

## Photonics Leadership Group Meeting Minutes

Thur 8 October 2020 14:00-13:30, Virtually by Teams

**Attendees** (Includes those attending for only part of the meeting, based on Teams listing):

Ian Alderton, Alrad; Ric Allott, STFC; Yann Amouroux, OSA; Ali Anjomshoaa, CSC; Terry Boniface, BEIS; Nick Bowden, CST Global; Dom Brady, Fibercore; Karin Burger, SPIE; Allan Colquhoun, Leonardo; Maryam Crabbe-Mann, EPSRC; Trevor Cross, Teledyne e2V; Buki Dada, Thorlabs; Iwan Davies, IQE; Chris Dorman, Coherent Scotland; David Gillett, Laser 2000; Dave Goodwin, IPG Photonics; Mark Goossens, CS Applications Catapult; Caroline Gray, OptiC Technology Centre; Duncan Hand, Heriot-Watt University; Jon Heffernan, University of Sheffield; Stratos Kehayas, Gooch and Housego; John Lincoln, Harlin; Anke Lohmann, Anchored In ; Sergio Mantecon, Edmund Optics; Paul McCartney, Fraunhofer UK; Owen McGann, GTS; Alison McLeod, Technology Scotland; John Parsons , Indigo Consulting; David Payne, University of Southampton; Richard Pitwon, Resolute Photonics; Michael Robertson, CIP Huawei; Alwyn Seeds, UCL; Deepan Shah, Nat Healthcare Photonics Ctr; Malcolm Varnham, SPI Lasers; Mike Wale, UCL; Matthew Wasley , KTN; Philip White, DIT; Alastair Wilson, CST Global;

### Apologies:

Simon Andrews, Fraunhofer UK; Valerie Berryman-Bousquet, Sharp Labs Europe; Jon Blackburn, TWI; John Blomfield, Qioptiq; David Bolton, EW Simulation Technology; Scott Bradley, BAE systems; Thomas Butcher, STFC; Max Buttinger, Thales UK; Russell Childs, Optoscribe; Geoff Duggan, Lumerical; Andrew Ellis, University of Aston; Glenn George, Bay Photonics; Mark Gubbins, Seagate ; Tom Harvey, Nat Healthcare Photonics Ctr; Julian Heaton, Innovate UK; Robert Hughes, RH consultancy; Antony Hurden, Grounded Innovation; Louise Jones, WOF; Andrew Kearsley, Oxford lasers; Christopher Leburn, Chromacity; Kevin Mackrodt, Artemis Optical; David MacLellan, ALLU; Graeme Malcom, M Squared Laser; Rachel Maze, BEIS; Wyn Meredith, CSC; John Nolan, UK Fibre Connectivity Forum; Andy Robertson, Bay Photonics; Stuart Sendall , Photosens; Jason Smith, University of Oxford/ Oxford High Q; Chris Sorsby, Vitritech; Jianming Tang, UK Fibre Connectivity Forum; Mark Thompson, IPG Photonics; Sergei Turitsyn, University of Aston; Duncan Walker, Pure LiFi – *attendance based on mid-meeting snapshot.*

*\*Post meeting and editorial input in italics*

### 1) Previous Minutes and welcomes

*Previous minutes from meeting 2 June, remain to be formally accepted (apologises for missing from agenda – any changes please inform John L*

### 2) • Feedback & discussion on presentations given during Photonex

Presentations normally given during the PLG meeting were incorporated into the industrial program for Photonex and made publicly available. With thanks to SPIE, recordings are available for catch-up from the SPIE digital library accessible via following links. This modified format enabled a substantial (50%) reduction in the time required for the virtual PLG meeting

- **Photonics Growth 2021 and Beyond** with presentations of the current state of the global industry, impact of Covid-19 on UK photonics (results from autumn survey) and discussion panel on future opportunities. The PDF of the presentation (without audio) of the PLG autumn survey is also available at <https://photonicsuk.org/contributors/minutes> . If PLG participants need access to original slides to use in other presentations msg John L.
  - Summary: UK industry in good shape, with all open and several areas showing growth even during pandemic. Global industry set for 3% reduction on year based on amalgamation of analyst forecasts for larger traded companies. Multiple growth opportunities both in bio-photonics as well as broader photonics application.
  - From the survey noted that few if any expect full in-person conference and exhibitions to return in near future, with mixed mode being the ‘best’ outcome even in a year. Indicates a need to prioritise the digital / virtual engagement journey for industry and research.
  - The lack of lab access for academic researchers was one of the most significant challenges to emerge from Autumn UK survey. Discussion notes that picture is far from uniform with lab access varying significant between different institutions. Impact on collaborations with industry noted as significant with between 3 to 6 month delay. Industry has notably found it easier to reopen/ maintain operations. The challenges for large university operations

acknowledge as significant. Discussion noted the importance of active research as a vital part of training for next generation engineers and scientists for whole industry and lack of access will hamper postgraduate training.

**Action John L> Draft open letter from PLG to Minister** for Science and Innovation stressing the need to balance in research (with its essential aspect of practical training) and undergraduate teaching

- **Funding and the innovation ecosystem** with briefing on the UK R&D roadmap from BEIS, latest funding opportunities and developments in Europe direct form Photonics 21.
  - UK R&D roadmap presentation illuminating for the balance being given to the 7 chapters: improving systems and funding, raising ambitions, enabling people, driving productivity, levelling-up across UK/ place, global collaboration, world leading-infrastructure, with no single area being prioritised over others. The importance of the R&D roadmap in guiding future policy is clear.
  - From Innovate, in addition to well known competitions, new investment accelerators funding emerging mixed investment and grant support.
  - Within Europe initial budgets for Horizon Europe are beginning to emerge with Photonics PPP highly likely to proceed.
- **Future Photonics research Horizons**
  - Showcasing results of the recent look at the future Horizons in Photonics research. Full report at <https://photonicsuk.org/future-horizons-for-photonics-research-2030-and-beyond-report-released> . Future photonics hub support for layout and production acknowledged
  - Now looking at how to proceed with industry and policy fit, and how to facilitate under remote meeting only requirements
  - PLG members encouraged to disseminate and consult Horizon scan report.

PLG participants are encouraged to view presentation on catch-up via above links if they have missed in person.

**ACTION all>The Autumn PLG survey remains Open for additional input.** If you have not already completed (113 have to date) please complete asap, we are some 20 photonics responses short of the Spring Survey.

### **3) Progress, support and routes to gaining support for significant interventions in key areas of photonics**

With the new UK R&D roadmap, gov aims to increase R&D investment and back bold plans, and renewed talk of supporting cross cutting technologies the planets would appear to be aligning to position for significant support for photonics in select areas.

#### **a) Communications hardware**

With a major focus on increase diversification in the UK communications supply chain, time would appear right to push hard for significant support for UK communications hardware development and support for building up the UK supply chain in this area. Noted that lack of systems integrator remains a challenge in the UK and thus success may require fostering stronger relationship with Nokia and Erickson. Additionally noted essentially to identify buyers for hardware in a market where costs is often critical.

**Action John L> Convene working group for further discussion and proposal development.** If you are interested in participating please indicate so at <https://doodle.com/poll/vcmx2a42f4fz63sw> (If the times next week don't work, just add you name to list, but don't check any of options, so we can capture those interested in participating, and if necessary we will look to find alternative time that works)

#### **b) High power lasers**

With known requirements in the defence community and impact in supporting cutting edge high energy science the PLG has been developing white paper and soliciting support for major UK development in high average power lasers. Focus being on the key enabling technologies to go substantially beyond the current few-kilowatt level to 100kW+ to GW substantially larger. Noted that with kW class lasers now a almost a

commodity item clear business case was required and if defence the only application substantial central funding would be essential.

### c) Sensors

Not discussed in meeting, but remains an active area of interest with collaboration with SILC (Sensors Innovation Leadership Council) on presenting possible case.

Overall noted potential post Brexit adjustment to state-aid regulation, increase R&D focus and emphasis on thinking big present significant opportunity.

## 4) PLG AGM

PLG AGM called to order at 15:00 on 8 October 2020

The Following motions were introduced. Voting on all motions being recorded through [Microsoft Forms](#) with link provided to participants in Team Chat.

Those present reminded of voting requirements:- right to vote determined by attendance at two or more of the last six PLG meetings or attendance at two or more PLG meetings in the in last two years, transferable within an organisation. One vote per organisation.

With more than 35 people on Teams call quorum noted as achieved.

**Motion 1:-** Agreement of remote meeting as valid AGM. Passed unanimously by 35 votes

**Motion 2:-** Reappointment of Chris Dorman as PLG Chairman. Passed unanimously by 35 votes

**Motion 3:-** Reappointment of John Lincoln as Chief Executive. Passed by 34 votes, 1 abstention

**Motion 4:-** Reappointment of Anke Lohmann Treasurer. Passed by 34 votes, 1 abstention

**Motion 5:-** Recommendation for creation of PLG Secretary and appoint Karin Burger to the role.  
Passed by 34 votes, 1 abstention

**Motion 6:-** Transfer of Photonics Leadership Ltd company secretary to Treasurer. Passed unanimously by 35 votes

**Motion 7:-** Photonics Leadership Ltd director confirmations – Simon Andrews, Ric Allott. Passed by 34 votes, 1 abstention

PLG activities for 2019-200 and financial position of PLG were reported by Anke L. Accounts showed income from contributions of £15,500 for year an increase of £500 over previous year. Outgoings and newly incurred liabilities were £17,800, the majority (£17,280 inc VAT being subcontracting costs to Harlin (John L) for day to day operation of PLG.

Time incurred for core operation of PLG remains @ ~30 days identical to previous year, excluding one-off Horizon scanning activity. Activity log shows a notable increase in number of government consultations where responses have been requested and/or provided.

- The full annual activity log is available at <https://photonicsuk.org/contributors/plg-achievements> and updated as activities are undertaken. Past meeting minutes and consultation responses s are available at <https://photonicsuk.org/contributors/minutes>

Additional probono time of ~6 days is provided for APPG secretariat and Treasurers input.

**Motion 8:-** Approval of 2020 PLG accounts. Passed by 34 votes, 1 abstention

Contributions for the operation of the PLG are requested at level of £250 for SME, £500 for University and RTO and £900 large company.

**Motion 9:-** Agreement of requested contribution levels for 2020-2021 to remain £250, £500 and £900). Passed by 33 votes, 2 abstentions

Banking with HSBC has become problematic whilst two signatures are required yet officers are distributed around country and face to face meetings are not permitted. Changing banking to Lloyds will enable remote dual authorisation of banking transactions.

**Motion 10:-** Approval to transfer banking to Lloyds, Passed unanimously by 35 votes

All 35 people voting in AGM confirmed eligibility to vote.. No AOB's for the AGM were noted.

Photonics Leadership AGM closed at 15:30 8 October 2020.

#### a) **Missing Motion**

Due to an administrative error, the AGM motion to reappoint John Parsons as PLG vice chairman was missing from the voting form (*Huge and embarrassing apologies to John*).

Please vote on the supplementary motion at

[https://forms.office.com/Pages/ResponsePage.aspx?id=Z7LDbgU-706uII\\_DMh92Z-Se9H7FSLhLvk2ZJZKpFnBUOEJZTUffSFHrVNPT0tKSFVIUTVBSjYwV54u](https://forms.office.com/Pages/ResponsePage.aspx?id=Z7LDbgU-706uII_DMh92Z-Se9H7FSLhLvk2ZJZKpFnBUOEJZTUffSFHrVNPT0tKSFVIUTVBSjYwV54u)

#### **5) Main meeting AOB**

Question was raised on whether there is an opportunity for more supplier/ supply chain engagement days especially for Catapults and RTO organisations to articulate specific challenges / problems they are seeking to solve. cf <https://www.gamechangers.technology/>. Noted that during current Covid-19 restrictions that typical industry days have mostly been suspended.

#### **6) Updates and inputs from other groups,**

*Apologises time did not allow for normal round table and the past request to submit activities from other groups in advance was not made available. If you have any items to add to follow please fwd to John L.*

- The annual UK Quantum Showcase will be going ahead as a virtual event on Friday 6 November. Info and registration details at <https://eur.cvent.me/2PxN1> or via [quantumshowcase@ktn-uk.org](mailto:quantumshowcase@ktn-uk.org)
- The KTN have an ongoing series of two hour Photonics for.... virtual events ~ once per month through to Jan 2021. [Register](#) online for
  - Photonics for...Security and Defence 27 October 2020
  - Photonics for...Agri-Food 24 November 2020
  - Photonics for...Quantum Applications 15 December 2020
  - Photonics for...Water Industry Challenges 26 January 2021
- [Women in Enabling Technologies](#) 3 November also from the KTN
- New items for the APPG in Photonics and Quantum newsletter continue to be required – contact Karin Burger for John L
- If anyone would like to be added to the of stakeholders potentially impacted by the UK's proposed rebalancing measures on tariffs on steel and aluminium products and derivatives from the US, and therefore benefit from being alerted to DIT's plans from 1st January 2021? Please contact Phil White at DIT contact details available via John L.
- [Photonics in Scotland report](#) with a number of useful stats is available to download.
- Anthony Mangnall, MP for Totnes posed a [question in House of Common on 29 September on Photonics](#) following a visit to EPIC centre in Torbay and Bay Photonics. Illustrating the impact of or engaging with your local MP, we actively encourage PLG participants to reach out to their local representative and encourage them to get involved with the APPG in Photonics and Quantum.

#### **7) Next Meeting**

Virtually unless substantial change occur in February 2021