively, and the total size of the BoS does not exceed 100 members.

(6) **Election of BoS Members**

a) At least once a year, in the last quarter of each calendar year, there will be held an election for new BoS members. The EB will determine the date of the election ("Election Date") and all Photonics 21 members will receive notice of the Election Date at least three months in advance, including the number of vacancies available. Furthermore, election of BoS members may not result in more than 30 (thirty) BoS members from the same country or less than 50% from industrial parties.

b) No later than 45 days before the Election Date new candidates can be proposed with a letter of nomination to the Photonics21 Secretariat. A candidate nomination will always contain the name of the candidate organisation together with its proposed BoS Representative, and voting on a candidate implies voting on this combination. A letter proposing a candidate, shall be in
English and shall contain a description of the activities of, and information about the added value and contribution to the BoS by both the nominated BoS member and the BoS Representative.

c) Per election each Photonics 21 member has one vote, it being understood, however, that only one vote per each Affiliation can be cast, regardless of how many Photonics21 members the Affiliation employs. It is the responsibility of each Affiliation to organise that the correct vote is cast on behalf of all the Photonics21 members it employs. New Photonics21 members cannot vote in a BoS member election, unless they have submitted their application to become a Photonics21 member at least 6 weeks prior to the Election Date.

d) Voting will take place electronically, through a web-based election tool. A vote can only be cast during the period of two weeks prior to the Election Date and on the Election Date itself. No later than four weeks before the Election Date, the Photonics 21 Secretariat will send the list of BoS candidates and the information received in that respect under sub-paragraph b) above, to each Photonics 21 member or, as the case may be, Affiliation, allowed to vote in accordance with sub-paragraph c) above, containing a login name and password for casting that particular vote ("Voting Notice") The Voting Notice will also inform the recipients on the date when the election tool is open for voting.

e) The candidates with the most votes will be considered elected until the total of the vacancies is reached.

i. In case two or more candidate combinations receive an equal amount of votes, and allowing all these candidates to be elected would cause the total numbers of vacancies to be exceeded, all these candidate combinations shall be considered to be elected.

ii. In case two or more candidate combinations receive an equal amount of votes, and allowing all these candidates to be elected would cause the total number of BoS members from one country to exceed 30, the EB will draw lots between these candidates, in order to admit such number of candidates that the total number of 30 is exactly reached.

iii. In case two or more candidate combinations, not representing industry and/or industrial organisations, receive an equal amount of votes, and allowing all these candidates to be elected would cause the total number of BoS members not representing industry and/or industrial organisations to become 50% or more of the total number of BoS members, the EB will draw lots between these candidates, in order to admit such number of candidates that the total number of BoS members not representing industry and/or industrial organisations will be one less than 50%.

(7) In general, when selecting new candidate BoS members and their BoS Representatives to the BoS, the Photonics 21 members take into account the following the standing of the candidate,

a. the relevance of the candidate for pursuing and achieving the objectives of Photonics21 and the current and potential future contribution of the candidate combination to the total platform or to the individual Work Groups, and/or the skills they would bring to enhance the BoS
b. The Chairmen of the Work Groups will endeavour to include as candidates, special interest groups of consumers and end user industries, European cluster organisations and/or other entities being stakeholders in development in the field of photonics in Europe.

(8) A BoS member is elected for a period of four years, from one Election Date to the Election Date four years thereafter. However, in case a BoS member employs an EB member, the BoS member shall continue its position until its employee is no longer an EB member or until the end of the four years period, whichever comes latest, unless the BoS membership has ended for another cause or reason. Immediate re-election after the end of the four years period is possible.

a) BoS membership ends

i. per the end of the four year period referred to above, unless the BoS member is re-elected immediately,

ii. by a written notice of resignation by the BoS member to the President,

iii. by a written notice of the President to the BoS Member, or, as the case may be, by a subsequent decision of exclusion by the BoS, in accordance with § 5(4)

iv. in case the BoS member and its BoS Representative no longer fulfil the criteria to be a Photonics21 member, to be established by the EB, or in case the BoS member enters the state of bankruptcy or suspension of payment, or

v. by exclusion in accordance with § 5(9).

b) In case the BoS Representative of a BoS member (or all of them in case of § 5(3) a) last sentence) is no longer employed by the BoS member, the BoS member can appoint a successor BoS Representative who will be in position until the next BoS election to follow, at which point in time the BoS membership ends with possibility of re-election.

c) When BoS membership ends for a BoS member, the position of its BoS Representative(s) also ends.

(9) Exclusion from BoS membership is possible on the basis of a “Severe Cause”. Severe Cause includes, but is not limited to violation by a BoS member or its BoS Representative of the regulations of these Terms of Reference, material breach by a BoS member under the Service Agreement, activities against the mission of Photonics21, and any actions or activities that impair the public standing of Photonics21.

A BoS Member can be excluded with immediate effect through written notice from the President, in case of a Severe Cause that cannot be remedied, or, if remediable, is not remedied by the pertaining BoS Member within 30 days, or any other reasonable term given, after written notice to that effect from the President, followed by a decision to exclude such BoS member, taken by at least a majority of three quarters of the EB Members. The BoS member can appeal from this decision at the first BoS meeting to follow, with an appeal notice to the Photonics21 Secretariat at least three days prior to such BoS meeting. The decision of the BoS meeting requires a majority of three quarters of the BoS members present or represented by proxy and shall be final.
(10) **Service Fee to the Association:**

   a. In the second half of each year, the EB will propose the service fee ("Service Fee") to be paid in the next year by each BoS member to the Association under the Service Agreement, except for such BoS members that employ an EB member.

   b. Once approved by the BoS, all BoS members are bound by this decision, it being understood that if a BoS member, who voted against such decision, resigns from its position within four weeks after such decision is taken, the Service Fee will not apply to the BoS member so resigning.

   c. In case a BoS member has more than one BoS Representative in accordance with § 5(3), it shall pay the Service Fee one time per each of its BoS Representatives.

(11) Meetings of the Board of Stakeholders will be held once a year upon invitation of all BoS members by the President, or so much more frequent as the President or at least 15% of the BoS Members deem necessary. Any convocation of a meeting of the BoS shall take place at least three weeks before such meeting is held, and shall include the agenda of such meeting. Decisions of the BoS are made at these meetings and require the presence or representation of more than the half of the BoS members. Decisions of the BoS are taken by simple majority vote unless otherwise stated herein. An abstention or an invalid vote are considered as not voting. Each BoS Representative, including the President, has one vote.

(12) Decisions by the BoS may also be taken through electronic means, such as e-mail, on-line voting and the like.

§ 6

**EXECUTIVE BOARD**

(1) The Executive Board (EB) is the managing body of Photonics 21. The EB is responsible for the coordination and execution of the operations of Photonics 21, for the preparation and the implementation of the decisions of the BoS and for the external representation of Photonics 21.

(2) The EB is composed of the President, up to four Vice-Presidents and the Work Group (WG) Chairs. The EB will be appointed by the BoS from amongst its BoS Representatives. At least one representative of the Photonics 21 Secretariat will be delegated as non-voting attendant of the EB meetings. Each BoS member can nominate candidates for the EB. Candidates for the function of President or Work Group Chair shall be appointed in such function by the BoS. A candidate EB member for the function of Work Group Chair shall have a high level of expertise and experience in the field of the pertaining Work Group and shall be a participant of such Work Group at the time of its nomination.

(3)

   a) Each member of the BoS can nominate its BoS Representative as a candidate for the EB. The members of the EB shall be appointed by the BoS for a period of two years, with immediate re-appointment being possible. Appointment of an EB member can only take place if the BoS member, that nominates the candidate EB member, accepts to become a Member of the Association and a Party to the Members Agreement, and to comply with all obligations attached
to being a Member of the Association, as set out in the articles of association of the Association and the Members Agreement.

b) Such acceptance by the Affiliation shall be put in writing through execution of a standard document, substantially in the form, attached hereto as Annex 3, prior to the voting on the pertaining candidate EB member.

c) In case an Affiliation of an EB member does not accede to the Members Agreement within one month after the appointment of such EB member, or no longer is a Member of the Association whether through withdrawal, termination or exclusion in accordance with the articles of association of the Association, or as a consequence of termination of its position as BoS member, this EB member shall be deemed to have resigned immediately.

d) A BoS Representative that is appointed in the EB, retains its position as BoS Representative and its right to cast one vote in meetings of the BoS.

e) A BoS Representative that is appointed in the EB automatically retains its position as BoS representative for the period of the Executive Board election period of 2 years.

(4) The EB reports to the BoS at least twice a year during a BoS meeting.

(5) The EB is chaired by the President. The President is the official representative of Photonics21. He or she acts in this capacity in accordance with the rules set by the BoS and reports regularly to the BoS about his/her activities. The President may appoint one of the Vice Presidents as his/her substitute on single occasions.

(6) The EB may establish its own rules and procedures.

(7) The EB members, in their position of members of the board of the Association, will always appoint the President as the Chairman of this board.

§ 7

PHOTONICS21 MEMBERSHIP

(1) The Photonics21 Membership forms the basis of Photonics21. Membership in Photonics21 is open to all individuals, companies, institutes universities and other organisations concerned with, and active in, research and innovation in the field of photonics in Europe on a professional basis, as well as to representatives of special interest groups of consumers, end user industries, European cluster organisations and/or other European entities, being stakeholders in the development in the field of photonics in Europe (hereafter “SIG”), all herein referred to as “Photonics21 members”.

(2) Membership can be obtained by submitting an application².

(3) Membership is for an undefined period of time. It ends by a written notice of resignation by the member to the Photonics21 Secretariat. Membership also ends by death, in case the Photonics21

² e.g. using the online form on the Photonics21 website www.photonics21.org.
member no longer fulfils the criteria to be a Photonics21 member, to be established by the Executive Board, or in case it enters the state of bankruptcy or suspension of payment, or by exclusion.

(4) Exclusion from membership is possible on the basis of severe cause. To a matter of severe clause § 5 (9) will apply mutatis mutandis for Photonics21 members, it being understood that the initial decision to exclude the Photonics 21 member is taken by the Executive Board.

(5) Membership of Photonics21 is free of charge. Members shall bear their own expenses arising from their participation in Photonics21 activities.

(6) Photonics21 members contribute to the mission and to the activities of Photonics 21. This is done particularly by participating in the Work Groups. Each Photonics21 member is assigned to one Work Group according to his/her preference, and possibly to a second Work Group. However, representatives of SIGs can be assigned to more than two Work Groups upon request. In addition, Photonics21 members gain access to the restricted member area of the Photonics21 website and receive relevant information on strategies, collaboration projects, funding opportunities, and others.

(7) Assemblies of the Photonics21 Membership will generally be held at least once a year upon invitation by the President.

(8) A complete list of the Photonics21 Membership is publicly available on the Photonics21 website www.photonics21.org. When submitting their membership application the applicant will indicate the Work Group(s) of their preference and agree to have their names and, if applicable, Affiliation listed, and in general agree with and, to the extend relevant, will comply with, all provisions of these Terms of Reference. Each Photonics21 member has to provide an e-mail address that contains the domain name of its Affiliation or SIG, if applicable. This e-mail address will not be published on the publicly available list of Photonics21 members.

§ 8

WORK GROUPS

(1) The Work Groups (WGs) of Photonics21 are the main centres of activities within Photonics21. They focus on application-oriented, cross-disciplinary issues and on specific tasks. Work Groups can be established or discontinued by the Board of Stakeholders.

(2) The composition of a Work Group will be established under the responsibility of its Chairperson (WG Chair), who reports to the Executive Board.

(3) Each Photonics 21 Member that applies to be part of a Work Group, will be admitted as a member of that Work Group.
§ 9

PHOTONICS21 SECRETARIAT

(1) The BoS has established an office for the Technology Platform, the “PHOTONICS21 Secretariat”, which shall provide organisational and operational support to the BoS, to the EB and to the WGs. The Photonics21 Secretariat acts on behalf of and reports to the EB.

(2) The Photonics21 Secretariat in particular provides the following support and services:

- managing all matters related to membership and administration of the platform,
- organising platform meetings and meetings of the BoS and the EB,
- organise BoS member elections,
- collecting and distributing information,
- collecting Service Fees, or, as the case may be membership fees, from the BoS Members upon request from the Association.
- conducting and coordinating publications of the platform,
- acting as an internal and external contact point and
- maintaining the technology platform’s website, and
- taking minutes of the meetings of the BoS and the EB.

(3) The Photonics21 Secretariat shall have access to all necessary information related to its operation. The Photonics21 Secretariat may set up its own rules and regulations which require approval from the Executive Board. Each amendment to these rules will require the approval of the Executive Board.

(4) The person(s) or the entity operating the Photonics21 Secretariat shall be appointed by the BoS every two years.

§ 10

MIRROR GROUP

(1) A Mirror Group composed of representatives from relevant public authorities may be established.

(2) The Mirror Group shall inform and advise the BoS and the EB regarding political issues and objectives and governmental activities at national and European level. Moreover, the Mirror Group may take up recommendations developed by Photonics21 and support their implementation.

(3) The Mirror Group may establish its own rules and procedures.

§ 11

TRANSITIONAL PROVISIONS

(1) In view of the amendment of these Terms of Reference (“Amendment”), effective per 14 October 2013, “the Amendment Date”, certain positions within the bodies of Photonics 21 have to be re-confirmed.
(2) Provided the Affiliations of all EB members sign the Members Agreement and establish, and become a member of, the Association, all existing EB members will continue to be EB member. Their schedule of resignation as applicable prior to amendment of these Terms of Reference per the Amendment Date, will continue to apply. The position of the President, Vice Presidents and the Work Group chairman do not change as a consequence of this Amendment.

(3) The Affiliations of the BoS members at the time of Amendment, will be deemed to have entered into the Service Agreement per the Amendment Date, and they will become the new institutional BoS member. If the Service Fee for the year 2014 is not paid by such BoS member, this will amount to a Severe Cause, as referred to in § 5(9).

(4) The BoS members at the Amendment Date will, as from the Amendment Date, be the BoS Representatives of the new institutional BoS members. If, in case as a result thereof a BoS members has more than one BoS Representative, all such BoS Representatives remain in their position and the approval by the EB, as referred to in § 5(3) a) last sentence, is deemed given.

(5) Immediately upon the election of BoS members in the last quarter of 2015, the Executive Board will determine by drawing lots, which BoS members, that have become a BoS member as a consequence of the Amendment of these Terms of Reference per October 14, 2013, will have a BoS membership period of respectively four, three, two and one year, calculated from the date of such drawing of lots, it being understood that the exact end of each BoS membership period will be the same date as the Election Date in the relevant year.

(6) There will be no changes to the Photonics 21 membership, to the constitution of the Work Groups, their Chairmen, or to the Photonics 21 Secretariat, as a consequence of this Amendment.

§ 12

**COMPLIANCE**

(1) In the execution of the activities related to Photonics 21 all Photonics 21 members, whether or not in the position of Work Group member, BoS Representative of EB member, shall adhere to all laws and regulations applicable to both themselves, Photonics21, the Association and the commercial relationship with the other Photonics21 members, including, but not limited to, criminal law, competition laws and export control laws, and shall refrain from all practices which may lead to penal liability due to fraud, crimes in violation of competition laws, bribery or other corruption crimes. Any verifiable violation of the above, by a Photonics21 member will be regarded as a Severe Cause.

§ 13

**CONCLUDING CLAUSE**

(1) These Terms of Reference have been amended and adopted to its present form by the Board of Stakeholders during at special BoS meeting held on October 14, 2013 in Brussels and are in effect from that date on.
(2) Decisions regarding amendments of these Terms of Reference shall be taken with a majority of at least two-third of the BoS members present or represented by proxy.

Annexes:

    Annex 1: Service Agreement
    Annex 2: SRA decision making process
    Annex 3: Statement candidate EB member Affiliation
Annex 1
Service Agreement

Between:
The Association: Photonics21 Association, with registered office at .......... , ............... in ......., hereinafter “the Association”,

and

................................., with registered office at .......... , ............... in ......., hereinafter “BoS Member”

Agree as follows:

1) All terms used herein with initial capital shall have the meaning assigned to them in the Terms of Reference of the European Technology Platform Photonics 21, which is known by both parties hereto.

2) The Association provides and will provide various services to BoS Member and to all other BoS members, as well as to Photonics 21 and its Photonics 21 members, the Work Groups, the BoS and the EB, with the purpose to promote R&D in the Photonics industry in order to strengthen the Photonics industry in the European Union and thereby acting in the interest of Photonics 21.

3) For these services, each year BoS Member will pay a Service Fee, the amount of which shall each year be established by the BoS at the proposal of the EB. However, if, and as long as, BoS Member employs an EB Member, it does not pay the Service Fee.

4) BoS Member shall receive an invoice from the Association for the Service Fee, sent by the Photonics21 Secretariat, which invoice shall be paid within 30 days after the date of such invoice.

5) If the BoS Member does not agree with the decision by the BoS regarding the Service Fee and voted against it, and resigns from its position as BoS member within one month after such decision is taken, BoS Member is not obliged to pay the Service Fee and consequently this Service Agreement ends per the date of BoS Member’s resignation.

Agreed by and signed on behalf of:

Association Photonics 21

[Name BoS Member]

Name:
Function:
Date:

Updated Version per BoS decision 28.03.2017
Annex 2
Decision Making Process SRIA

Operational structure and decision making process in Photonics21
Photonics21 consists of three organisational layers with following roles and tasks:

- The **Work Groups (WGs)** are the major source of strategy development within the Photonics21.
- The **Board of Stakeholders (BoS)** reviews the outcomes of the work group strategy and votes on the overall priorities and focus of the PPP.
- The **Executive Board (EB)** executes the decisions of the Board of Stakeholders - through the PPP association - and will be the mouthpiece of the ETP towards the European Commission in the PPP.

**Work Groups (People): Strategy Development** (Proposal: “Multiannual Roadmap” as well as “Research and Innovation Priorities for Horizon2020 PPP work programmes”).
The Photonics21 ETP Membership forms the basis of the Photonics21 PPP. Membership in the ETP Photonics21 will continue to be on a personal basis and open to all concerned with and active in research, innovation and manufacturing in the field of photonics in Europe on a professional basis. This also includes end user industries and European cluster organisations and national technology platforms. Each member (currently >2000) is assigned to a WG according to his/her preference. Thus, all strategic issues to be addressed in the PPP will originate from the WGs. The Photonics21 WGs each draft their strategy documents and research and innovation priorities for the PPP. Subsequently, the EB and more specifically the WG chairs within the EB are coordinating the input from the WGs and preparing submissions to facilitate the decision-making process in the BoS.

**Board of Stakeholders (Parliament): Prioritization and Decision Making**
The respective Photonics21 WG draft strategy documents and research and innovation priorities for the PPP are reviewed and prioritized (by vote, if needed) by the Photonics21 Board of Stakeholders (BoS). Therewith the BoS determines the PPP strategy (like the Photonics PPP Multiannual Strategic Roadmap) and a focussed set of Research and Innovation priorities for the Photonics PPP.

**Executive Board (Government): Execution**
The Photonics21 Executive Board (EB), democratically elected by the BoS members for a period of two years, is executing the decisions of the Board of Stakeholders and builds the strategic link between the BoS and the WGs.
Figure 13: Decision making process: Photonics21 PPP Multi Annual Roadmap and PPP Research and Innovation (R&I) Priorities
Template for setting research and innovation priorities for Horizon2020 PPP work programme [Period] (circulated to the WG Chairs)

Photonics PPP
Photonics21 Research and Innovation topics for the Horizon2020 PPP Work Programme [period]³ (e.g. 2014 -2015)

WORK GROUP No:

Per work group

1. Research topics: Time to market ~6-10 years
2. Innovation topic: Time to market ~3 years (optional)

³ Number of work group proposals on research/innovation topics is not limited
I. **Preamble:**

There will be at least one call per year where Research and Innovation (R&I) actions under the Photonics PPP (and under the cross-cutting KETs WP) could be supported by the EC

There is therefore a need for:

1. Defining in much more detail than the level of description provided in the SRIA each of the specific R&I actions which could be candidates for inclusion in the ICT WP [Period]
2. Prioritising such candidate R&I actions (incl. the definition of the respective budget figures) for their inclusion in the ICT WP [Period].

The purpose of this document is therefore to request, from each of the WG, specific inputs with regard to items 1 and 2 above. Separate inputs are requested for the research actions (topics) and for the innovation actions.

II. **Description of the area where Horizon2020 funding is requested (1 page max)**

1. **Area to be addressed**
   - Application domains\(^4\) (e.g. “Automotive”)
   - targeted application (e.g. “Sensors for automotive safety”)

2. Position of Europe in the application domain (research, industry), foreseen evolution from now to 2020+ **What is the challenge (in Europe) in the respective area today?**
   (e.g. The excellent results obtained by European research centers and industrial labs in the field did not give birth to any product up to now; the reason is 3-fold:
   - Some materials involved and process steps do not exist in current foundries.
   - Large investment are needed to produce this new technology in European foundries
   - Tier 2 suppliers in this field are quite weak in Europe; European Tier 1 suppliers currently implement Asian products in their commercial equipment.)

3. **What needs to be done?**
   Necessary steps to overcome the problem described, including the type of activity (research, innovation, other)?
   (e.g.:
   a. Consolidate R&D in the field, especially regarding the validation of the technology by Tier 1 suppliers and automobile manufacturers (Research activity).
   b. Set-up a pilot production line involving the technology providers as well as the potential European customers; they should be provided a free access to the products of the pilot line and integrate them in equipment pre-series (Innovation activity).
   c. Explore the other potential fields of valorisation, including niche markets, where cost constraints can be relaxed (Innovation activity).

4. **When should it be launched and how much funding is needed?**
   *In which year should the area be called: as part of WP [year a] or WP [year a+1]?*  

\(^4\) For horizontal work groups focus can be on generic technology domains
III. **Proposal for Research or Innovation Topic(s) (2 page max) in Horizon2020 WP [Period]**

For each Research or Innovation topic, please provide a few lines of description which comprises of at least the issues listed below under 1 to 6 (for the level of granularity of the description per R&D topic, see for example the WP text of Objective 3.2 Photonics under the ICT FP7 WP 2013)\(^5\). Innovation actions can be in the form of a pilot production line, a demonstration action, a combination of these or any other form of action.

**Research or Innovation Topic (the title should specify explicitly the nature of the topic, i.e. “Research” or “Innovation”):**

1. **Description of the topic, objective:** *What shall be reached in concrete terms including Specs and TRL?\(^6\)*
2. **Relevant Research & Innovation present in Europe?**
   
   What is the positioning of EU research of this topic? With regard to the current EU industrial landscape, are the results likely to be exploited in the EU?

3. **Impact on European economy, employment:** *What is/are the concrete business case(s)?*
   
   Why/how will it improve the competitiveness of the EU industry? Direct market potential [market fig.]/ impact on End user markets [market fig.]; Which value/supply chain(s) does the product(s) address, which parts of the value/supply chain(s) are likely to be located in Europe? Creation of jobs in Europe;

4. **Impact on societal challenges**

5. **EU added value:** Need for EU investment rather than national or local investment? Why should it be funded at EU level?

6. **Funding:** What could be the share of financing requested under Horizon 2020 compared to the overall investment required (only for innovation actions)?

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\(^6\) Note: In the particular case of a pilot production line, please define the TRL ([http://de.wikipedia.org/wiki/Technology_Readiness_Level](http://de.wikipedia.org/wiki/Technology_Readiness_Level)) of the action and whether this is an "open" access pilot or not.
1. Evaluation criteria

EU added Value: Yes/No

*Please note that any action proposed needs to have an EU added value to be considered.*

<table>
<thead>
<tr>
<th>Criteria</th>
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</thead>
<tbody>
<tr>
<td>Economic relevance of the Application domain</td>
</tr>
<tr>
<td>Relevance of the Topic: Research and/or Innovation present or can be built up</td>
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<tr>
<td>Impact of the topic on economy, employment and societal challenges</td>
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<tr>
<td>EU added value</td>
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<td>Value for money</td>
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</tbody>
</table>
5. Time planning:
Photonics21 Research and Innovation Priorities for Horizon2020 Work Programme [Period]

<table>
<thead>
<tr>
<th>Date</th>
<th>Action Item</th>
<th>Coordination level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preparation of the WG priorities by Work Group Chairs/Sherpas (or as the case may be smaller editor group) - based on the Photonics Multi-Annual Roadmap</td>
<td>WG Level</td>
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<tr>
<td></td>
<td>WG chairs send out WG proposal to WG membership</td>
<td></td>
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<td></td>
<td>Deadline for feedback from WG members</td>
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<td></td>
<td>Final, consolidated proposal circulated to the WG</td>
<td>WG Level</td>
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<tr>
<td></td>
<td>WG Chair/Sherpa meeting on prioritization of Ph21 WG proposal for Horizon2020 WP [Period]</td>
<td>EB Level</td>
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<tr>
<td></td>
<td>WG Chair/Sherpa meeting - prioritization of Ph21 WG proposal for Horizon2020 WP [Period]</td>
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<tr>
<td></td>
<td>Executive Board Telco: Prioritization of WG Proposals (EB Proposal) WP [Period]</td>
<td>EB Level</td>
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<td></td>
<td>Circulation of the 1(^{st}) EB Proposal to the BoS</td>
<td>BoS Level</td>
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<tr>
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<td>Feedback from BoS on 1(^{st}) draft EB Proposal</td>
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<td></td>
<td>Telco: WG Chair/Sherpa - prioritization of Ph21 WG proposal for Horizon2020 WP [Period] result: 2(^{nd}) draft EB Proposal</td>
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<td>Telco: Executive Board - prioritization of Ph21 proposal for Horizon2020 WP [Period]</td>
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<td>Circulation of the final Photonics21 Proposal to the BoS</td>
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<tr>
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<td>EB/Sherpa: Meeting with the EC on Work Programme topics</td>
<td>EB/EC Level</td>
</tr>
<tr>
<td></td>
<td>EB: Report back to the BoS on the outcome of the meeting with the EC</td>
<td>EB/BoS Level</td>
</tr>
<tr>
<td></td>
<td>EB and BoS discuss and finalise the Ph21 Horizon2020 WP [Period]</td>
<td>EB/BoS Level</td>
</tr>
</tbody>
</table>
Annex 3
Statement candidate EB member Affiliation

The undersigned, ................................................................., with registered office at .......... , ............... in ........, hereafter “BoS member”, herewith states that:

1) it is aware that its BoS Representative, ....<name> ............ (“the Candidate“), is a candidate EB member and

2) if the Candidate is appointed as EB member, BoS member shall accede to the Members Agreement, the content of which is know to it, in accordance with the relevant provisions thereof, and become a Member of the Photonics21 Association, and comply with all obligations connected thereto.

Signed on behalf of ..................<name BoS member> .........................

Name:

Function:

Date: