



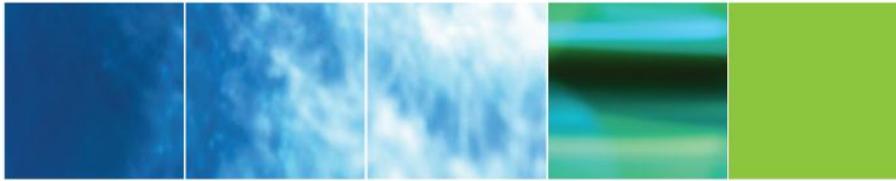
FP7 and Ireland Horizon 2020 and Europe

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What is the 7th Framework Programme?

- Biggest research programme in the world
- €50B+ over 2007 – 2013
- Covers all areas of technology and science
- Highly competitive funding, about 20% success rate across Europe
- In Ireland, managed by Enterprise Ireland on behalf of DJEI



There's more help than ever before...



The National Support Network for FP7



Ireland's drawdown: €438M
1.55% of the available budget
i.e. above Ireland's target of 1.08% from 2007-2013



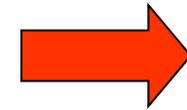
FP7 – currently...

- The biggest research fund in the world - growing in scale – recession proof
- It's all about research excellence (ERC), researcher careers (Marie Curie) and collaborative research (with a strong PPP focus – even responding to the current economic crisis)
- Lead players established – monitoring – looking for impact...
- 2013 Calls are open (or closing) – they include Bridging Activities into Horizon 2020
- Recent national investment in research means Ireland can participate in FP7 from a far stronger position than before
- If looking for research funding there is something in it, if looking for something else it's there too...



Funding to Higher Education Participants by Institution

HES Institution	Funding to Irish Participants (€)	Total Funding to Projects (€)
TCD	€ 60,728,220	€ 505,497,966
UCD	€ 54,338,981	€ 478,555,760
UCC	€ 48,764,860	€ 432,597,480
NUIG	€ 34,685,784	€ 348,393,270
DCU	€ 21,976,222	€ 131,337,624
UL	€ 13,438,780	€ 192,686,360
RCSI	€ 8,834,080	€ 43,174,201
NUIM	€ 4,464,320	€ 26,155,211
WIT	€ 11,425,855	€ 94,256,055
DIT	€ 2,541,942	€ 24,458,602
CIT	€ 2,371,144	€ 54,630,303



**Ireland's
higher education
drawdown:
€269M**

EC Top 250
TCD 82
UCD 93
UCC 104
NUIG 149



Total Number of Applicants in Submitted Proposals, Number in Successful Applications and Success Rate

Higher Education Institution	Total Number of Participations	Total Number of Successful Participations	% Participation Success Rate
UCD	640	148	23.1%
TCD	656	146	22.3%
UCC	612	145	23.7%
NUIG	443	97	21.9%
DCU	318	64	20.1%
UL	214	40	18.7%
WIT	160	27	16.9%
NUIM	124	18	14.5%
DIT	104	14	13.5%
RCSI	65	14	21.5%
CIT	60	11	18.3%



Funding to Higher Education Participants by Institution – comparison of FP6 (source: National Evaluation of FP6, Forfas) and FP7

HES Institution	Funding to Irish Participants (€ million)	
	FP6	FP7
TCD	28.6	60.7
UCD	22.6	54.3
UCC	30.1	48.8
NUIG	24.1	34.7
DCU	9.4	21.9
UL	5.0	13.4
WIT	4.9	11.4
RCSI	2.7	8.8
NUIM	3.1	4.5
DIT	1.9	2.5
CIT	0.6	2.4



Some examples 1

- **20 new research jobs** at the Tyndall National Institute following the award of €8 million in funding; at the cutting-edge of telecommunications, nanoelectronics, medical devices and environmental monitoring
- Professor Kevin O'Rourke, TCD – Ireland's **first ERC Advanced Grant** to study Trade and the Great Depression in a Long Run Perspective
- Telecommunications Software & Systems Group (TSSG) at Waterford Institute of Technology leading 5 new research projects - €3.8m funding; improving and **shaping the 'Future Internet'**; investigating ICT security; social networking and systems architecture
- Dr. Chaoying Wan – **research fellow coming into Ireland** to study assembly of novel bone-mimetic hybrid membranes



Some examples 2

- Intel - Strategic use of FP7 with 18 successes to date; **15 R&D staff** in ICT, Nanotech, eHealth, Manufacturing (energy). **Industry partners** include Microsoft, SAP, Siemens, BMW, IBM etc. **Local partners include TCD, UCD, WIT, Tyndall, Lake Comm.**
- DePuy - Marie Curie Industry-Academic Partnership in the state of the art medical device casting; **secondments between DePuy and University of Birmingham**: 12 to & 9 from DePuy; salaries at 100%.
- Wavebob - Demonstrating **full size wave energy converter** – intention that it will be grid-connected; partners: VATTENFALL AB, Generg Novos Desenvolimentos S.A., GERMANISCHER LLOYD GMBH, HYDAC System GmbH, WEDGE GLOBAL S.L; Total cost: €8.5 million - Commission contribution: €5 million



Some examples 3

- The Irish Research Council for Science, Engineering and Technology - Marie Curie **co-funding of international mobility** Fellowships in Science Engineering and Technology: >50 researchers; salaries at 100%
- Department of Agriculture, Fisheries and Food - **coordination of European trans-national research** in Organic Food and Farming Systems
- Enterprise Ireland – **coordination of micro and nanotechnologies** for a new highly competitive European industry
- Mid West Regional Authority and Shannon Development – **regional development linking research driven clusters** in biomass mobilisation



Successful participants in proposals securing greater than €1m in funding

Applicant Name	Funding Scheme	Total Irish Applicant EC Requested Contribution €
Irish Research Council for Science, Engineering and Technology	Marie Curie (COFUND)	€ 4,980,070
Opsona Therapeutics Ltd	Health (CP-FP)	€ 3,589,207
Irish Research Council for the Humanities and Social Sciences	Marie Curie (COFUND)	€ 2,698,140
Trinity College Dublin	ERC (Advanced Grant)	€2,480,587
University College Dublin	Health (CP-IP)	€ 2,226,380
Trinity College Dublin	NMP (CP-IP)	€ 2,143,701
Royal College of Surgeons in Ireland	ERC (Starting Grant)	€ 1,999,531
Trinity College Dublin	ERC (Starting Grant)	€ 1,999,313
Wavebob Ltd	Energy (Collaborative Project)	€ 1,899,892
Trinity College Dublin	ERC (Advanced Grant)	€ 1,889,676
St. James's Hospital	Health (CP-FP)	€ 1,889,100

WIT – 1 ERC Starter Grant...



Ireland's industry drawdown: €115M (FP6 x4)
78% to SMEs
and Intel, a star performer, with growing numbers of ICT multinationals

...comfortably above the EU 15% target
...success rates equivalent to academic institutions

Ireland is up there with the best BUT needs to aspire to bigger finance...

Number of Applicants in Submitted Proposals, Number in Successful Proposals and Success Rates by Country

Country	Applicants in eligible proposals from country	Applicants in retained proposals from country	Funding Granted to applicants (€)	Success Rates	
				Applicants from country	EC financial contribution to applicants from country
UK - United Kingdom	50,529	11,997	3,981,628,464	23.74%	21.79%
AT - Austria	10,801	2,370	736,946,235	21.94%	21.40%
FI - Finland	8,299	1,883	652,791,654	22.69%	20.13%
DK - Denmark	7,805	1,899	656,902,640	24.33%	23.52%
NO - Norway*	6,399	1,598	509,379,148	24.97%	20.95%
IL - Israel*	6,320	1,391	494,940,718	22.01%	17.22%
IE - Ireland	5,961	1,376	438,356,756	23.08%	21.78%
<i>EU Average</i>				22.18%	20.72%
PT - Portugal	8,039	1,578	318,405,456	19.63%	15.79%
HU - Hungary	5,662	1,178	194,957,536	20.81%	15.03%
CZ - Czech Republic	4,957	1,016	180,990,017	20.50%	16.18%

* Associated Country



FP7 2012-2013 and Horizon 2020...

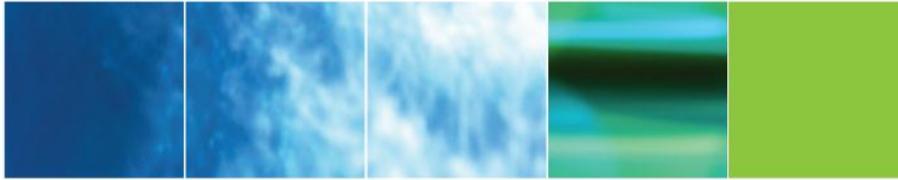
- One Call series left: from July 2012 *****Bridging FP7 to H2020*****
- H2020 will be a bigger research fund (starting position: €80BN)
- Includes Research Excellence, Industrial Leadership and Grand Societal Challenges
 - ◆ Health, demographic change and wellbeing
 - ◆ Food security, sustainable agriculture, marine and maritime research and the bio- economy
 - ◆ Secure, clean and efficient energy
 - ◆ Smart, green and integrated transport
 - ◆ Climate action, resource efficiency and raw materials
 - ◆ Inclusive, innovative and secure societies
- Brings the CIP and EIT in from the cold
- Further simplification: 100% research funding + 20% overhead



Horizon 2020

3 Pillars -

- Excellent science (ERC, Marie Skłodowska Curie, etc.)
- Industrial leadership (ICT, NMP, FETs etc.)
- Societal challenges (6 or 7)

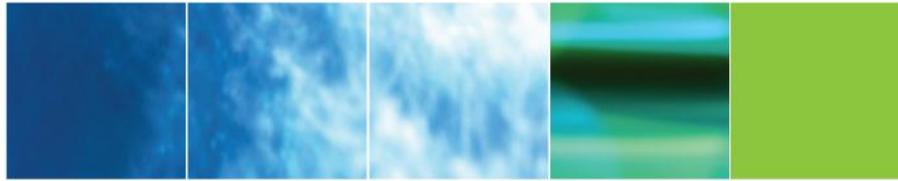


We'll...

- ...guide you to the piece of the programme that's right for you right now
- ...or influence next year's Call to position you for success

- ...help you find the right partners
- ...and handhold you through the writing of your application

- ...help you find the time to do it
- ...and make you feel at home abroad



Ireland – Northern Ireland co-operation

Collaborative applicants	Ireland	Northern Ireland
765	466	299
Successful		
196	117	79
Funding		
€60.7M	€44M	€16.7M
	% total Irish applicants	% total Northern Irish applicants
	7.82%	32%
	% successful IE applicants	% successful NI applicants
	8.5%	39.7%



Ireland – NI partnerships – examples Security

- CommonSense – detection of Improvised Exploding Devices (IEDs), co-ordinator UCC, PSNI a partner
- Handhold – Handheld olfactory detector, co-ordinator QUB, partners UCC, NUIG



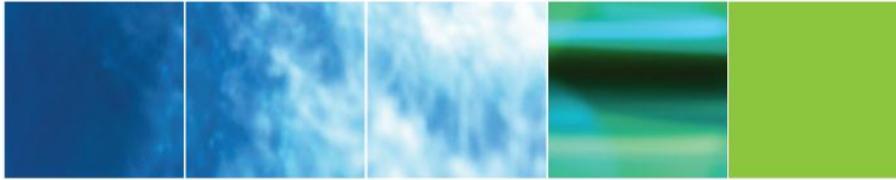
Ireland – NI partnerships – examples ICT

- SLA@SOI - Empowering the service economy with SLA-aware infrastructures – Intel & QUB
- VERVE - Vanquishing fear and apathy through E-inclusion: Personalised and populated Realistic Virtual Environments for clinical, home and mobile platforms – TCD and Kainos, Belfast
- SiElegans - Emulating the C. elegans nervous system: A blueprint for brain-inspired computational architectures – NUIG & Ulster partners



Ireland – NI partnerships – examples NMP

- **EINSTEIN** Energy Efficient Buildings call 2011 –Title: EFFECTIVE INTEGRATION OF SEASONAL THERMAL ENERGY STORAGE SYSTEMS IN EXISTING BUILDINGS – Rol partner: Scandinavian Homes Ltd , NI partner: University of Ulster.
- **NeuroNano** - Do nanoparticles induce neurodegenerative diseases? Understanding the origin of reactive oxidative species and protein aggregation and mis-folding phenomena in the presence of nanoparticles –UCD coordinating the project, Ken Dawson, University of Ulster

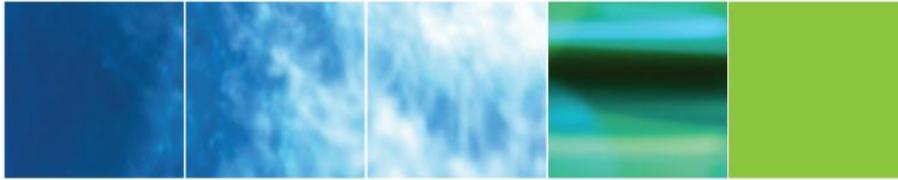


Horizon 2020 - going forward

- Already planning our approach

- Consultation with our stakeholders
 - ◆ Review of our services
 - ◆ Identify strengths and weaknesses
 - ◆ How to build on these and address these

- Input to all national discussions and EU discussions



Thank you