Ways of successful science, technology and innovation cooperation between Europe and the USA

Lessons learned and concluding remarks

BILAT USA workshop

Vienna, 24 April 2012

Evolution of international S&T cooperation

- Towards a multi-polar S&T world
 - The emergence of other countries (China, India, ...)
 - Evidence for increasing international collaboration
 - Average collaboration distance is higher
 - Virtualisation of science
 - ICT infrastructure allows for intense collaboration
- New drivers for enhanced cooperation
 - Individual researchers (to work with the best scientists)
 - Research institutions (strategic alliances)
 - Business R&D (approaching to markets/knowledge)
- From narrow to broader paradigm
 - Collaboration in the "knowledge triangle"

Evolution of policies on international <u>cooperation</u>

- Both the European Union, individual Member States and US funding agencies are redefining their international cooperation strategies, priorities and tools
 - Looking for more intense cooperation ranging from fundamental research to innovation
 - Moving from individual to institutional support
- In the EU, the Council created SFIC (Strategic Forum for International S&T Cooperation)
 - Partnership between the European Commission and Member and Associated States to *"facilitate the further development, implementation and monitoring of the international dimension of ERA"*

Experiences in the

UE-US S&T cooperation (I)

- EU and US S&T communities are cooperating by using a variety of schemes
 - From mobility actions to joint research projects or more innovative schemes
 - "policy experimentation" arena
- The participation of US entities in the FP7 is growing but there is still room for improvement
 - Difficulties to accept the EU-FP7 rules for participation
- S&T cooperation between EU and US partners is not limited to FP
 - Bilateral US-MS schemes are moving towards multilateral schemes
 - SFIC has provided the basis for defining MS+AC international cooperation

Experiences in the

UE-US S&T cooperation (II)

- The workshop has presented a set of experiences and lessons learned from them
 - Identification of legal barriers (Belgium Court, Penalties, ownerships of foreground, etc.) for signing Grant
 Agreements or Consortium Agreements (40% of US partners did not signed the GA!!)
 - Subcontracting, third parties??
 - Easier if no exchange of funds
 - The importance of pre-commercial procurement to support innovation at the international level
 - The specificity of somes areas (i.e. space sector)
 - Different behaviour of US agencies (i.e. NASA)
 - The lack of information for potential participants (NCP??)

The EU-US cooperation staircase

A couple of cases but not a c roadmap for the fu						J	oint centres or labs with stable joint funding			
with limited resources pr Participation i (i.e. EU-FP7,					nchronized calls for joint iorities and virtual labs					
					in research projects , thematic areas, or arch infrastructures)			Legal problems not solved yet		
		(PhD	ility programmes students, post-docs, ties, entrepreneurs)				Many experiences but slowly moving from individual to institutional support			
	Exchar	nge of in	formatio	on	Yes,	but	not in a very systematic wa			/ay

Trends for the future (I)

- Progressive openness of R&D actions/programmes
 - From the US:
 - NSF: take advantage of PIRE, IRES, SAVI, ... (other agencies ??)
 - From the EU:
 - Increased participation in H2020
 - Good experiences: mobility (NRO), joint projects (ANR, BMBF...)
 - Initiative "Approaching USA" with a set of action points
 - From individual MS:
 - A variety of programmes depending on the country
 - Mobility, joint projects, joint labs, Master/PhD programmes, ...
- Agreements between individual institutions
 - Universities, research centres
 - Governmental support ?

Trends for the future (II)

- Increased role of innovation
 - Academic-industry involvement
 - New actors??
 - Entrepreneurship
 - EIT involvement??
- Cooperation US-EU in a global scenario
 - In the G8 context
 - research councils
 - research infrastructures
 - Moving to G20??

Conclusions

International cooperation in S&T is not an option: it is an essential driver for growth and knowledge creation

- US-EU S&T collaboration is growing but there is still room for improvement
- Hints for the future
 - How to move towards H2020?
 - ... taking into account the accumulated experience (global ERA-NET?)
 - How to implement joint actions between several MS and US agencies?
 - "Variable geometry" approach (inter-agency agreements)
 - With or without "common pot"
 - How to increase university-industry relationships?
- A lot of work to do!!