

European Research Funding

HORIZON 2020

Paul Knobbs
European Funding Manager

Research Support Office
Aston University

What we'll cover...

- ▶ Tips, general rules and context
- ▶ Structure of Horizon2020
 - ▶ Pillar 1 – Excellence Science
 - ▶ Pillar 2 – Industrial Excellence
 - ▶ Pillar 3 – Societal Challenges
- ▶ Funding regime
- ▶ Building a network
- ▶ More tips and questions

I'll start with a few tips.

- ▶ Become an expert reviewer. DO IT.

http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020-experts

- ▶ Save the H2020 and Participant Portal website to your favourite

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

- ▶ Down load the Work Programmes and read them. **Know where you fit in.**

<http://ec.europa.eu/programmes/horizon2020/>

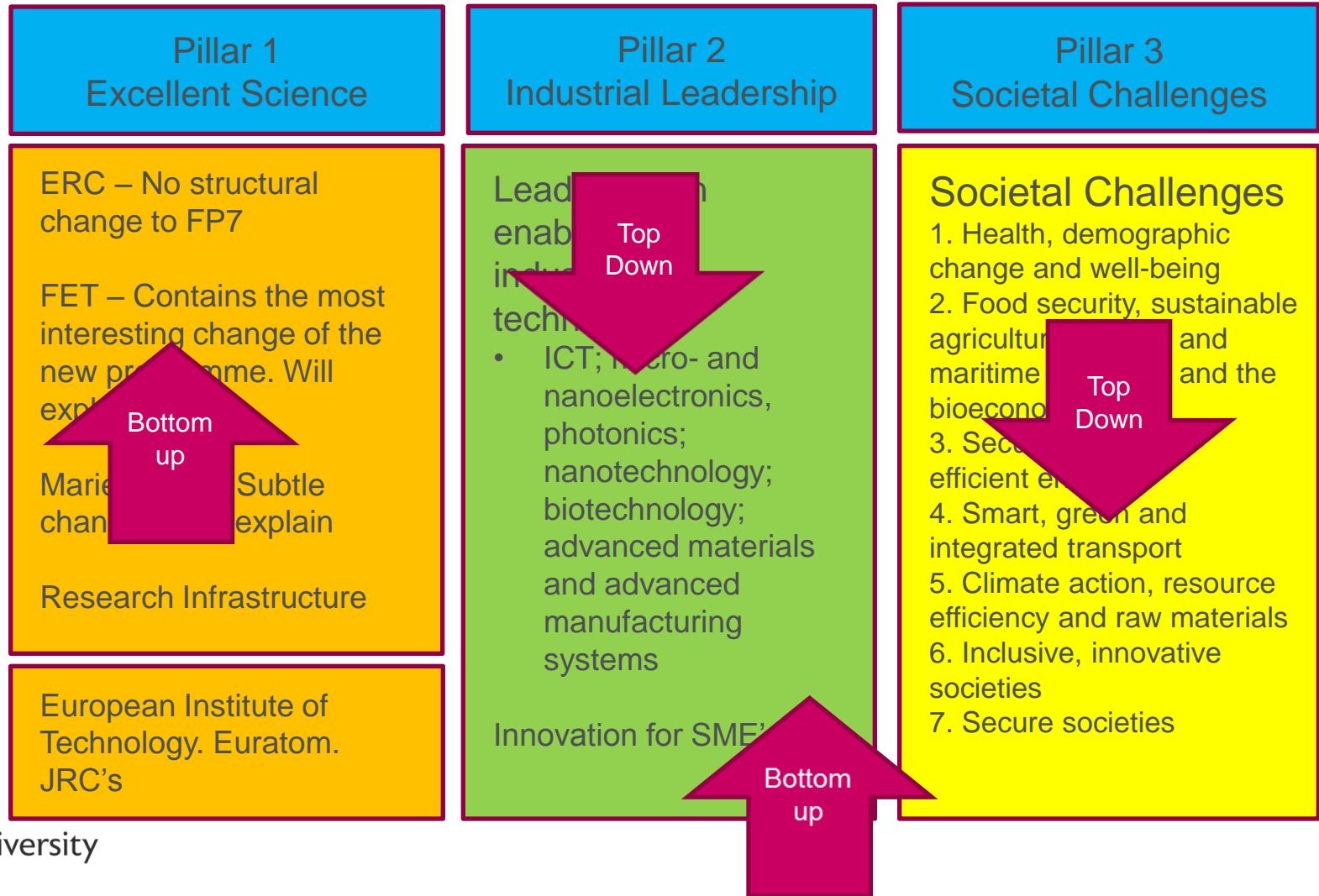
- ▶ Use **Linked in**...join the H2020 groups. It's an extremely active community.

- ▶ Attend more events like this, good source of prospective partners.

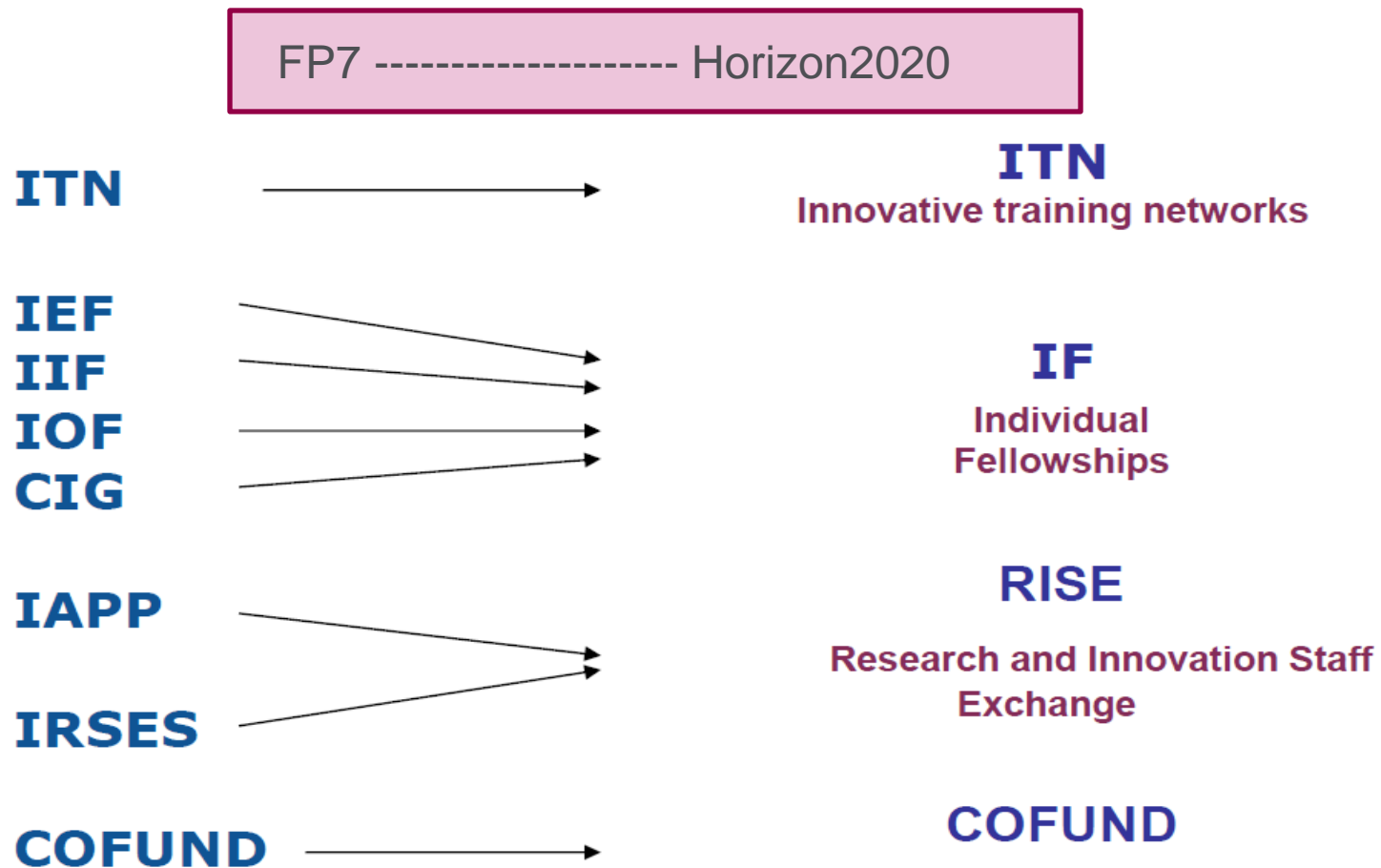
General points for H2020

- ▶ **SME participation is strongly encouraged. + strongly in demand. Consortia need SMEs.**
- ▶ Three member states required to form an eligible consortium
- ▶ Single application form structure across all elements of H2020
 - ▶ Scientific Excellence (50%)
 - ▶ Impact (30%)
 - ▶ Implementation (20%)
- ▶ Bi annual work programmes

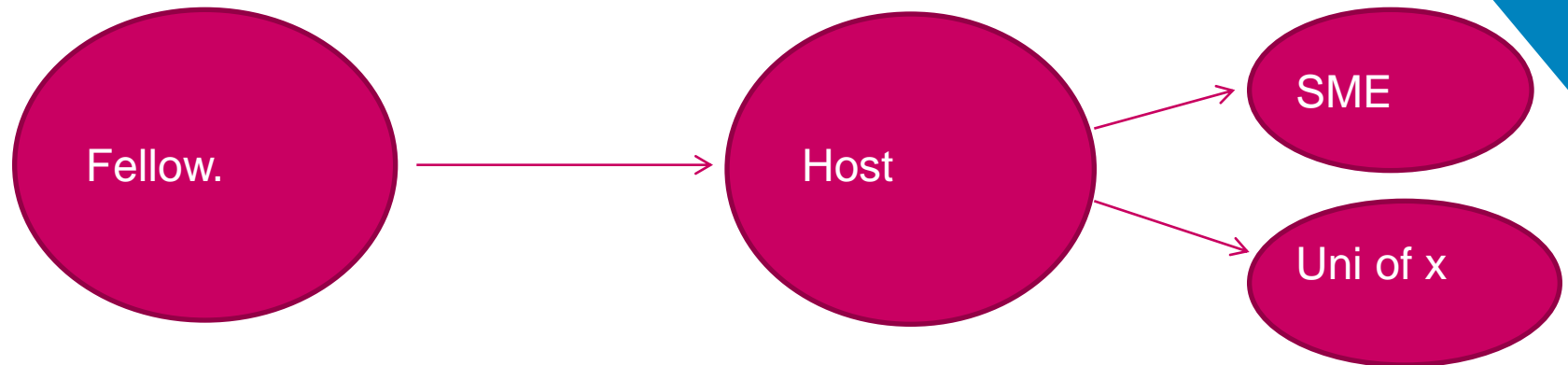
Horizon 2020 Structure



Pillar 1: Excellent Science - MC



Individual Fellowships (IF)



The Rules

- Fellow can be within EU or outside of EU.
- Nationality is not an issue.
- Must not have spend more than 12 months in previous 3 years in host country.
- Must have a PhD, or more than 4 years research experience.

Hosts responsibilities

- Provide a home for 2 years for IF
- Training and Knowledge Transfer
- IF can spend up to 30% away from host at partners to undertake research

ITN Schemes available

European Training Network (ETN)

- Quick Notes – Most familiar, 6 to 10 partners, academic and non academic. 540 months

European Industrial Doctorates (EID)

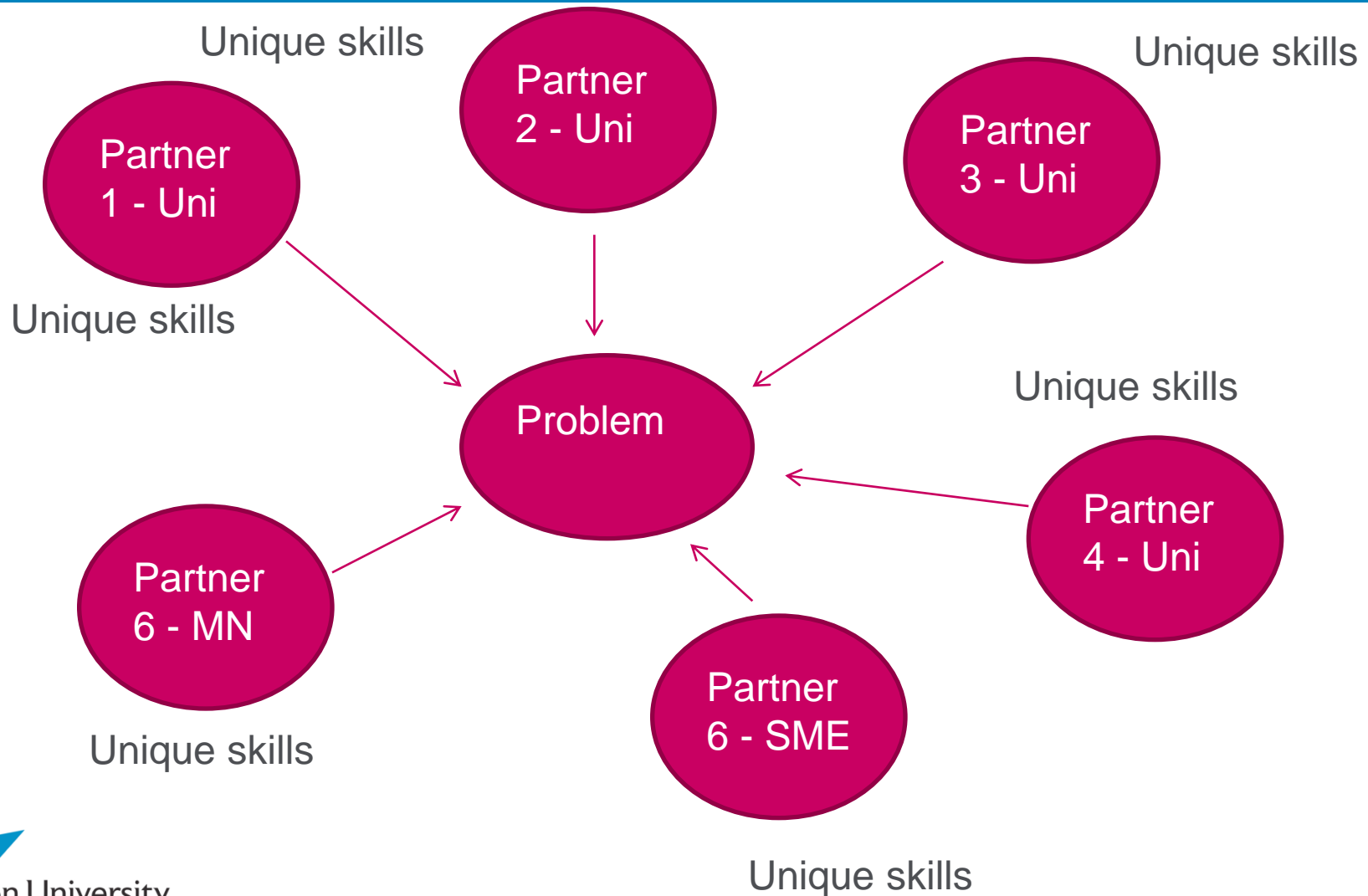
- Quick notes – NEW. Two partners minimum. **Researchers*** must spend 50% of their time in non-academic setting. 180 months.

European Joint Doctorates (EJD)

- Quick notes – NEW. Creation of joint doctoral programmes leading to the delivery of joint, double or multiple doctoral degrees.

540 months

ITN – ETN, example



Marie Curie Timings

MSC Action 2014	Open	Close
ITN	11 December 2013	09 April 2014
IF	12 March 2014	11 September 2014
RISE	11 December 2013	24 April 2014
Co Fund	10 April 2014	02 October 2014

MSC Action 2015	Open	Close
ITN	02 September 2014	13 January 2015
IF	12 March 2015	10 September 2015
RISE	06 January 2015	28 April 2015
Co Fund	14 April 2015	01 October 2015

Pillar 2: Industrial Leadership

- Based around 3 thematic Work Programmes:-
 - Nano, Materials, Process technology, Biotech (NMPB)
 - Information Communication Technology (ICT)
 - Space
- These are collaborative proposals, industry participation is vital
- Projects typically 6 – 12 partners, €3 to €4 million. However, larger projects are allowed.

Nano, Material, Process and Biotechnology Work Programme (NMPB WP) NMPB

► NMPB – Bioenergy related calls:-

SPIRE.2015-1: New adaptable catalytic reactor methodologies for Process Intensification

SPIRE.2015-2: Energy and resource management systems for improved efficiency in the process industries

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-leit-nmp_en.pdf

Pillar 2 – Innovation for SMEs

SME instrument (replaces Research for SMEs in FP7)

- only for research intensive SMEs (**may collaborate with HEIs / others**)
- enhancing innovation capacity
- supporting market driven innovation
- **output based funding**

Provides funds and coaching for:

Research
(*public funds*)



DEVELOPMENT



Commercialisation
(*investors (Angels / VCs)*)

1. Concept & feasibility (€50K lump sum)
2. Demo / Market replication / R&D (€1-3M milestone linked)
3. Commercialisation (no direct funding)

[Entry at level 1 or 2]

Stimulating the innovation potential of SMEs for a low carbon energy system

- ▶ Specific Challenge: SMEs play a crucial role in developing resource-efficient, cost-effective and affordable technology solutions to decarbonise and make more efficient the energy system in a sustainable way.
- ▶ Reducing energy consumption and carbon footprint by smart and sustainable use (including energy-efficient products and services as well as ‘Smart Cities and Communities’),
- ▶ Low-cost, low-carbon electricity supply (including renewable energy as well as CCS and re-use),
- ▶ Alternative fuels and mobile energy sources

<http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/2543-sie-01-2014-1.html>

The Societal Challenges, €

Health, demographic change and wellbeing	7 472
Food security, sustainable agriculture, marine and maritime research & the bio-economy	3 851
Secure, clean and efficient energy*	5 931
Smart, green and integrated transport	6 339
Climate action, resource efficiency and raw materials	3 081
Inclusive and reflective societies	1 309
Secure societies	1 695
<i>Science with and for society</i>	<i>462</i>
<i>Spreading excellence and widening participation</i>	<i>816</i>

Challenge 2 – Food Security, Sustainable Agriculture, Marine and Maritime Research and the Bio-Economy

Sustainable and competitive bio-based industries

- ▶ **ISIB-5-2014: Renewable oil crops as a source of bio-based products**
- ▶ ISIB-6-2015: Converting CO₂ into chemicals
- ▶ **ISIB-7-2014: Public procurement networks on innovative bio-based products**

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-food_en.pdf

Challenge 3 – Secure, Clean and Efficient Energy Challenge

- ▶ LCE 11 – 2014/2015: Developing next generation technologies for biofuels and sustainable alternative fuels
- ▶ LCE 12 – 2014/2015: Demonstrating advanced biofuel technologies
- ▶ LCE 13 – 2015: Partnering with Brazil on advanced biofuels
- ▶ LCE 14 – 2014/2015: Market uptake of existing and emerging sustainable bioenergy

http://ec.europa.eu/research/participants/data/ref/h2020/wp/2014_2015/main/h2020-wp1415-energy_en.pdf

Fast Track to Innovation

Fast Track to Innovation

- ▶ **The objective is to increase participation of industry, SMEs and first time applicants in H2020, and to stimulate private sector investment in research and innovation.**
- ▶ Bottom-up driven logic, covering all fields across Pillar 2 & 3.
- ▶ Funding for close-to-market activities.
- ▶ A pilot action to be launched in 2015.
- ▶ For innovation actions with a max. of 5 partners and a max. of €3 mln EU contribution per project.
- ▶ Continuously open calls with three cut-off dates per year.
- ▶ Time to grant max. 6 months.
- ▶ (Market) Impact criterion given a higher weighting during evaluation.

Funding Regime

- ▶ Marie Curie has its own very generous formula funding model.
- ▶ All pillar 2 and 3 are funded as follows:-
 - ▶ Direct costs – staff, travel, equipment, consumables
 - ▶ 25% over head
 - ▶ 100% or 70% remuneration, depending on closeness to market of project.
- ▶ The EC has made a genuine attempt to simplify the application, contract negotiation and project management. *My view is that it has worked.*

Building a Network

- ▶ H2020 funding is all about creating a European Research Area to rival USA and Asia. Collaboration is essential.
- ▶ EU is the 28 Member States (MS) and Associated Countries (AC) (countries who pay into the pot, like Israel, Denmark and Norway)
- ▶ Most collaborative EU funded proposals require three MS/AC to be eligible – so a network or belonging to a network is essential.
- ▶ Eligible partners include academic and non-academic participants, SMEs, Charities, Multi-Nationals, NGOs, etc...
- ▶ How do you develop a network...?

Building a Network

- ▶ Typically, your network comes from your own professional network of international contacts - conference acquaintances, previous colleagues and peers, supply chain partners...
- ▶ There are opportunities to grow your European Network (links at the end of the presentation):-
 - ▶ Attend EC Conferences – *make new friends...*
 - ▶ Attend H2020 launch events in Brussels
 - ▶ Become a H2020 reviewer
 - ▶ Sign up on the EC partner searches – *link in following slide*
 - ▶ Remember that you can mine your networks network and your colleagues networks (plus their network)
 - ▶ Use your homepage - <http://www1.aston.ac.uk/lhs/staff/az-index/billrm/>
 - ▶ + don't underestimate **Linked In** – *it's tedious, but very useful*

More tips

European Technology Platforms.

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

European Innovation Partnerships.

http://ec.europa.eu/research/innovation-union/index_en.cfm?pg=eip

EU R&D Associations

<http://www.hyperion.ie/euassociations.htm>

FP7 Funded projects database

http://cordis.europa.eu/fp7/projects_en.html

H2020 partner search

<https://cordis.europa.eu/partners/web/towardshorizon2020/members>

EC Research Events

http://cordis.europa.eu/fetch?CALLER=EN_NEWS_EVENT

More tips in French

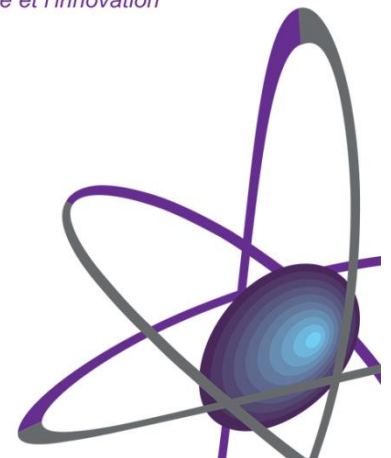
- ▶ **Horizon 2020 : Le nouveau programme cadre européen 2014-2020 pour la recherche et l'innovation.**
- ▶ **Guide réalisé par Réseau Europe Alsace**
- ▶ <http://www.bureau-alsace.eu/actualites/guide-horizon-2020/>



Guide des financements

Horizon 2020

*le nouveau programme cadre européen 2014-2020
pour la recherche et l'innovation*



Un document réalisé par
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Europe Alsace
Recherche & Innovation

Questions