

# CERN

European Organization for Nuclear Research

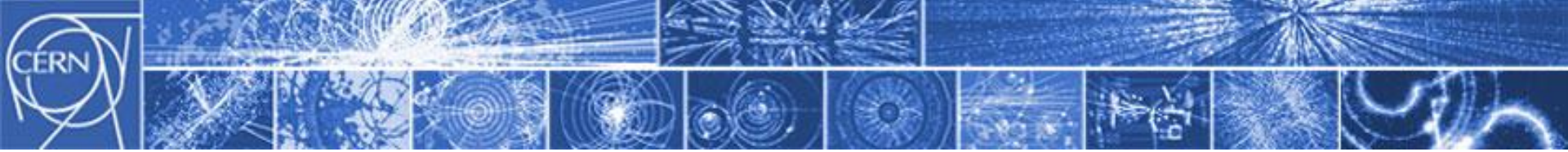
Organisation Européenne pour la Recherche Nucléaire

## Fast *know-how* workshop on initiating EU proposals

**Module 3:**  
**Documenting yourself**

Pablo Garcia Tello (KT)

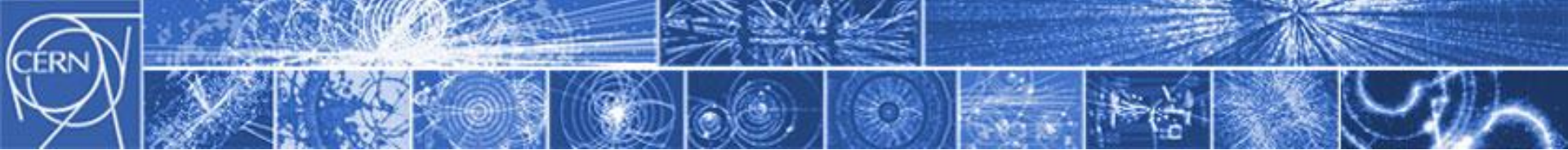




# Why?

**Documenting yourself is fundamental to:**

- Understand the context of your proposal.**
- Write competitive S&T and Impact sections.**



# Documentation...on what?

## Your proposal technical content

What is it?  
How innovative is it?  
How it fits with Tech/Industrial trends?

Helps you structuring your S&T and Implementation sections

## Your proposal context

How it fits on...  
1) EU initiatives  
2) Innovation and competitiveness landscape  
How can I disseminate and exploit results for my benefit and others' as well.

Helps you writing your Impact section and « beyond state of the art » of S&T.



# Tip 1: Literature (1)

❑ Of course you always read the latest technical review paper on the field... and especially those one with a section such as “future challenges”.

❑ BUT...who reads also the latest application review paper in the field... and especially the ones telling about “future trends”?

164 Recent Patents on Nanotechnology 2009, 3, 164-176

### Recent Progress in Graphene-Related Nanotechnologies

Rachel M. Frazier<sup>1\*</sup>, Daniel T. Daly<sup>2</sup>, Richard P. Swatloski<sup>3</sup>, Kevin W. Hathcock<sup>4</sup>, and Clint R. South<sup>4</sup>

<sup>1</sup>Alabama Innovation and Mentoring of Entrepreneurs, University of Alabama, Tuscaloosa, AL 35487, <sup>2</sup>Alabama Innovation and Mentoring of Entrepreneurs, University of Alabama, Tuscaloosa, AL 35487 and Visiting Research Fellow, School of Chemistry & Chemical Engineering, Queen's University Belfast, Belfast, Northern Ireland (UK), <sup>3</sup>Office for Technology Transfer, The University of Alabama, Tuscaloosa, AL 35487 and Visiting Research Fellow, School of Chemistry & Chemical Engineering, Queen's University Belfast, Belfast, Northern Ireland (UK), <sup>4</sup>Ballard Spahr Andrews & Ingersoll, LLP, Atlanta, GA 30309

Received: February 19, 2009; Accepted: July 3, 2009; Revised: July 8, 2009

**Abstract:** Currently there is great interest in graphene-based devices and applications. The main advantages of graphene include excellent conductive and mechanical properties. The applications of graphene cover a wide range of possibilities, from next-generation transistors to light-weight, high-strength composite materials. However, commercial use of graphene will depend on the development of an industrially-viable method of fabricating and handling graphene. The recent advances in manipulating graphene and patents will be reviewed with a focus on the progress of graphene nanoparticle synthesis and applications.

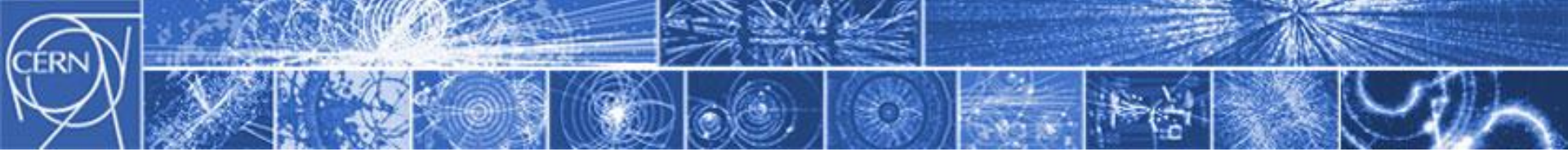
## Graphene: Is It the Future for Semiconductors? An Overview of the Material, Devices, and Applications

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by *Yaw Obeng and Purushothaman Srinivasan*

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The Electrochemical Society *Interface* • Spring 2011

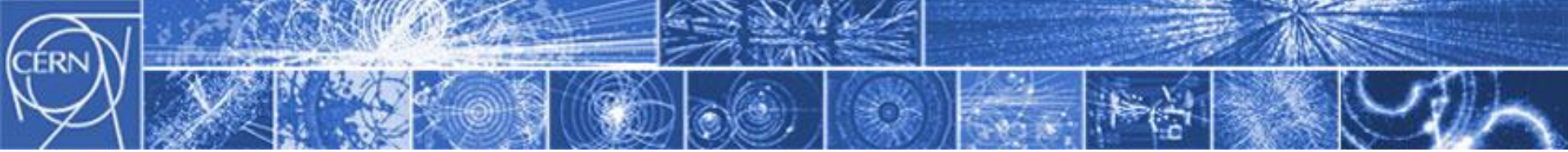


Tip 1: Literature (2)

# Read Patents

**EUROPEAN Patent Office Searching Tool**

<http://worldwide.espacenet.com/advancedSearch?locale=en> EP



## Tip 2: Don't forget to educate the evaluator

Your proposal needs technical jargon and rigour...but also needs to be understandable and readable for a non-specialised evaluator...check sites like these and learn this style:

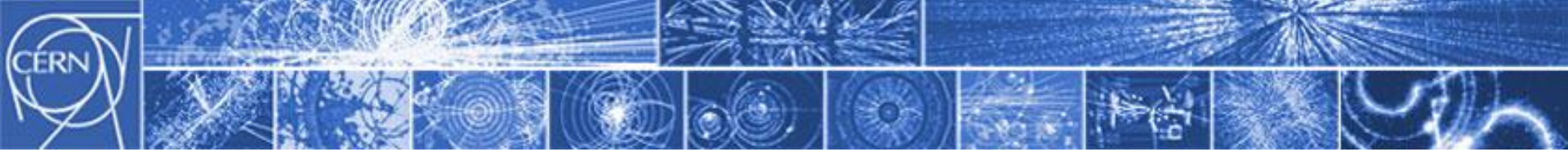
Scientific American: <http://www.scientificamerican.com/>

IEEE Spectrum: <http://spectrum.ieee.org/>

Phys. Org.: <http://phys.org/>

ACM: <http://www.acm.org/>

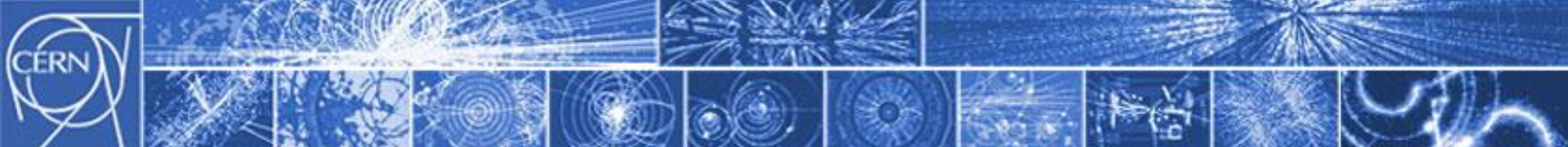
New Scientist: <http://www.newscientist.com/>



## Tip 3: Check the EU context of your proposal (1)

**Your proposal must not be an isolated initiative...it should link with EU strategies...where to check relevant ones?**

**You don't need to memorize them 😊...  
just need to write how your proposal  
aligns with the key points they propose.**



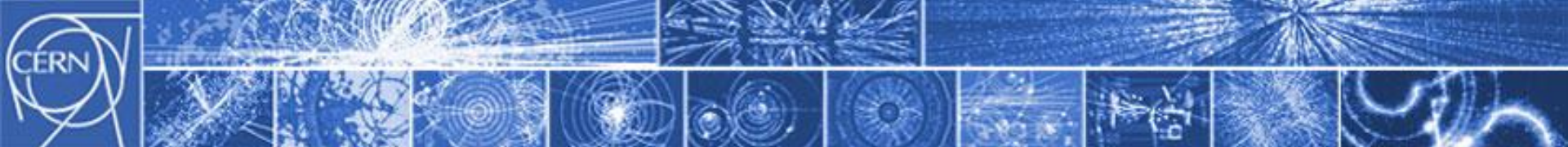
## POLITICALs “MUST READs”

Strategy Name	Web site	Key document
Europe 2020	<a href="http://ec.europa.eu/europe2020/index_en.htm">http://ec.europa.eu/europe2020/index_en.htm</a>	Europe 2020 strategy available at: <a href="http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm">http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm</a>
Innovation Union	<a href="http://ec.europa.eu/research/innovation-union/index_en.cfm">http://ec.europa.eu/research/innovation-union/index_en.cfm</a>	EC Innovation Union communication: <a href="http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=keydocs">http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=keydocs</a>
Industrial competitiveness	<a href="http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm">http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm</a>	EC communication "An integrated industrial policy for the globalization era":  <a href="http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm">http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm</a>
Resource Efficient Europe	<a href="http://ec.europa.eu/resource-efficient-europe/index_en.htm">http://ec.europa.eu/resource-efficient-europe/index_en.htm</a>	EC Communication a resource efficient Europe: <a href="http://ec.europa.eu/resource-efficient-europe/index_en.htm">http://ec.europa.eu/resource-efficient-europe/index_en.htm</a>

## Science Strategy “MUST READs”

Strategy Name	Web site	Key document
Key Enabling Technologies (KETs)	<a href="http://ec.europa.eu/enterprise/sectors/ict/key_technologies/">http://ec.europa.eu/enterprise/sectors/ict/key_technologies/</a>	EC Communication on KETs: <a href="http://ec.europa.eu/enterprise/sectors/ict/key_technologies/">http://ec.europa.eu/enterprise/sectors/ict/key_technologies/</a>



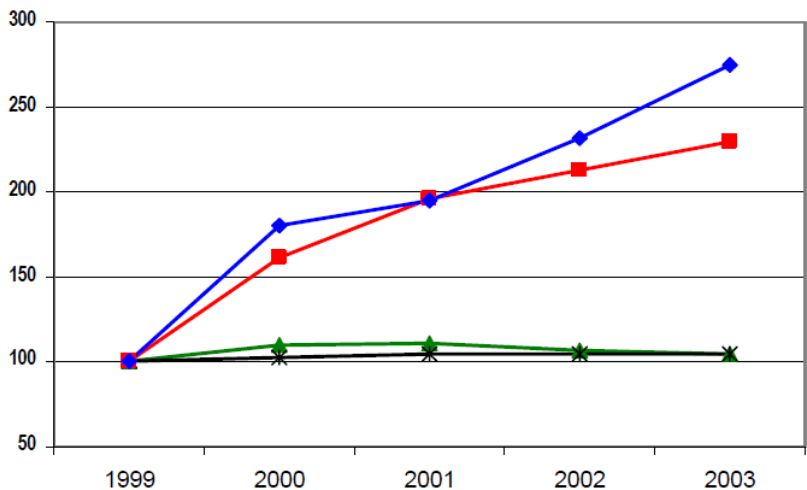


## Tip 5: Illustrate with EU statistics

**EUROSTAT can show you almost anything on EU-related statistics...**

<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/>

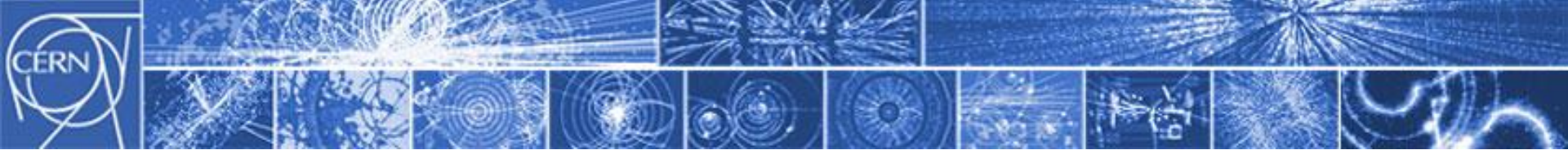
Graph 1: Recent development in the EU telecommunications sector — Index, 1999=100



—▲— Employment                      —\*— Number of main telephone lines  
—■— Mobile telephone subscribers    —◆— Internet subscribers\*

\* on the basis of the following countries: BE, CZ, DK, DE, EL, ES, CY, HU, MT, AT, PT, SI, SK, SE.

Useful if you are writing a proposal with applications to Telecommunications.



## Tip 6: Check Interesting Strategic Reports

# Examples

McKinsey <http://www.mckinsey.com/insights/mgi/research>

Accenture <http://www.accenture.com/us-en/outlook/Pages/index.aspx>

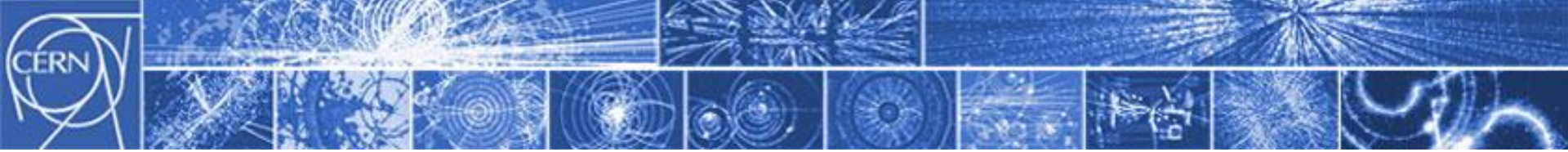
OECD <http://www.oecdbookshop.org/oecd/index.asp?LANG=EN>

Forbes <http://www.forbes.com/forbesinsights/index.html>

Arthur D. Little <http://www.adlittle.com/reports.html>

RAND <http://www.rand.org/>

ETC, etc, etc....



Tip 7: Check how industry breaths...

## Check what the « big ones » think...

Intel <http://www.intel.eu/content/www/eu/en/homepage.html>

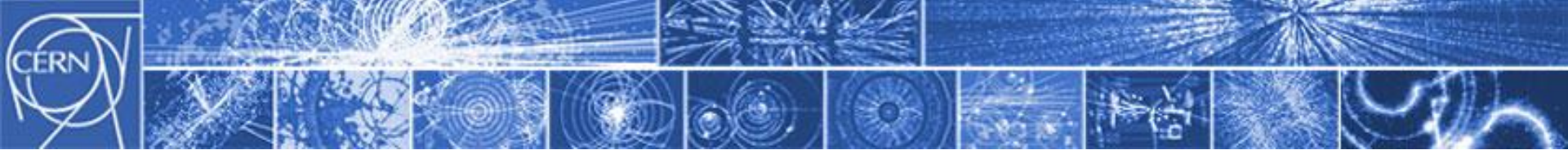
IBM <http://www.ibm.com/smarterplanet/us/en/?re=CS1>

Toyota: <http://www.tytlabs.com/>

GE health care:

<http://ge.geglobalresearch.com/locations/bangalore-india/business-units-in-bangalore/healthcare/>

Etc....



## Tip 8: Industrial Sectors

### Check the Sector Organizations...

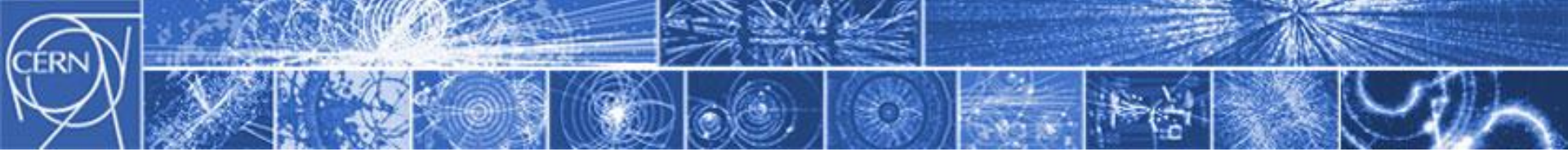
SEMI Europe <http://www.semi.org/eu/>

EPIC <http://www.epic-assoc.com/>

European Automobile Manufacturers Association of Europe

<http://www.acea.be/>

ETC...

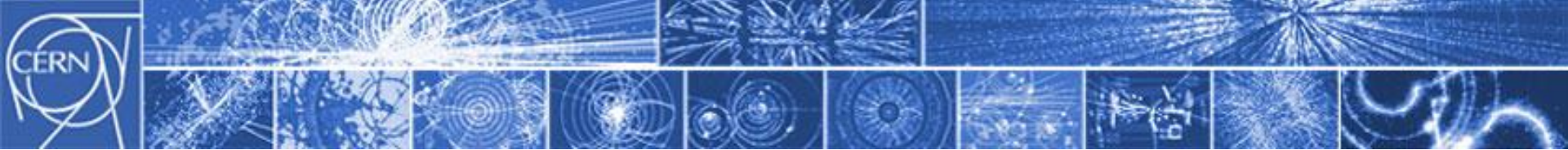


## Tip 9: Market studies are important...

Freedonia Group <http://www.freedoniagroup.com/>

Frost & Sullivant <http://www.frost.com/prod/servlet/frost-home.pag>

**Even if all you can get for free are « intros »...**



Tip 10:  
European  
Technology Platforms (ETPs)



EC Strategic R&D&I  
Programmes  
and  
Policies

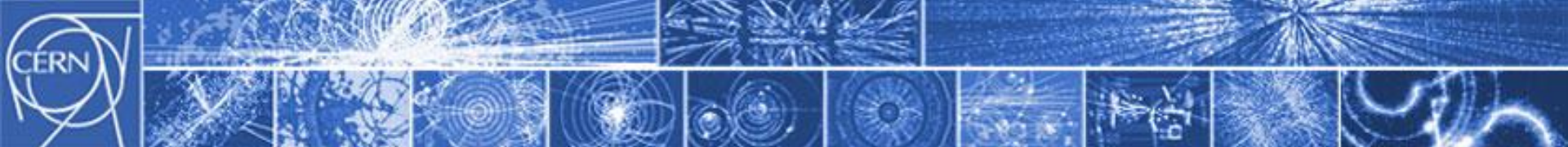
Dialogue

**EUROPEAN TECHNOLOGY PLATFORMS**

- Permanent Sectors Networks
- Develop a consensuated Strategic Roadmap
- Advise EC on R&D&I Strategy

GROUP and FORM

**Individual Private and Public R&D&I EU Organizations**



# Tip 10: European Technology Platforms

Energy	ICT	Bio-based economy	Production and processes	Transport
Biofuels	ARTEMIS	FABRE TP	ECTP	ACARE
SmartGrids	ENIAC	Food	ESTEP	ERRAC
TPWind	ISI	GAH	ETP SMR	ERTRAC
Photovoltaics	Net!Works	NanoMedicine	Manufature	Waterborne
ZEP	NEM	Plants	FTC	ESTP
SNETP	NESSI	Forest-based	WSSTP	
RHC	EUROP		SusChem	
	EPOSS		EuMaT	
	Photonics21		IndustrialSafety	

Embedded Systems

Air Transport

Electronics

Materials & Manufacturing

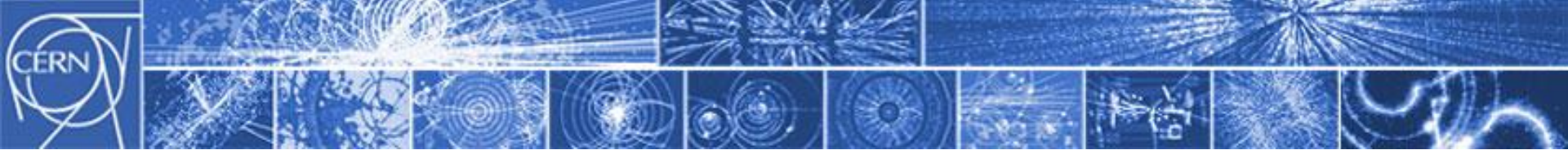
Road Transport

System Integration

Chemistry

Materials

Photonics



# Tip 10: European Technology Platforms



ENIAC-GB-105-v101110

**Vision, Mission and Strategy  
for European Micro- and Nanoelectronics**

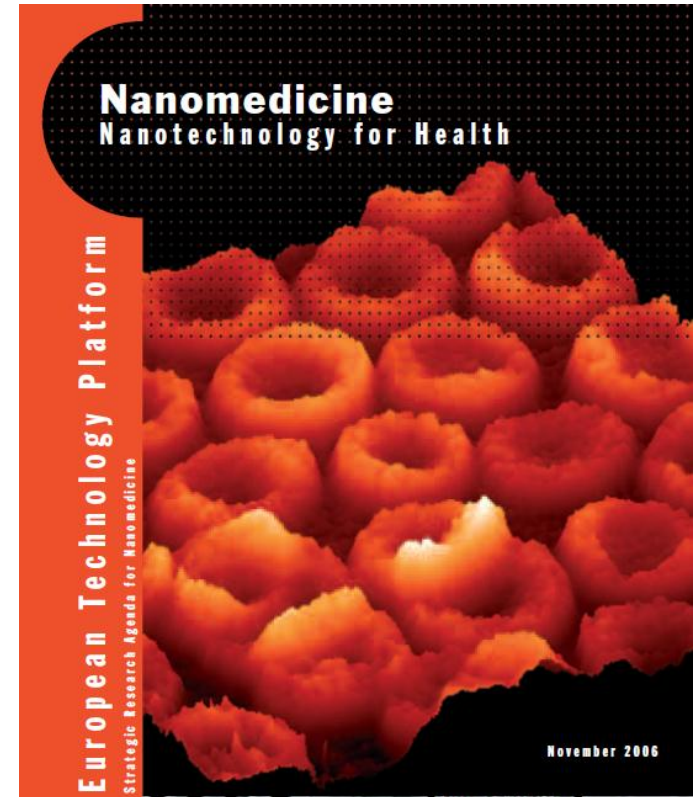


**Multi Annual Strategic Programme**

Submitted by the Industry and Research Committee

elaborated by  
AENEAS and CATRENE

10 November 2010



**Check their Agendas, Vision papers, etc...and connect your project with them.**





- **FINALLY...BEFORE START WRITING...**

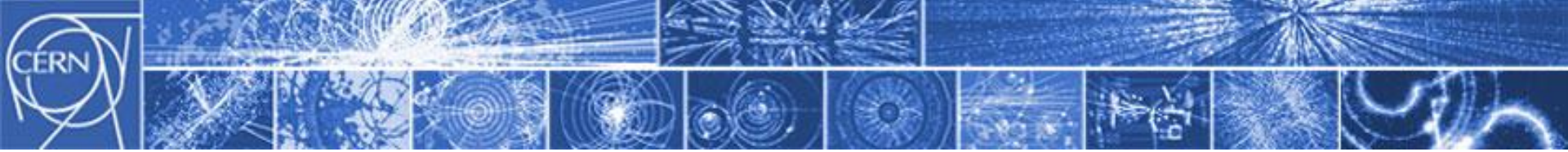
- Dedicate 2 days:

- 1 day **Document gathering**
- 1 **Reading and Understanding**

- Don't bury yourself in information...

- Be selective and to the point.
- Discard materials too technical and/or unintelligible.
- Favor « journalistic type » literature.





**Thanks  
&  
Good luck!**