



# Deliverable D5.14

## Project presentation

**FP7-ICT-258178/IMEC/R/PU/D5.14**

**Project Number:** FP7-ICT-2007-5 258178

**Project Title:** Network for **EX**change and **PR**ototype **E**valuation of photonic**S** component**S** and **O**ptical systems (NEXPRESSO)

**Contractual Date of Deliverable:** 01/08/10

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**Nature of the Deliverable** R

**Dissemination level of Deliverable** PU

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### Abstract:

This deliverable presents the NEXPRESSO project including conclusions and major feedback from ACCORD and highlighting the new types of collaboration and the NEXPRESSO timeline.

### Keyword list:

Photonic components, Optical components, research supervision.



## Clarification

### *Nature of the Deliverable*

R	Report
P	Prototype
D	Demonstrator
O	Other

### *Dissemination level of Deliverable:*

PU	Public
PP	Restricted to other programme participants (including the Commission Services)
RE	Restricted to a group specified by the consortium (including the Commission Services)
CO	Confidential, only for members of the consortium (including the Commission Services)



## Disclaimer

*The information, documentation and figures available in this deliverable, is written by the NEXPRESSO ("Network for EXchange and PRototype Evaluation of photonics componentS and Optical systems") – project consortium under EC co-financing contract FP7-ICT-258178 and does not necessarily reflect the views of the European Commission.*



## **Content**

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## 1. Introduction

This deliverable presents the NEXPRESSO project including conclusions and major feedback from ACCORD and highlighting the new types of collaboration and the NEXPRESSO timeline.



## 2. Project presentation

The document is attached as Annex.



**NEXPRESSO**

***Network for **EX**change and **PR**ototype **E**valuation  
of photonic**S** component**S** and **O**ptical systems***

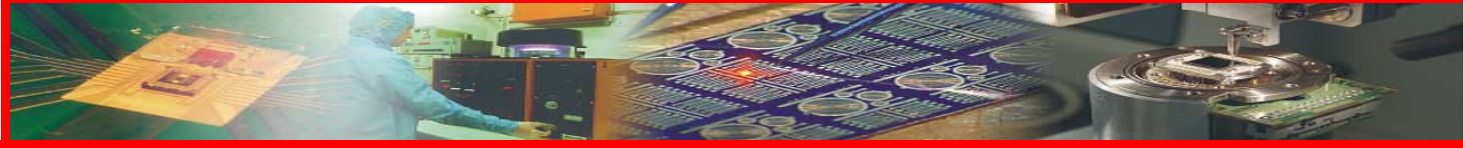


***How to get a  
(pre-competitive) Photonic Component***

***....  
for free !!***



# Introduction



**IMEC (co-ordinator)**

**B**



**EPIC**

**F**



**Multitel**

**B**



**HES-SO**

**CH**



**Wroclaw Univ. of Technology**

**P**



**Sagem Défense Sécurité**

**F**



**Scottish Optoelectronics Association SOA**

**UK**



**Perfos**

**F**



**OIDA**

**USA**



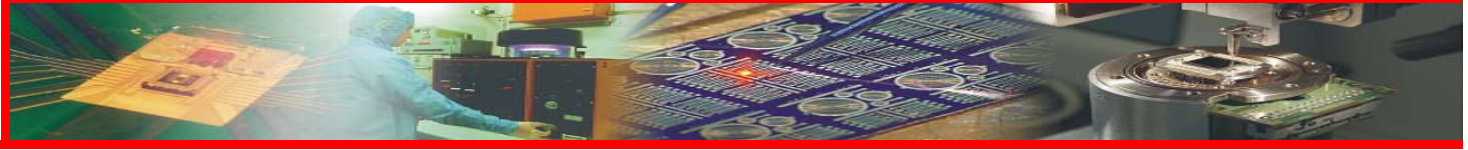
**Optics Valley**

**F**





# NEXPRESSO Objectives



NEXPRESSO follows the FP6 ACCORD-project and has the objective

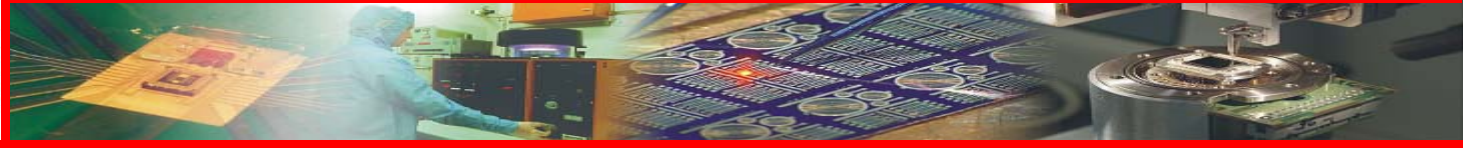
- to put **pre-competitive** photonic components and systems in the hands of researchers and students
- at **no net cost** to the university or to the company that furnishes the prototypes and
- to facilitate transfer of the university results for potential end-users especially SMEs in **new markets, new applications.**

**ACCORD ran from: 01/09/06 – 30/04/10**

**but continues as “NEXPRESSO” 01/06/10 - 31/05/13**



# ACCORD Objectives



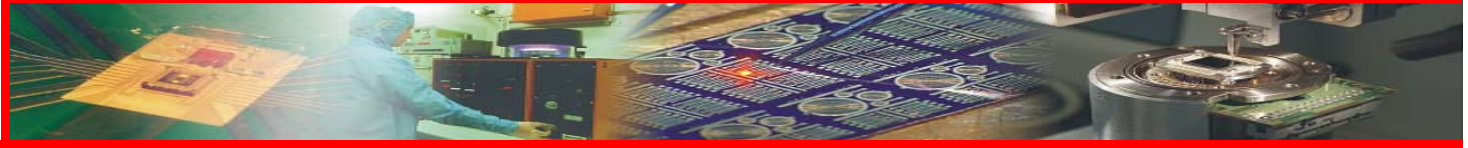
On the **Operational side** the project uses 3 types of collaborations:

- Type 1: Components are submitted by suppliers  
R&D groups respond with projects to work on these components
- Type 2: R&D groups submit requests for components  
Suppliers respond by submitting suitable devices
- Type 3: End-users request specific R&D on possible components

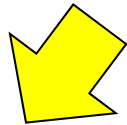
On the **Exploratory side**, the project looks into ways to support a similar initiative using other resources



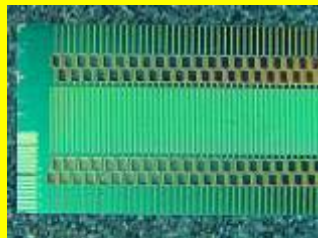
# NEXPRESSO Scheme



NEXPRESSO opens a call to component manufacturers (Type 1) or R&D groups (Type 2)



Component manufacturers respond by submitting components in area of photonics (Type 1):

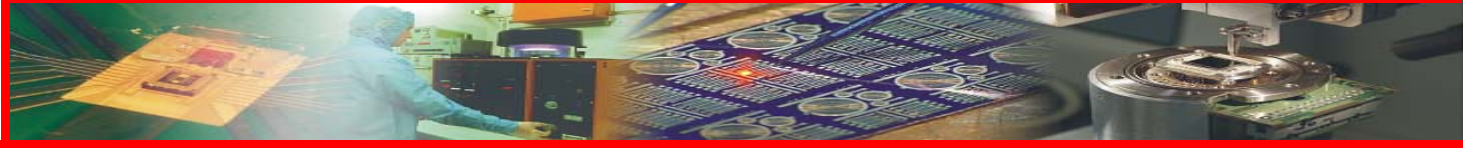


R&D groups respond by submitting projects and related component requests in area of photonics (Type 2)

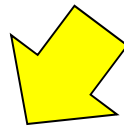




# NEXPRESSO Scheme



NEXPRESSO lists submissions and opens a call for R&D projects (Type 1) or Components (Type 2)



R&D Groups respond by submitting R&d projects using the listed components (Type 1):



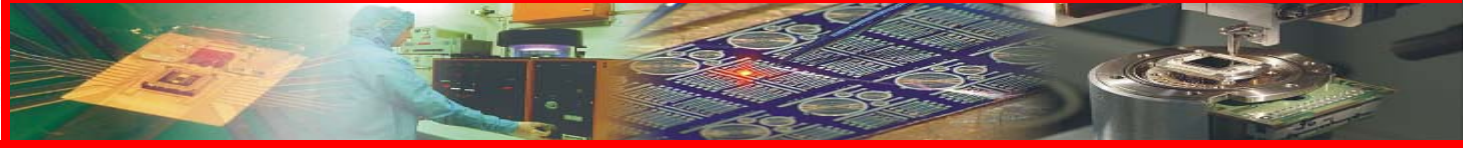
Suppliers respond by submitting requested component (Type 2)







# NEXPRESSO Scheme

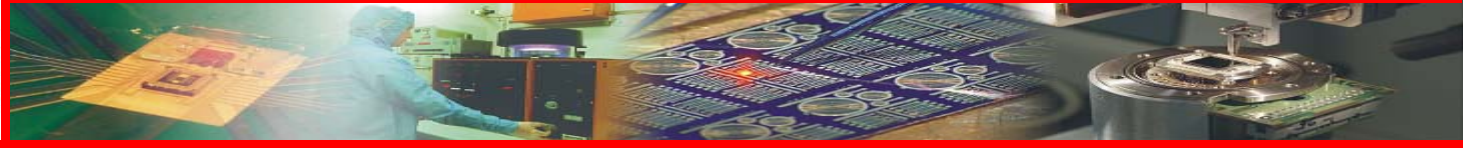


NEXPRESSO evaluates submitted proposals (Type 1 & 2)

- ☐ independent review committee
- ☐ based on
  - scientific value
  - new applications
  - possible involvement of end-users
  - training opportunities
  - cost for value
  - resources & expertise
- ☐ preferably no existing relation Supplier «» University



# NEXPRESSO Scheme



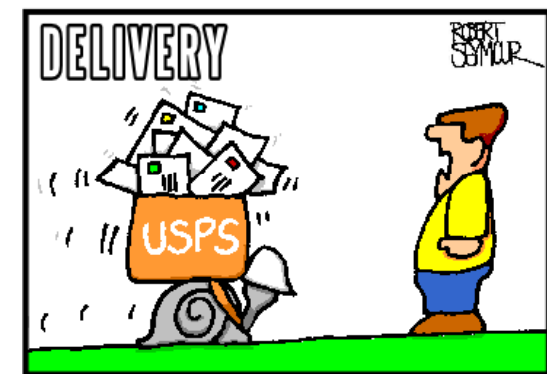
Component supplier & University come to agreement



NEXPRESSO buys the component and delivers it to the University



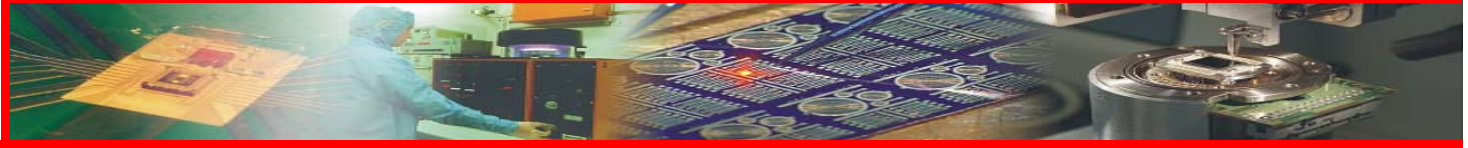
Du Jour



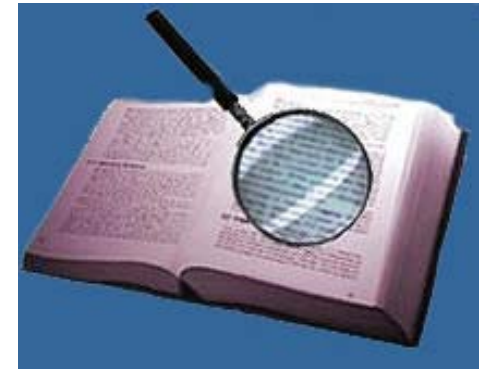
THAT explains everything.....



# NEXPRESSO Scheme



NEXPRESSO follows R&D progress

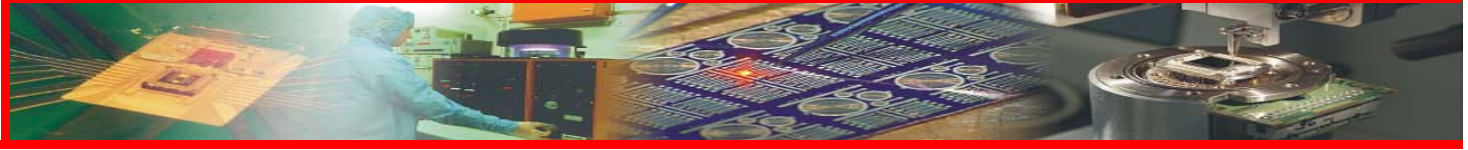


R&D Projects are requested to present progress & results at events & in journals

specifically acknowledging NEXPRESSO support



## Specific issues



### Specific issues

1. NEXPRESSO does not intervene in IPR agreement
2. NEXPRESSO remains owner of component
3. Scientific publications are exclusively an affair between the company and the university
4. NEXPRESSO publishes results of exchanges





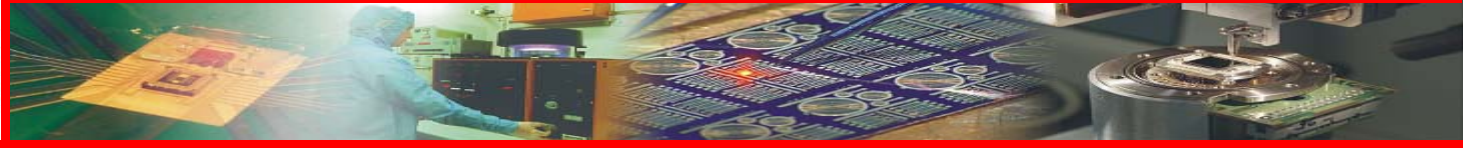
## ACCORD numbers



	Submitted	Evaluated	Projects started
Call 1 for Components	22	20	
Call 1 for R&D projects	15	13	5
Call 2 for R&D Projects	4	3	1
Call 2 for Components	15	15	
Call 3 for R&D projects	12	12	5+1



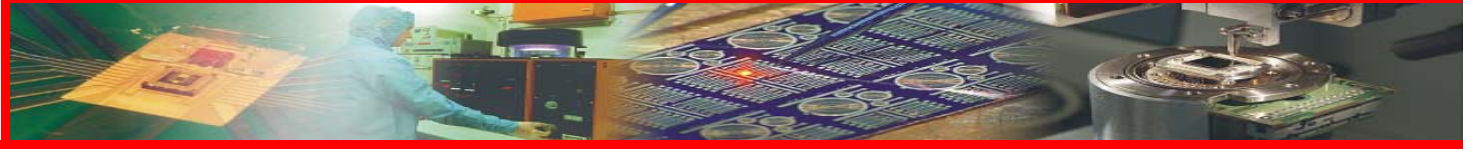
## ACCORD Projects



- 102 Tampere University of Technology (FIN)  
Short pulse laser Eolite Corus 10G for micromachining of biodegradable implants and grooving of silicon wafer  
EOLITE - IR to UV Industrial Laser
- 108 University of Latvia (LAT)  
Adaptive Optics for Eye Physiology Studies  
Visionica, Wavefront Sensors
- 109 St Andrews University (UK)  
Photoporation using fiber tips  
Lovalite, Fibre face components
- 112 Universidad Politecnica de Madrid (ES)  
Testing and system upgrading  
FiberLogix, All-fibre stripper
- 113 Universidad Polit cnica de Valencia (ES)  
Characterisation of Semiconductor Optical Amplifiers and Electroabsorbers and their use in novel applications  
CIP, SOA / EA Modulators



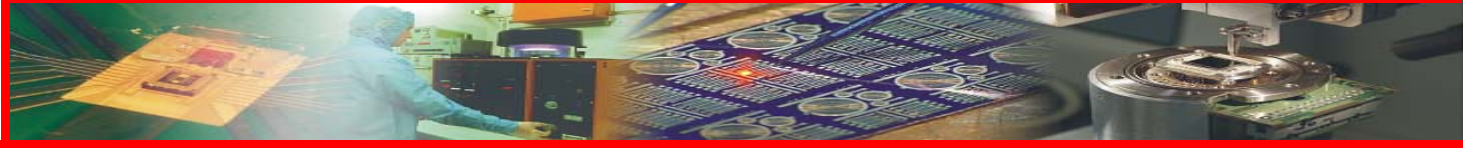
# ACCORD Projects



- 203 Strathclyde University (UK)  
A multi-wavelength, time multiplexed, spectrometer for atmospheric sensing  
Cascade Technologies Ltd
- 301 ETH Zurich (CH)  
A high throughput terahertz spectroscopic imaging system for security applications  
Onefive GmbH
- 302 Georgia Tech – CNRS (F)  
Development of GaN Based LEDs using ZnO/c-sapphire Templates  
Nanovation SARL



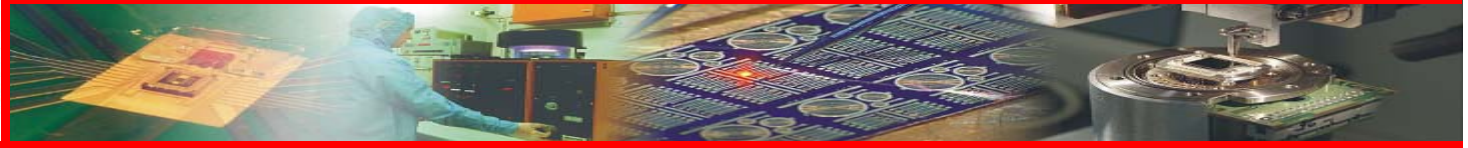
# ACCORD Projects



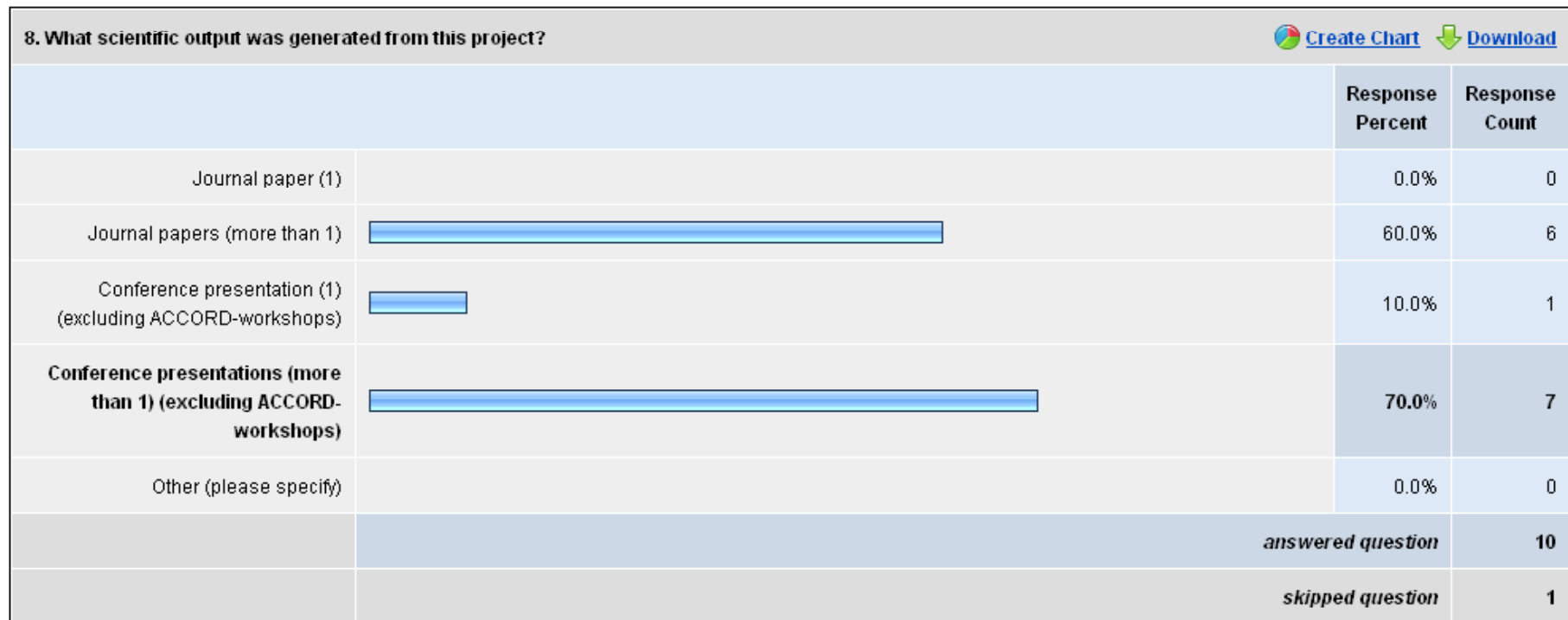
- 304 Institute for photonic technology Jena (D)  
Quasi-Multiplex CARS Microscopy with High Frame-Acquisition Rate  
Fastlite
- 308 CNIT (I)  
Integrated time domain optical interleaver for photonic-based full-digital  
radar receiver  
Pirelli Labs
- 310 University of Dundee (UK)  
Resonator modes in the presence of passive element for conical refraction  
(2 deliveries)  
Conerefringent Optics S.L
- 312 University of Strathclyde (UK)  
Adaptive optics for improved resolution in optical sectioning microscopy  
Imagine Optic



# ACCORD Measurement of success

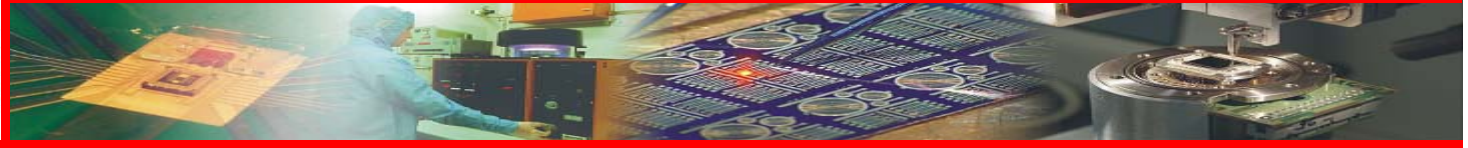


Scientific value: Publication in Journals or at conferences

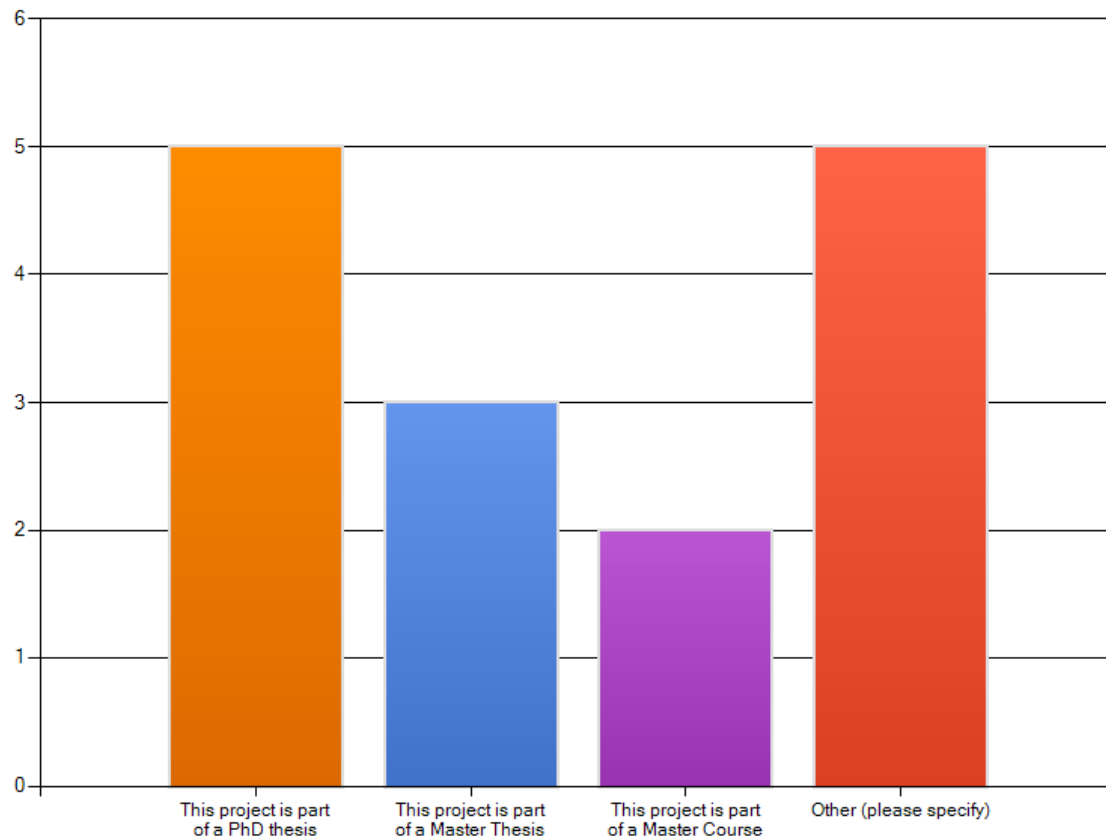




# ACCORD Measurement of success



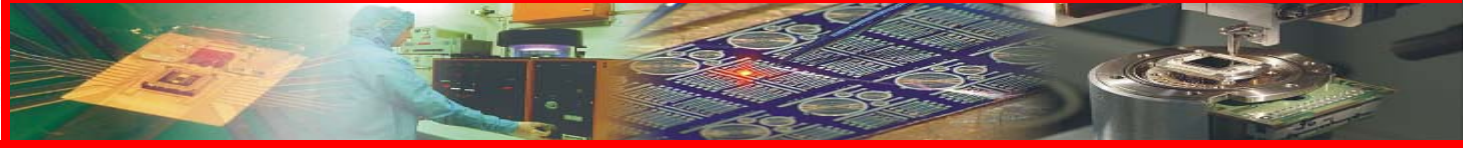
Involvement in educational programmes: work and results used in PhD thesis, Master Thesis or Master courses.





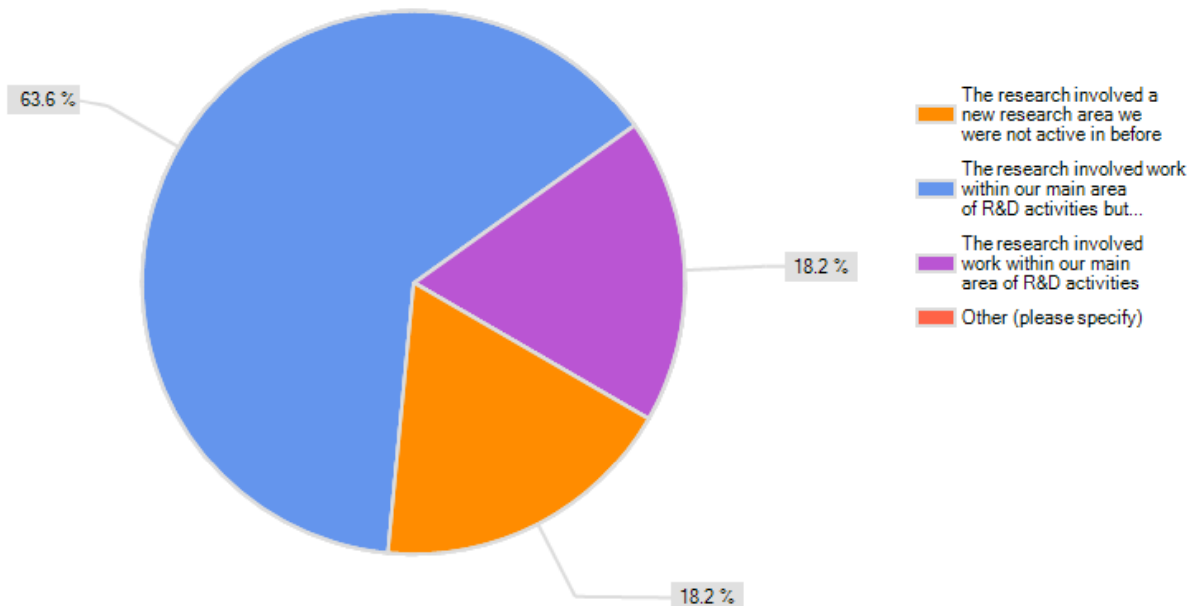


# ACCORD Measurement of success



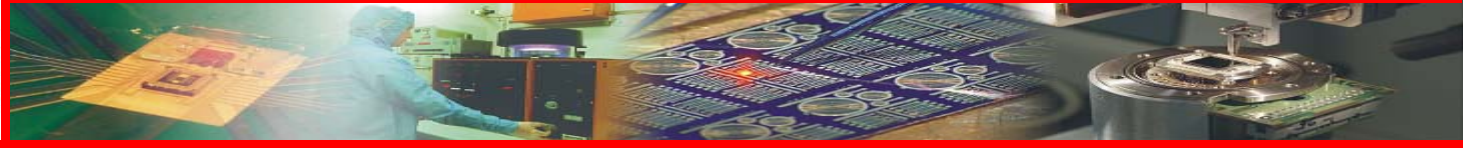
Did the research carried out on this component within the ACCORD-project cover a new area of research for your group, or was this covering the area in which you are carrying out most of your research?

New areas of research or access to new components



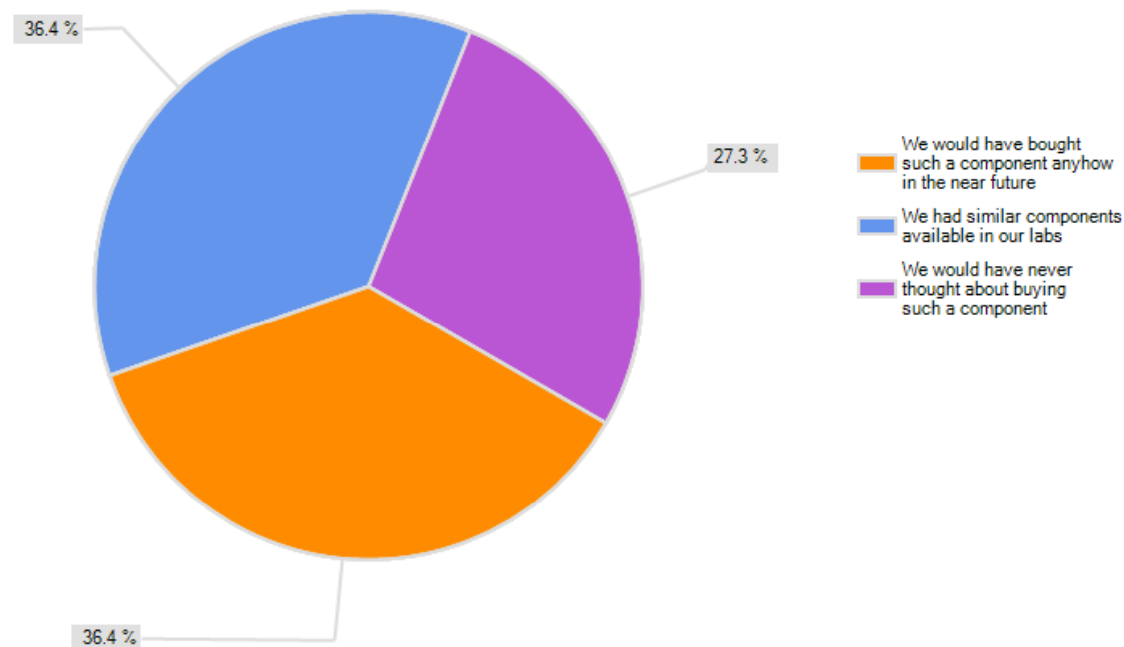


# ACCORD Measurement of success



ACCORD delivered the component to your group. Would you have bought such a component anyway for your research, or would you never have considered buying this?

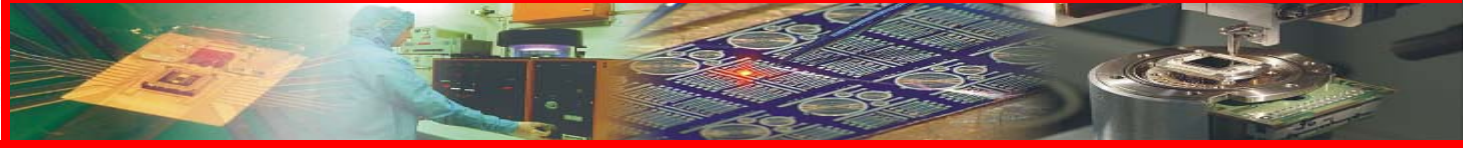
New areas of research or access to new components





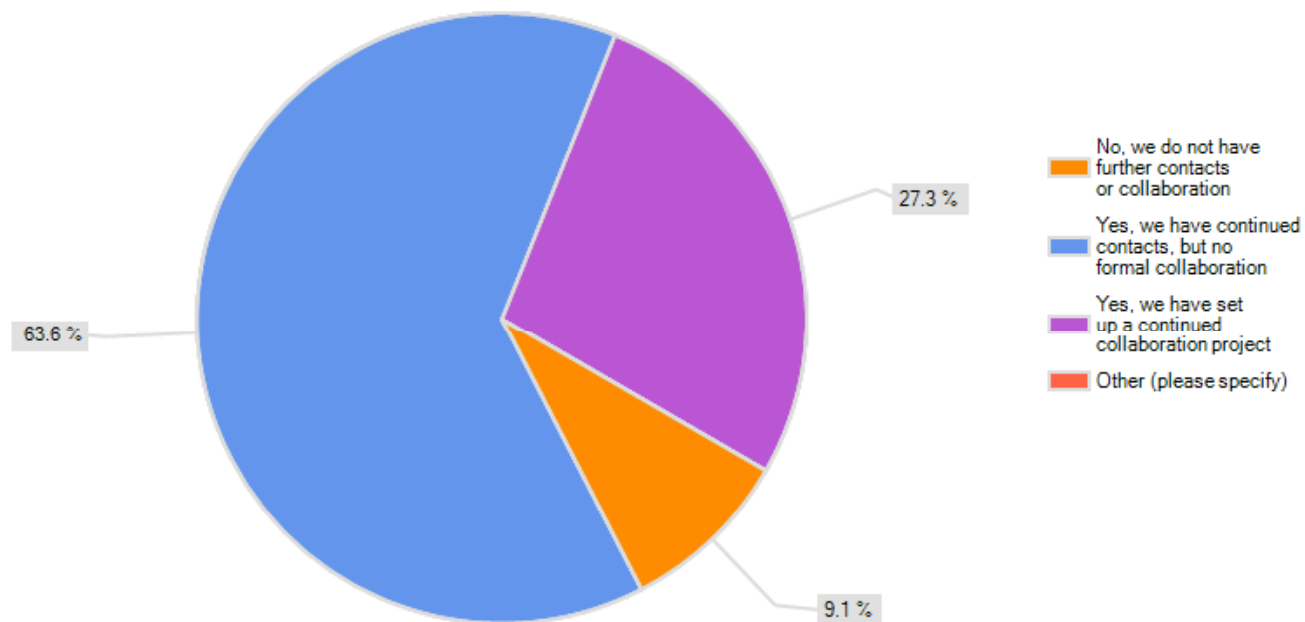


# ACCORD Measurement of success



Did the collaboration with the Supplier continued after the end of the ACCORD-project?

New collaborative projects as a continuation with the supplier

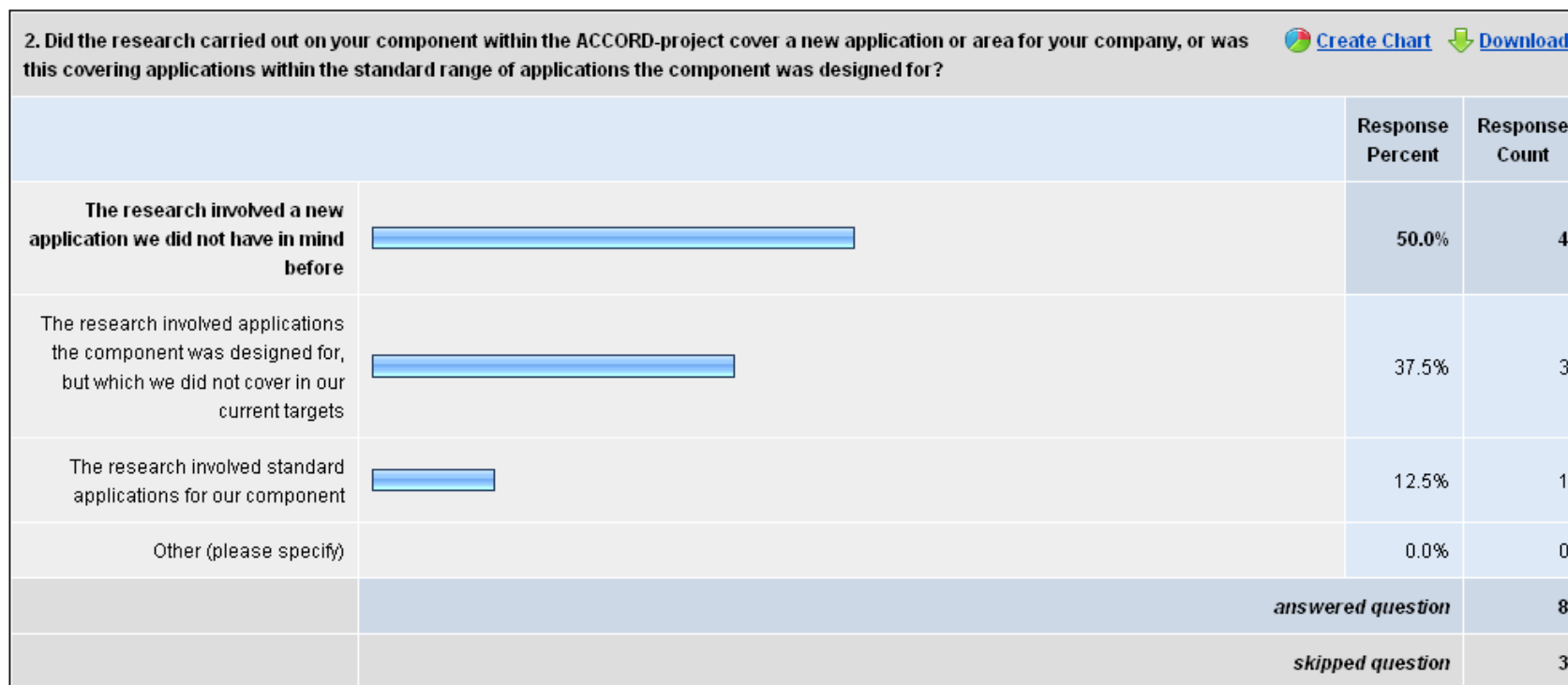




# ACCORD Measurement of success

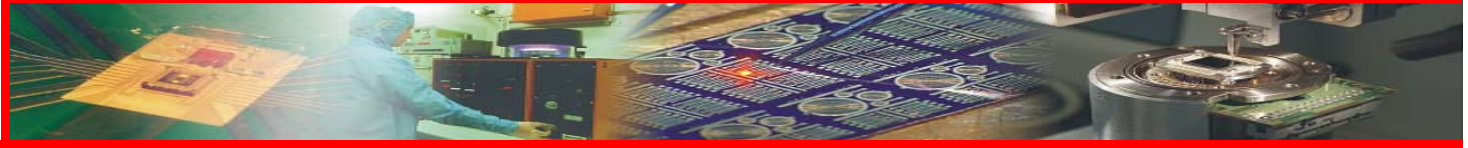


Broadening of area of application of the component /  
broadening of market focus



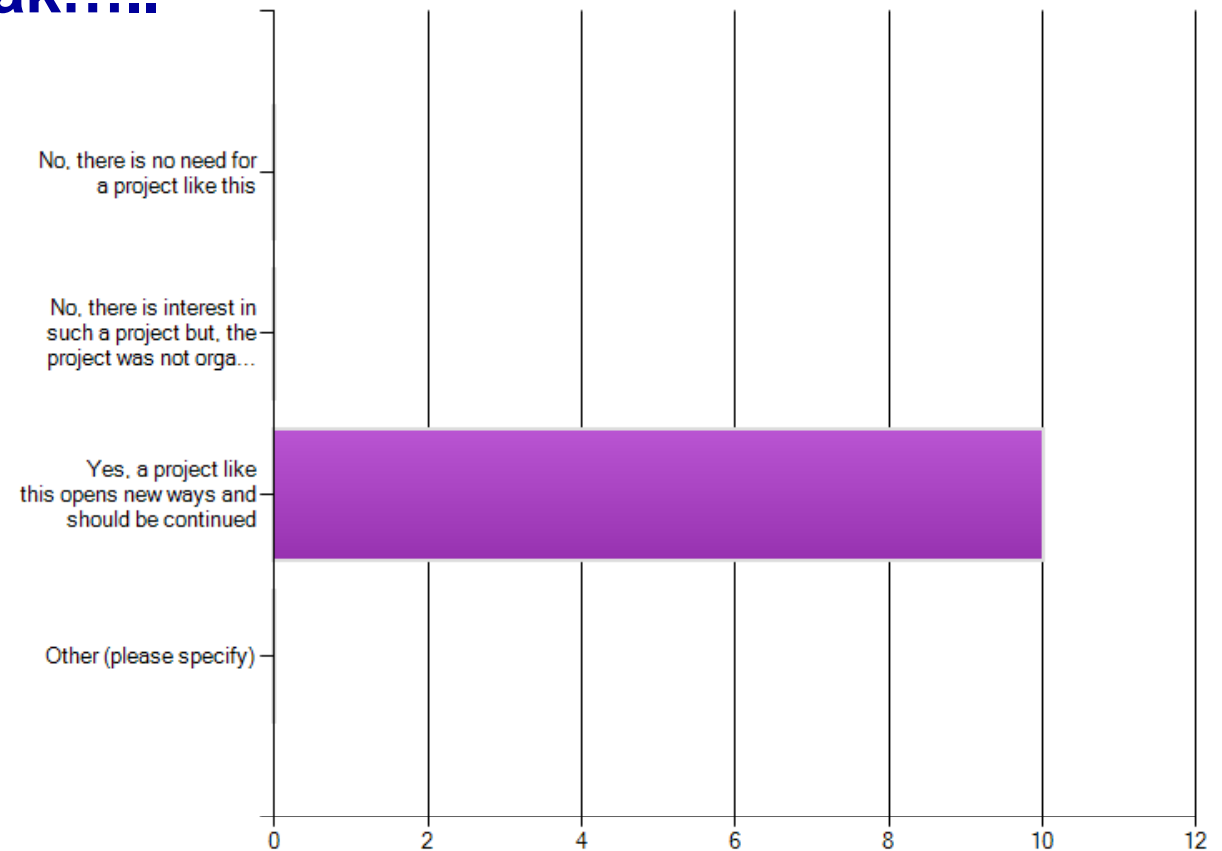


# ACCORD Conclusions



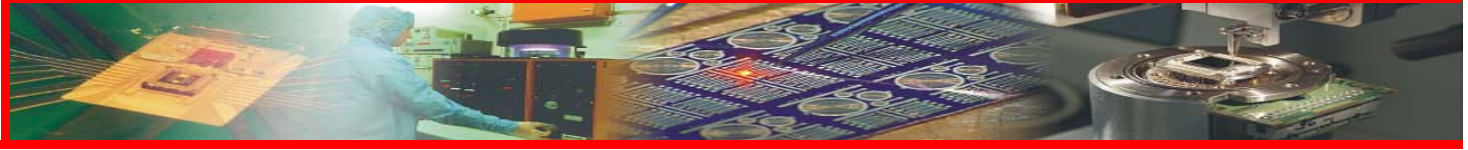
Let the others speak.....

Do you consider ACCORD as being a success as a whole?





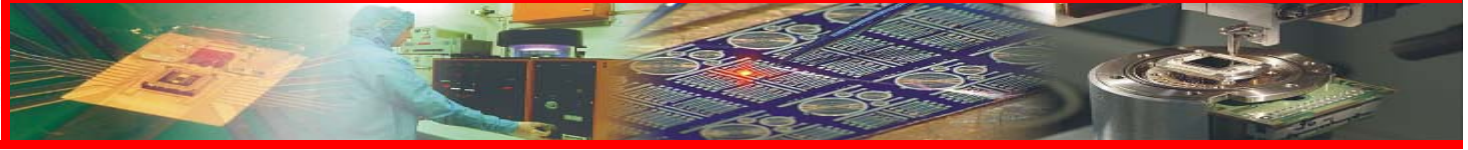
## Quotes about ACCORD Involvement



1. We have now a useful collaboration with the component partner and have gained valuable experience
2. We did research, that would have been impossible otherwise.
3. We had the opportunity of use very nice devices to achieve good research for a Master Thesis and even for a chapter of a Ph.D. Thesis
4. It is help us to discover new direction in laser physics
5. We have explored a new application and we have been known by a community not aware of the company activities.
6. We have gained access to new application-related know-how and have been able to adapt the product according to the feedback we got from the R&D group.
7. We realized components using our technology for a new application.



# ACCORD Measurement of success



## ACCORD

- From a bold idea
- to an non-standard project proposal
- with response higher than expected

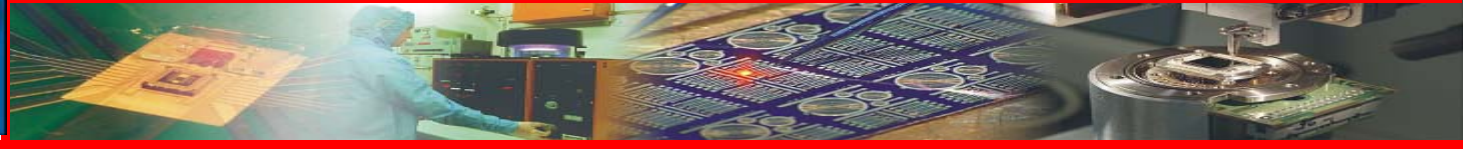
setting up new links SME-R&D  
involving young scientists  
generating scientific output & patent  
resulting in continued collaboration & projects

Any doubts about joining NEXPRESSO ??





# What with NEXPRESSO?



## NEXPRESSO

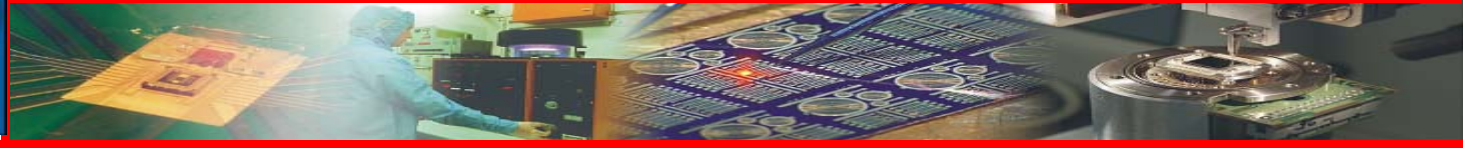
Based on ACCORD with additional activities:

- 1) Solicitation of pre-competitive components from industry to make them available to academia
- 2) Solicitation of pre-competitive component requests from academia to which industry can respond
- 3) Solicitation of requests from end-users for assessment of pre-competitive components by academia

Any doubts about joining NEXPRESSO ??



# What with NEXPRESSO?



## NEXPRESSO

### Type 1 Proposals:

Three specific calls will be issued for components

- Call 1: Open: 08/10 Close: 09/10
- Call 2: Open: 04/11 Close: 05/11
- Call 3: Open: 11/11 Close: 12/11

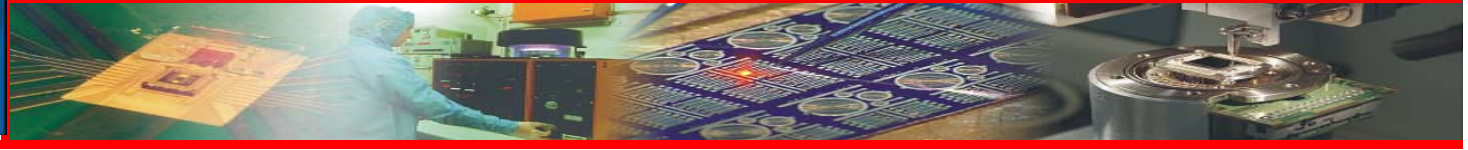
Three specific calls will be issued for R&D proposals:

- Call 1: Open: 10/10 Close: 11/10
- Call 2: Open: 06/11 Close: 07/11
- Call 3: Open: 01/12 Close: 02/12

[www.nexpresso.eu](http://www.nexpresso.eu)



# What with NEXPRESSO?



## NEXPRESSO

Type 2 & 3 Proposals:

Open calls with cut-off dates

- Cut-off date 1: 07/11
- Cut-off date 2: 02/12

Reporting:

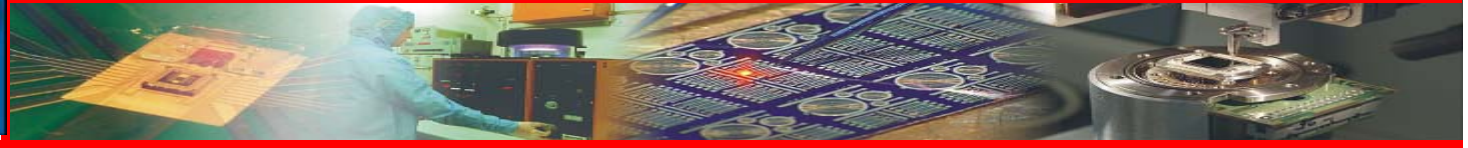
to be decided case per case

[www.nexpresso.eu](http://www.nexpresso.eu)





**NEXPRESSO**



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