



Access Center for
Photonics Innovation Solutions
And Technology Support



ACTPHAST:
A unique one-stop-shop for
supporting European SMEs in
photonics innovation
adoption and acceleration

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PHOTONICS²¹

PHOTONICS PUBLIC PRIVATE PARTNERSHIP

**ACTPHAST is an Integrated Project funded by the European Commission
under FP7 Grant Agreement N° FP7- 619205.**

SMEs are the motor of Europe's innovation economy

5k SMEs in Photonics



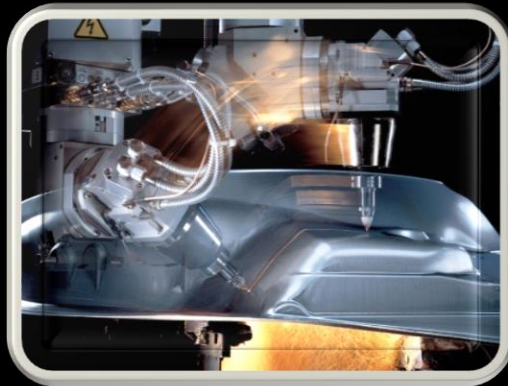
Optical Datacom



Photovoltaics



LED Lighting



Lasers in Manufacturing

PHOTONICS

opportunities
to innovate products
in a variety of sectors



Displays



Machine Vision



Medical Optics



Optical Components

ACTPHAST's INNOVATION ROADBLOCK REMOVERS



**dedicated task forces
with the best EU experts**



**supported by key
photonics technology platforms**



**well-organized approach to
provide SME's with innovation support and services**

Targeted innovation support projects – from concept feasibility to prototype

TRL1: Basic principles observed	TRL2: Technology concept formulated	TRL3: Experimental proof of concept	TRL4: Technology validation in lab	TRL5: Tech. validation in relevant environment	TRL6: Demonstration in relevant environment	TRL7: Demonstration in operational environment	TRL8: System complete and qualified	TRL9: Successful missions operation
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Speed and ease-of-use are key for SMEs –

- *Continuous open call for innovation projects*
- *Typically 2-3 months from application to approval*
- *Typically 7 months for innovation project execution*

ACTPHAST's general support principles



**support innovation
driven by business needs**



**provide support
instead of funding**



**innovation instrument
dedicated to SMEs**



**support
a variety of industry sectors**



**target innovation
close to the market**



**potential impact
on jobs and growth are key**

Examples of innovation support projects

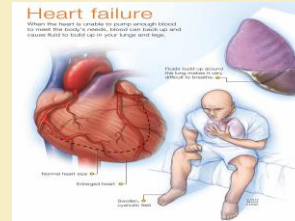


optical fibre sensing



**High thermal expansion
FBG packaging**

**VUB
IPHT**

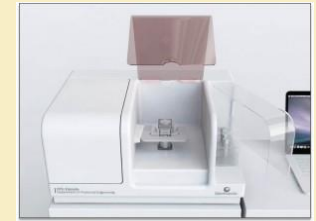


**medical monitoring
reducing
hospital re-admission**

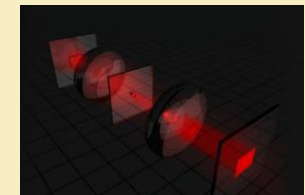


**3D LED-based
cardiovascular
monitor**

**CNRS
KIT
VUB**



cell sorters



**light beam
shapers for SLMs**

**TYN
VUB**

Examples of innovation support projects



**power system
protection**

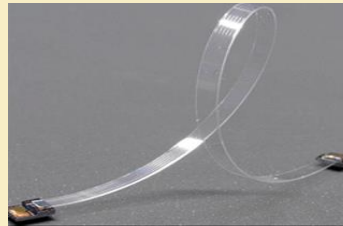


**FBG interrogator
for power industry**

TNO



optical datacom



**ultrathin chip
packaging**

IMEC



FOLLOW-ON



fireplaces



**feasibility study
of a virtual fireplace**

WUT

Examples of innovation support projects



optical transceivers



**POF RCLED
transceivers for FTTH**

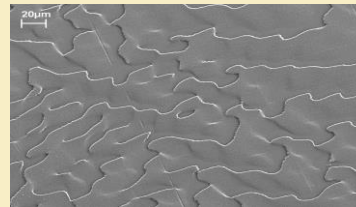


**VUB
KIT
VTT**

Holoxica



**holographic
displays**



**fabrication route of
HQ diffractive elements**

**KIT
HHI**

LAZER



**cycling
helmets**



**visor-mounted
displays**



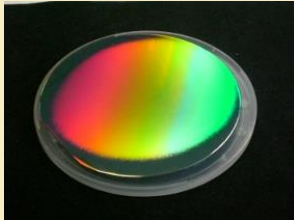
**IMEC
VUB**

Examples of innovation support projects

H O L O G R A M
I N D U S T R I E S



**anti-counterfeit
products**



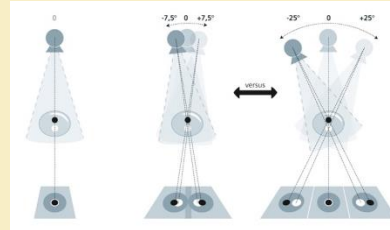
**resonant gratings
for security**

**CNRS
UEF**

 **italray**
Your X-ray Solution



X-Ray instruments



**procedures for
tomosynthesis**

WUT

 **TOMRA**



**food
sorters**



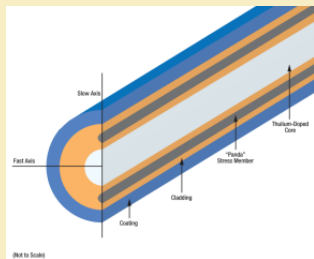
**LED-based
sorting**

**VUB
KIT
VTT**

Examples of innovation support projects



optical amplifiers

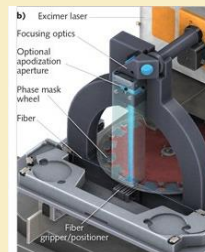


**Erbium-doped
extended mode fiber**

IPHT



**FBG fabrication
equipment**

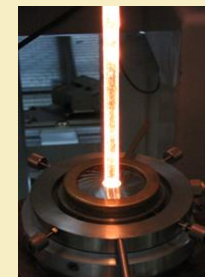


**FBGs
manufacturing process
for high power lasers**

ORC



**specialty fibers
for oil and gas industry
aerospace/biomedical**



**ultra-high performance
fibre for use
in harsh environments**

ORC

Key Indicators for Success and Impact



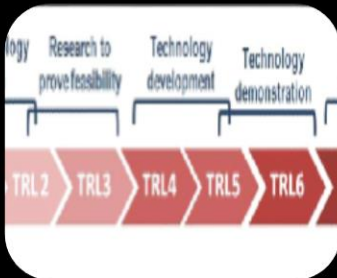
**customer
satisfaction**



**timeliness
of support**



**leverage of
EC R&I funding**



**advancement in
TRL**



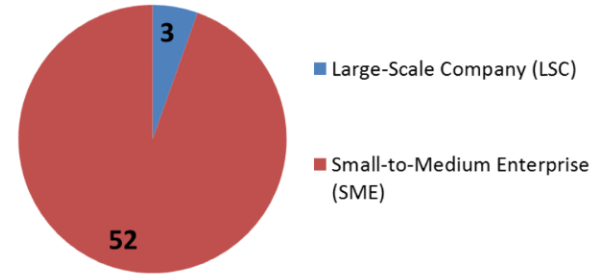
**projected increase
in company's revenues**



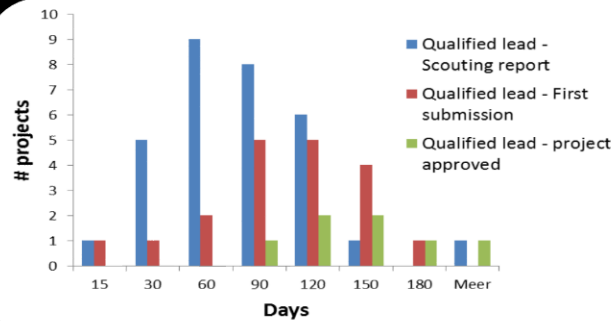
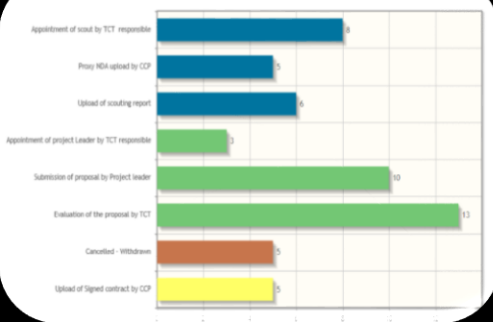
**projected increase
In number of jobs**



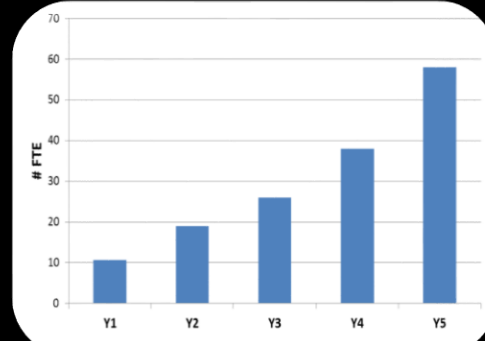
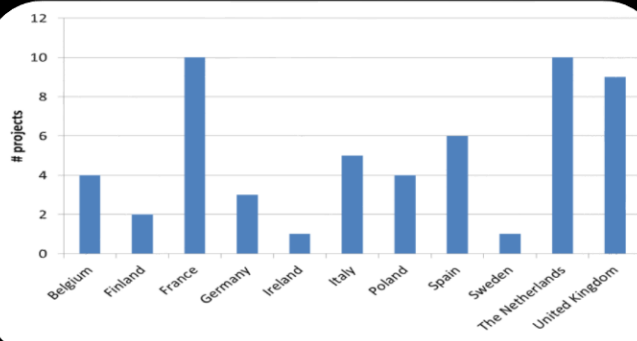
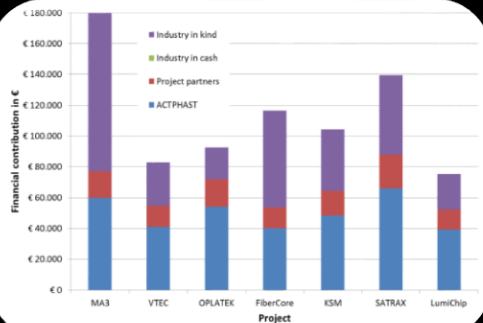
ACTPHAST monitors its impact on a real time performance dashboard



Projects Pipeline by Next Action



Project	TRL1	TRL2	TRL3	TRL4	TRL5	TRL6	TRL7	TRL8	TRL9	Advanced TRL level
MA3		X								2
VTEC			X							1
OPLATEK									X	2
FiberCore								X		2
KSM						X				3
SATRAX						X				1
LumiChip								X		2
Projects		3	7	6	2	1				



Quantitative measuring of your KPI's allows to measure your progress, impact, and success

KPI Metrics ▼	2014 ▼	2015 ▼	2016 ▼
Total no. of approved & active innovation projects (cum.)	20	44	71
Breakdown by company size:			
% Micro Enterprise	45%	39%	41%
% Small Enterprise	45%	45%	43%
% Medium Enterprise	5%	7%	7%
% Large Enterprise	5%	9%	9%
European dimension of the projects (no. of countries represented)	9	12	17
% of non-photonics companies	15%	36%	45%
% first time photonics innovation	5%	16%	25%
% first time EU funded	60%	61%	56%
% new research collaborations	60%	64%	59%
KPI Metrics ▼	2014 ▼	2015 ▼	2016 ▼
Total no. of approved projects (cum.)	20	44	71
Total expected New Revenues	59M€	167M€	286M€
Total expected New Venture Capital	800k€	13M€	44M€
Total expected New Jobs	77	266	490

Sharing progress on KPIs through the ACTPHAST public website is essential



Latest ACTPHAST support statistics - click for more>>

93 INNOVATION
PROJECTS

90% FOR SMES

50% FOR NON-
PHOTONICS
COMPANIES

700 POTENTIAL NEW
JOBS

Home

Supported companies

Application domains

Technology platforms

How it works

Who can apply

Contact

Register your interest

A unique one-stop-shop solution for
supporting photonics innovation in European
companies

especially adapted to the needs of small- and medium-sized enterprises

Watch our video

Download presentation

Potential increase in new revenues and related EU job creation are ACTPHAST's Key Performance Indicators

<u>Expected</u>	?	Current Year	Year 1	Year 2	Year 3
Annual Revenue	?	1 000 000.00	1 030 000.00	1 112 400.00	1 190 268
Variable Expenses	?				
Supplies	?	100 000.00	101 970.00	109 026.32	117 824
% Revenue	?	10.00	9.90	9.80	9.90
Wages	?	200 000.00	199 820.00	215 805.60	230 911
% Revenue	?	20.00	19.40	19.40	19.30
Distribution	?	50 000.00	50 985.00	54 513.16	58 912
% Revenue	?	5.00	4.95	4.90	4.95
Marketing	?	50 000.00	50 985.00	54 513.16	58 912
% Revenue	?	5.00	4.95	4.90	4.95
Other Variable	?	50 000.00	50 985.00	54 513.16	58 912
% Revenue	?	5.00	4.95	4.90	4.95
Total Variable	?	450 000.00	454 745.00	488 371.40	525 473
% Revenue	?	45.00	44.15	43.90	44.10
Gross Profit	?	550 000.00	575 255.00	624 028.60	664 794
% Revenue	?	55.00	55.85	56.10	55.90
Mark-Up %	?	122.22	126.50	127.78	126

Fixed Expenses	?
Location	?
% Revenue	?
Salaries	?
% Revenue	?
Administration	?
% Revenue	?
Interest	?
% Revenue	?
Other Fixed	?
% Revenue	?
Total Fixed	?
% Revenue	?

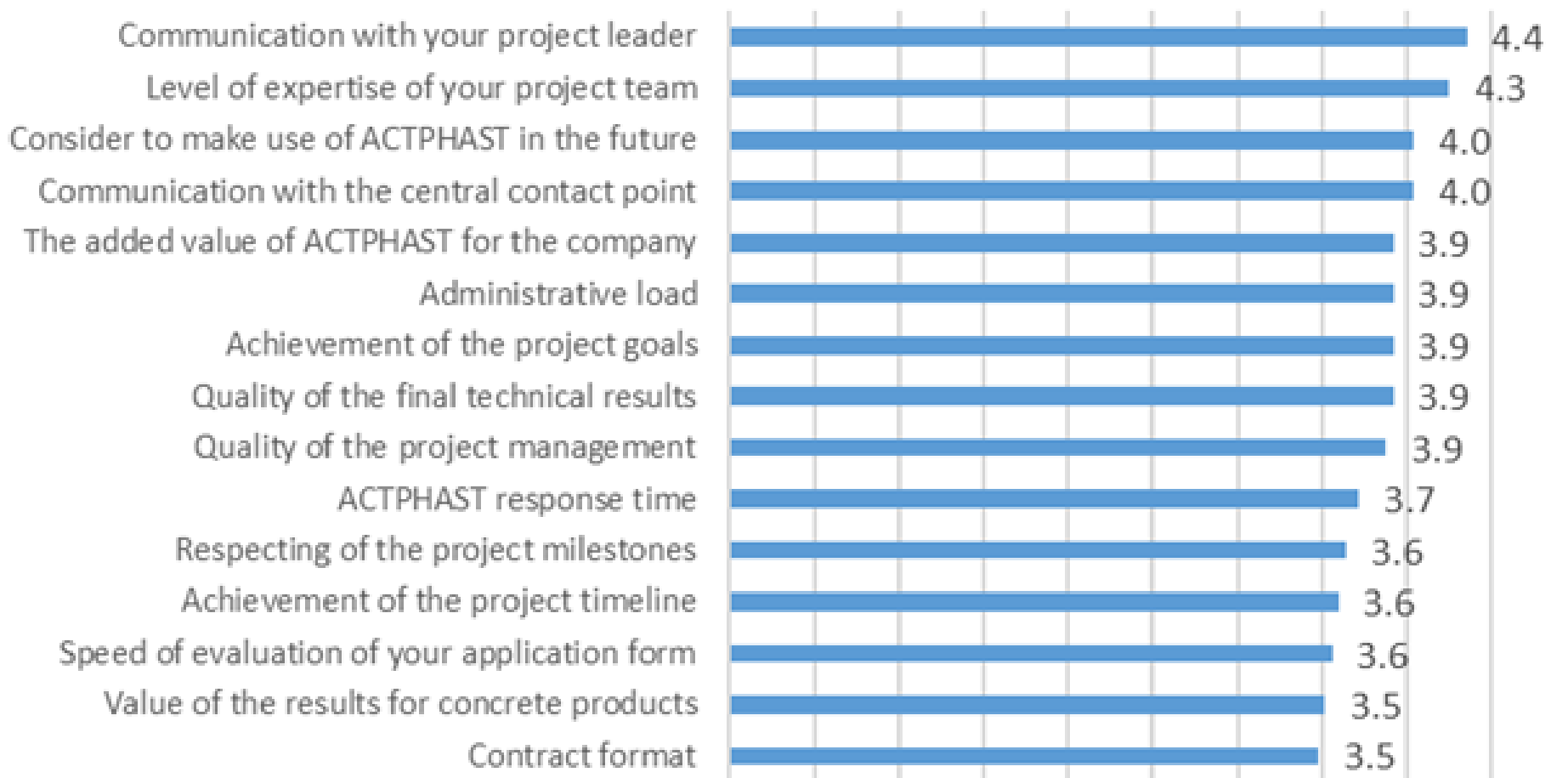
Total Expenses	?
% Revenue	?
Profit/Surplus	?
% Revenue	?



Measuring customer satisfaction matters

It is the ultimate success indicator and allows to fine-tune procedures

Summary of Company Satisfaction on completed Innovation Projects





Company CEO testimonials

"one-liners say it all"

"easy to launch, not too much bureaucracy"

"flexible and fast"

*"access to real expertise that we could not otherwise access
or afford through normal contacts"*

"highly industrial minded, not too deeply into theoretical"

"very professional"

*"a wonderful tool to support development of new products in
companies"*

"helps to minimize risk of SMEs"

*"it would have been highly unlikely for us to address this
project without ACTPHAST support"*



Announcing the new ACTPHAST 4.0



- **ACTPHAST 4.0 will take over from ACTPHAST from November 2017 with a new 4-year funding cycle of €10m supported by EU H2020**
- **ACTPHAST 4.0 offers wonderful new opportunities to boost SME photonics innovation in Europe at a scale and with a leveraging factor never seen before**
- **ACTPHAST 4.0 aims to be a game-changer in revitalizing European manufacturing, and as one of the vital catalysts to the successful digitization of European industry**



Beyond the state-of-the-art: ACTPHAST 4.0 in numbers

Key Aspects of the Innovation Support Model	ACTPHAST (current)	ACTPHAST 4.0 (beyond)
No. of companies reached through awareness campaigns	36.000	60.000 ↑
No. of companies benefiting from business coaching	-	600 ↑
No. of companies benefiting from financial coaching, comprising:	-	300 ↑
- general financial coaching (33%)		100
- VC-specific coaching (66%)		200
No. of companies benefiting from technology coaching	120	240 ↑
No. of deep photonics innovation projects with companies	71	120 ↑
Increased leverage on European photonics R&I expenditure	2,3	2,8 ↑
Increase in company revenues direct from photonics innovation	300M€	700M€ ↑
Increase in EU jobs direct from photonics innovation	500	750 ↑
Increase in venture capital direct from photonics innovation	40M€	75M€ ↑
No. of European member states represented by supported SMEs	17	25 ↑
Percentage of SMEs in supported group of companies	90%	90% →
Percentage of “non-photonics” companies in supported group	45%	65% ↑
Percentage of supported companies who are first users	25%	35% ↑
No. of companies feeding into the pilot lines for scaled production	-	20 ↑
No. of transfers to mass manufacturing in European companies**	-	20 ↑
Provision of best practices for regional co-funding	No	Yes ↑



Get Involved!



**Register your interest today by
visiting the website:**

www.actphast.eu