Fast *know-how* workshop on initiating EU proposals

**Module 3:
Documenting yourself**

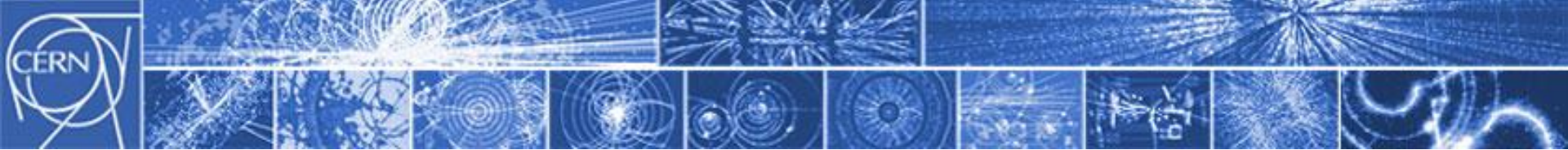Pablo Garcia Tello (KT)

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.

❑ **Of course you always read the latest <u>technical</u> review paper on the field… and especially those one with a section such as "<u>future challenges</u>".**

❑ **BUT…who reads also the latest <u>application</u> review paper in the field… and especially the ones telling about "<u>future trends</u>"?**

Recent Progress in Graphene-Related Nanotechnologies

Rachel M. Frazier[1],*, Daniel T. Daly[2], Richard P. Swatloski [3], Kevin W. Hathcock [4], and Clint R. South[4]

[1]Alabama Innovation and Mentoring of Entrepreneurs, University of Alabama, Tuscaloosa, AL 35487, [2]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), [3]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), [4]Ballard Spahr Andrews & Ingersoll, LLP, Atlanta, GA 30309

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

by Yaw Obeng and Purushothaman Srinivasan

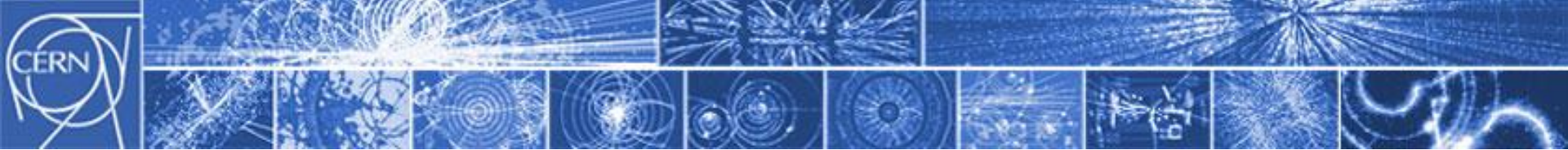The Electrochemical Society *Interface* • Spring 2011
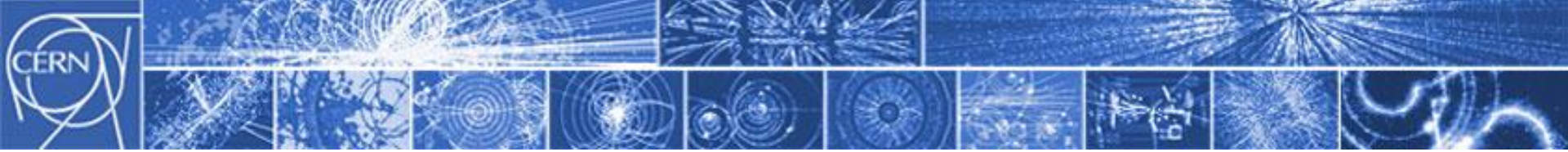
Tip 1: Literature (2)

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:

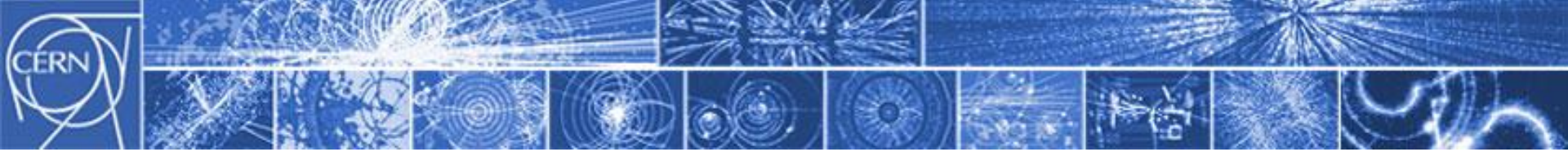**Scientific American: http://www.scientificamerican.com/**

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

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

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

New Scientist: http://www.newscientist.com/
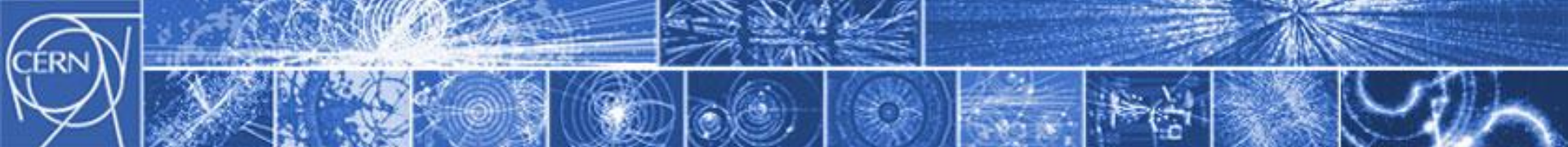
Tip 3: Check the EU context of your proposal (1)

Your proposal <u>must not be </u>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	http://ec.europa.eu/europe2020/index_en.htm	Europe 2020 strategy available at: http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm
Innovation Union	http://ec.europa.eu/research/innovation-union/index_en.cfm	EC Innovation Union communication: http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=keydocs
Industrial competitiveness	http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm	EC communication "An integrated industrial policy for the globalization era": http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm
Resource Efficient Europe	http://ec.europa.eu/resource-efficient-europe/index_en.htm	EC Communication a resource efficient Europe: http://ec.europa.eu/resource-efficient-europe/index_en.htm

Science Strategy "MUST READs"

| Strategy Name	Web site	Key document
Key Enabling Technologies (KETs)	http://ec.europa.eu/enterprise/sectors/ict/key_technologies/	EC Communication on KETs: http://ec.europa.eu/enterprise/sectors/ict/key_technologies/
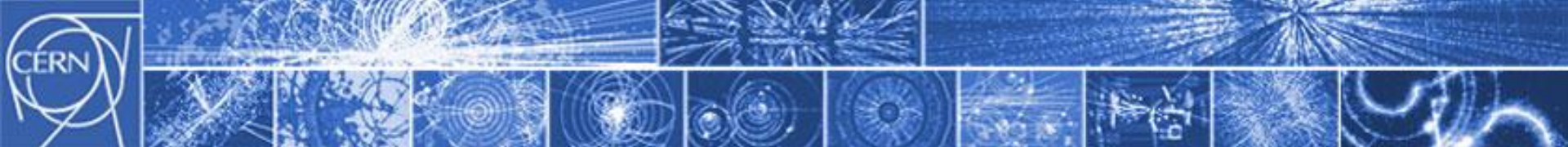
Tip 5: Illustrate with EU statistics

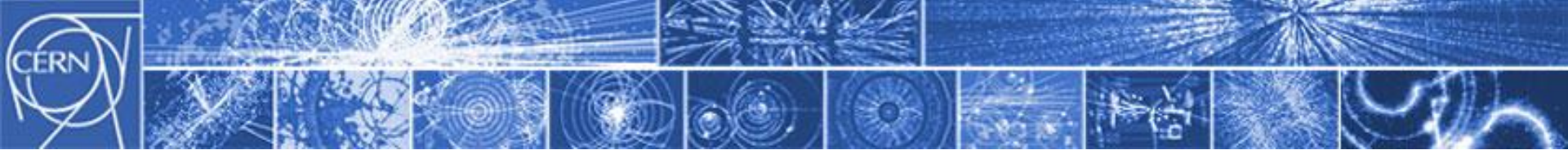## EUROSTAT can show you

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
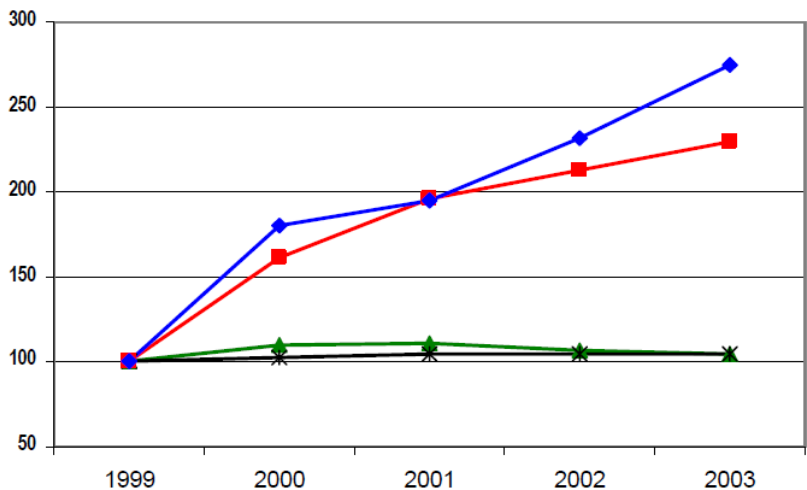
Legend:
- Employment
- Number of main telephone lines
- Mobile telephone subscribers
- Internet subscribers*

* 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.

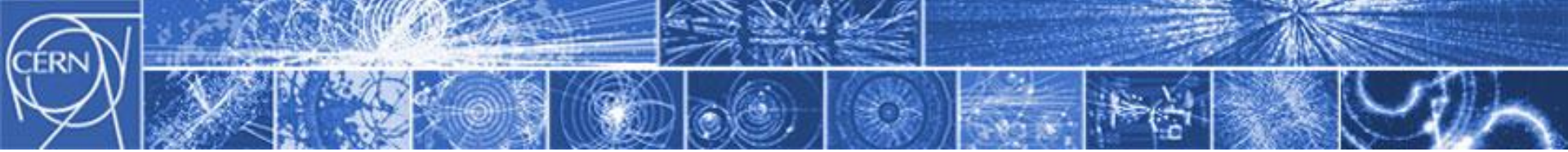# Tip 6: Check Interesting Strategic Reports

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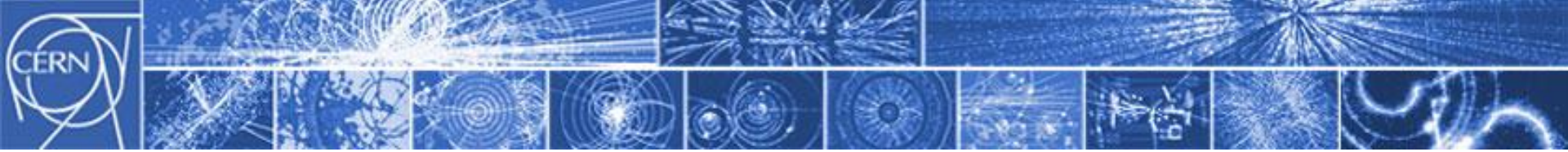
Toyota: http://www.tytlabs.com/

GE health care:
http://ge.geglobalresearch.com/locations/bangalore-india/business-units-in-bangalore/healthcare/

Etc….

Tip 8: Industrial Sectors
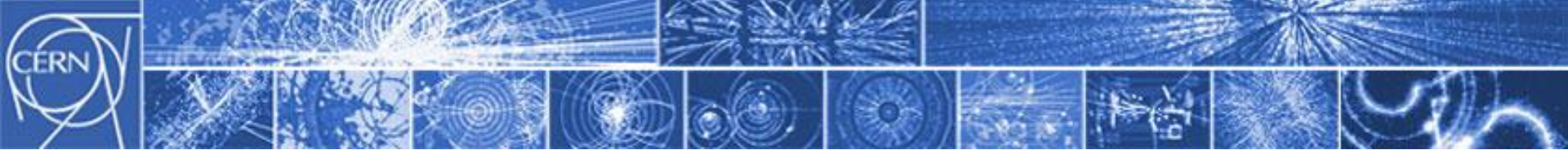
Check the Sector Organizations…

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 »…
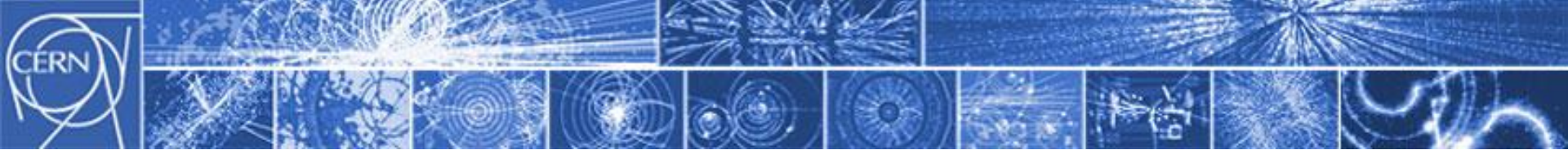
Tip 10:
European
Technology Platforms (ETPs)

EC Strategic R&D&I
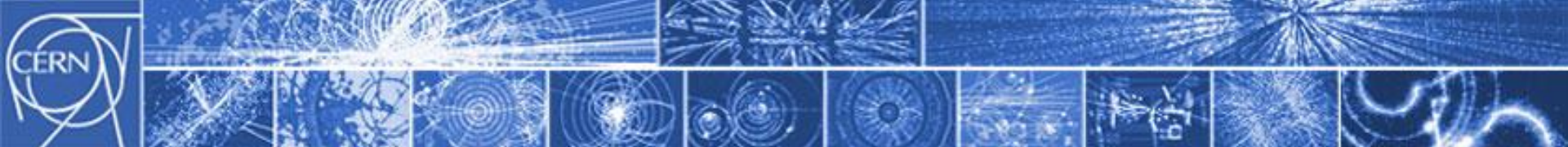Programmes
and
Policies

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	Manufuture	Waterborne
ZEP	NEM	Plants	FTC	ESTP
SNETP	NESSI	Forest-based	WSSTP	
RHC	EUROP		SusChem	
	EPoSS		EuMaT	
	Photonics21		IndustrialSafety	

Labels on diagram: Embedded Systems, Air Transport, Electronics, Road Transport, Materials & Manufacturing, Chemistry, System Integration, Materials, Photonics

http://cordis.europa.eu/technology-platforms/individual_en.html

Tip 10: European Technology Platforms

Towards a Bright Future for Europe

Strategic Research Agenda in Photonics

PHOTONICS 21
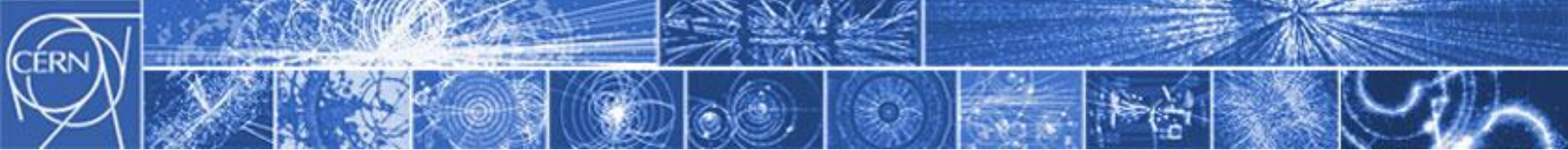
ENIAC-GB-105-v101110

Vision, Mission and Strategy
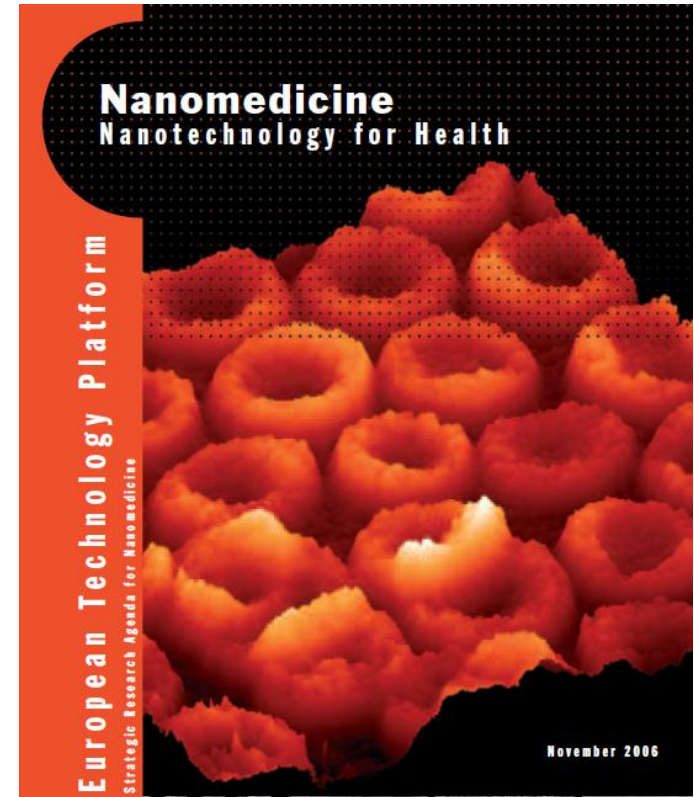
for European Micro– and Nanoelectronics

eniac
JOINT UNDERTAKING

Multi Annual Strategic Programme

Submitted by the Industry and Research Committee

elaborated by
AENEAS and CATRENE

10 November 2010

Aeneas   CATRENE

Nanomedicine
Nanotechnology for Health

European Technology Platform
Strategic Research Agenda for Nanomedicine

November 2006

Check their Agendas, Vision papers, etc…and connect your project with them.
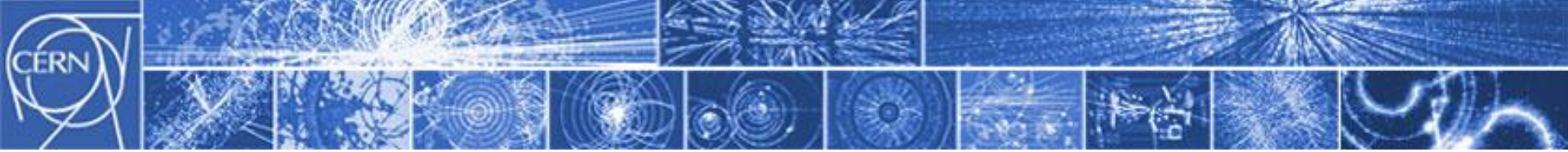
- # FINALLY…BEFORE START WRITING…

- 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!