

Horizon 2020 the Framework Programme for Research and Innovation



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Innovation and excellence in health and care

Introduction

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Disclaimer

- ❑ This presentation is based solely on my personal experience and from having talked with key stakeholders in the European R&D community. This presentation has not been seen nor vetted by the Commission.

Aims of the Presentation

- ❑ What we currently know of Horizon 2020
- ❑ What is the EC's current thinking
- ❑ How to prepare

From Framework 4 to Horizon 2020

Framework 4	Solving Technical Problems (Bottom Up)
Framework 5	Addressing specific problems (Top Down)
Framework 6	Avoiding 'Fragmentation' and Duplication'
Framework 7	The European Research Area (ERA)
Horizon 2020	Science for Science, Society and Economy

Positive benefits from FP7

- ❑ Enables cross-border pooling of resources to achieve critical mass and diffusion of knowledge
- ❑ Promotes competition in research, thereby raising levels of excellence
- ❑ Offers a wide range of training possibilities and enhances Europe's research capacity
- ❑ Provides a way to deal with pan-European policy challenges and link to EU market frameworks
- ❑ Raises the international attractiveness of EU research and innovation

But concerns about FP7 and other programmes

- ❑ Complexity - too many instruments and funding mechanisms, complex landscape
- ❑ Further simplification- less variation in rules, simpler audits and controls, avoid duplicate information
- ❑ Better strategy for innovation – how to commercialise results, generate impacts
- ❑ Need to focus resources – with critical mass to address the grand challenges
- ❑ Broaden participation – new Member States, women
- ❑ Clearer agendas - driven by scientific, industrial, social objectives

What is Horizon 2020

- ❑ Commission proposal for a 80 billion euro research and innovation funding programme (2014-20)
- ❑ Part of proposals for next EU budget, complementing Structural Funds, education, etc.
- ❑ A core part of Europe 2020, Innovation Union & European Research Area:
 - Responding to the economic crisis to invest in future jobs and growth
 - Addressing peoples' concerns about their livelihoods, safety and environment.
 - Strengthening the EU's global position in research, innovation and technology

What's new

- ❑ A single programme bringing together three separate programmes/initiatives
- ❑ More innovation, from research to retail, all forms of innovation
- ❑ Focus on societal challenges facing EU society, e.g. health, clean energy and transport
- ❑ Simplified access, for all companies, universities, institutes in all EU countries and beyond.

What are the priorities 1?

- ❑ Excellence in the science base
- ❑ World class excellence; developing and attracting talent
 - Frontier research (European Research Council)
 - Future and emerging technologies
 - Skills, training, career development (Marie Curie)
 - Research infrastructures -networking, access, development

Proposed funding (million euro, 2014-20)

European Research Council Frontier research by the best individual teams	13 268
Future and Emerging Technologies Collaborative research to open new fields of innovation	3 100
Marie Curie actions* Opportunities for training and career development	5 752
Research infrastructures (including e-infrastructure) <i>Ensuring access to world-class facilities</i>	2 478

What are the priorities 2?

- ❑ Tackling societal challenges
- ❑ Responding directly to EU objectives; whole chain from research to market
 - Health, demographic change & wellbeing;
 - Food security & bio-based economy;
 - Secure, clean & efficient energy;
 - Smart, green and integrated transport;
 - Supply of raw materials; resource efficiency and climate;
 - Inclusive, innovative and secure societies

Key research areas in Horizon 2002

- Energy
- Environment
- Aging
- China
- Factories of the Future
- Urban Europe
- Connecting Climate knowledge
- Microbial Challenge
- More years – better living
- Water Challenges
- Healthy and productive seas and oceans
- Decarbonising the transport sector

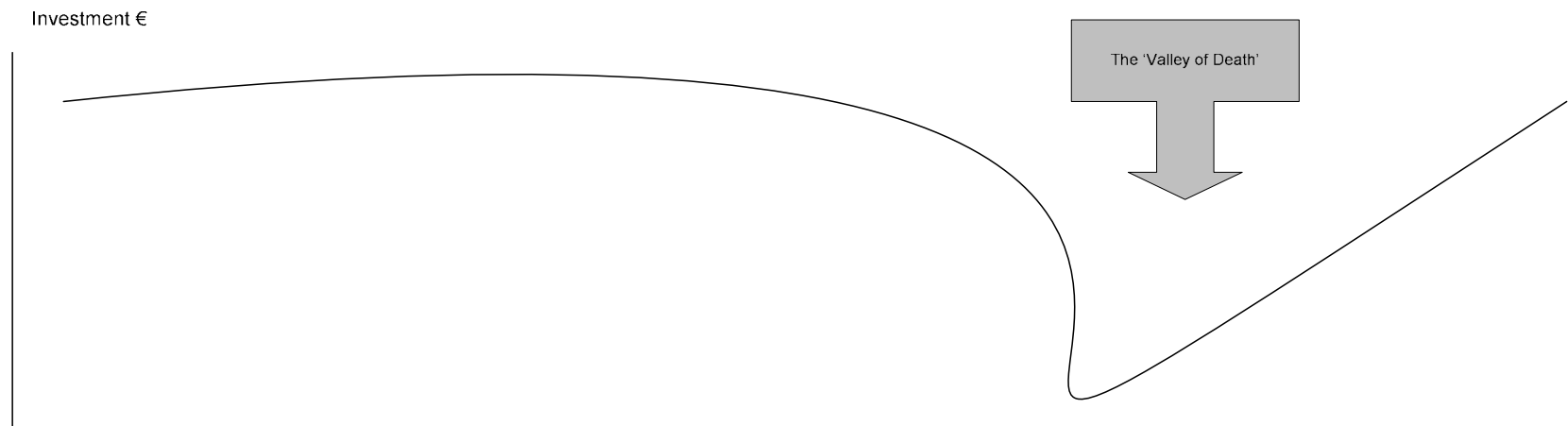
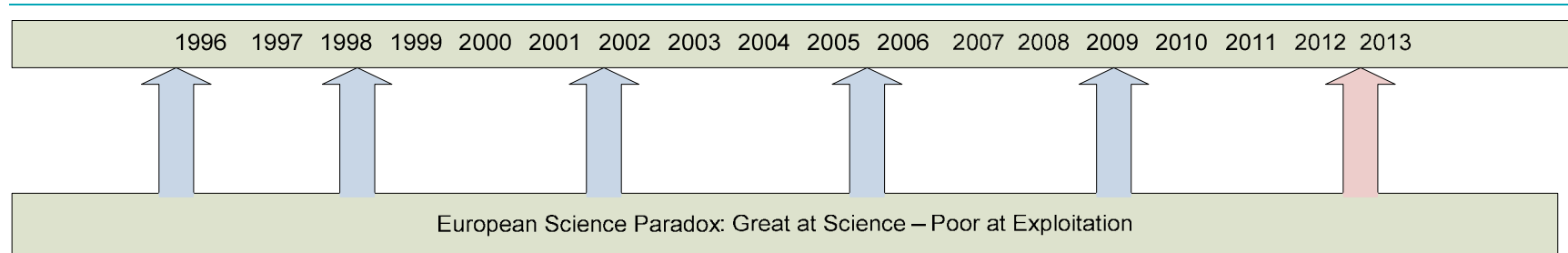
Proposed funding (million euro, 2014-20)

Health, demographic change and wellbeing	8 028
Food security, sustainable agriculture, marine and maritime research & the bioeconomy	4 152
Secure, clean and efficient energy	5 782
Smart, green and integrated transport	6 802
Climate action, resource efficiency and raw materials	3 160
Inclusive, innovative and secure societies	3 819

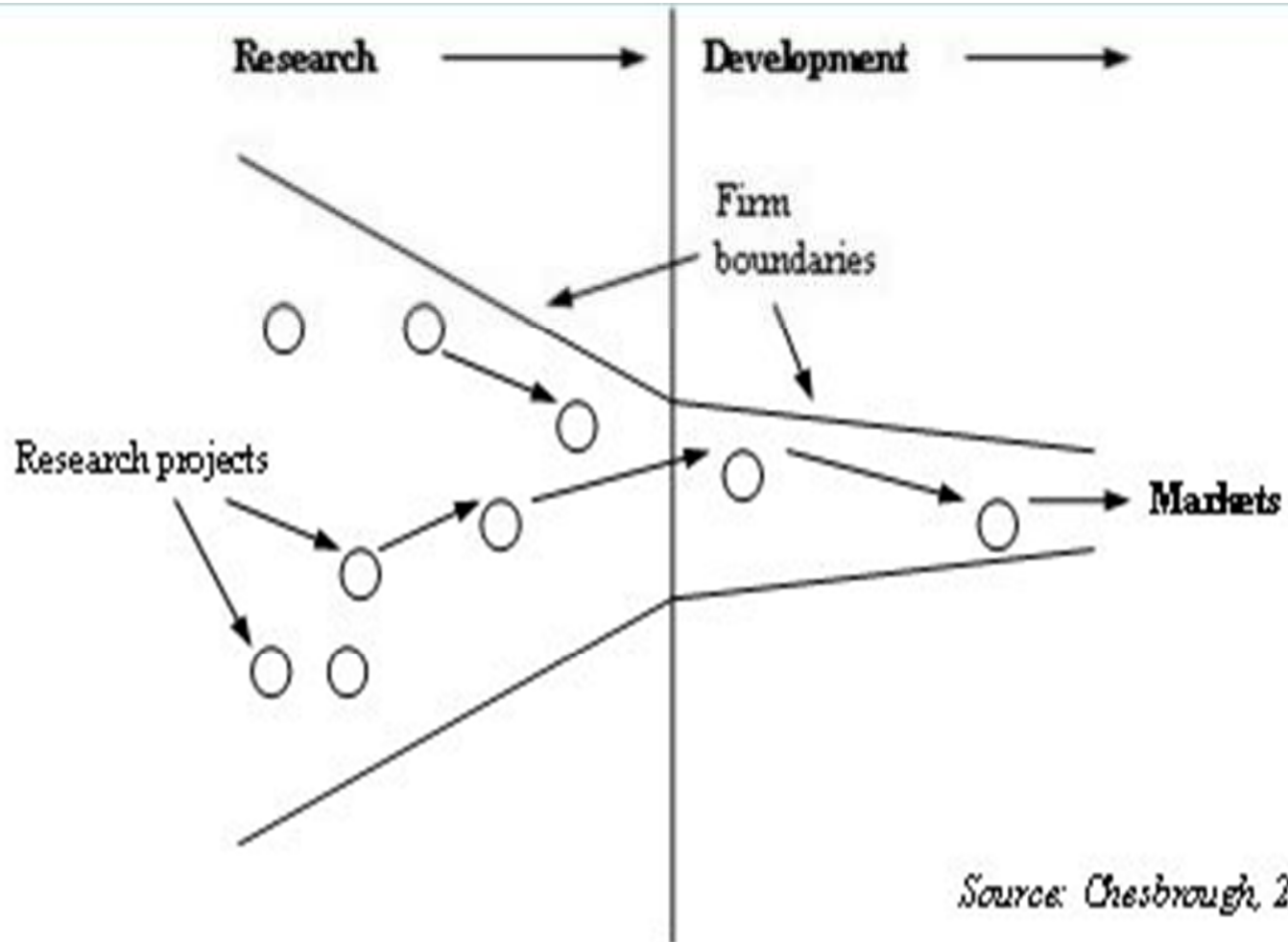
What are the priorities 3?

- ❑ Creating industrial leadership; competitive frameworks
- ❑ Business led R&I; raising private investment
- Enabling and industrial technologies (ICT, nano, bio, space, etc.)
- Access to risk finance (loans, equity)
- Support for innovation in SMEs

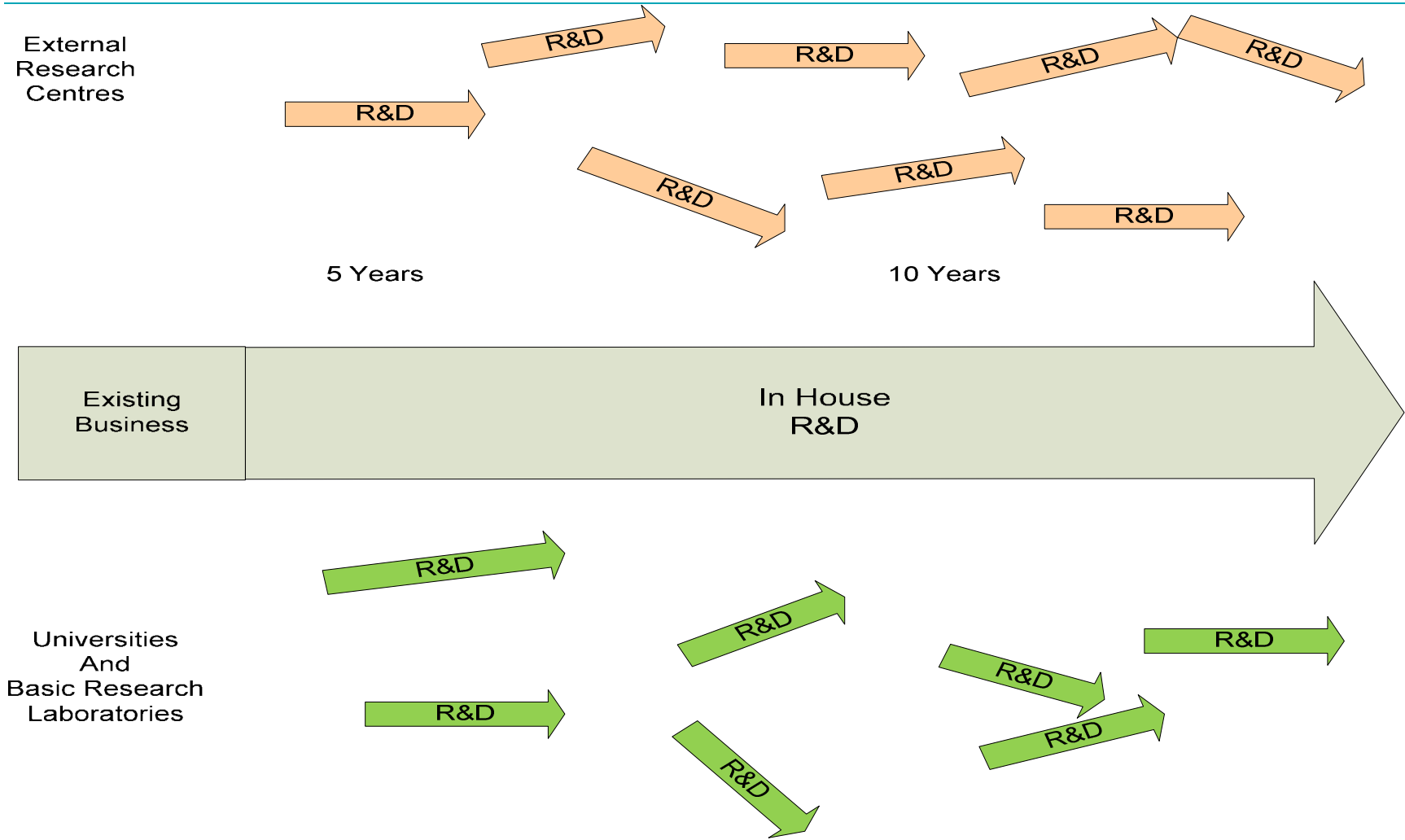
Poor Exploitation and Low Impact



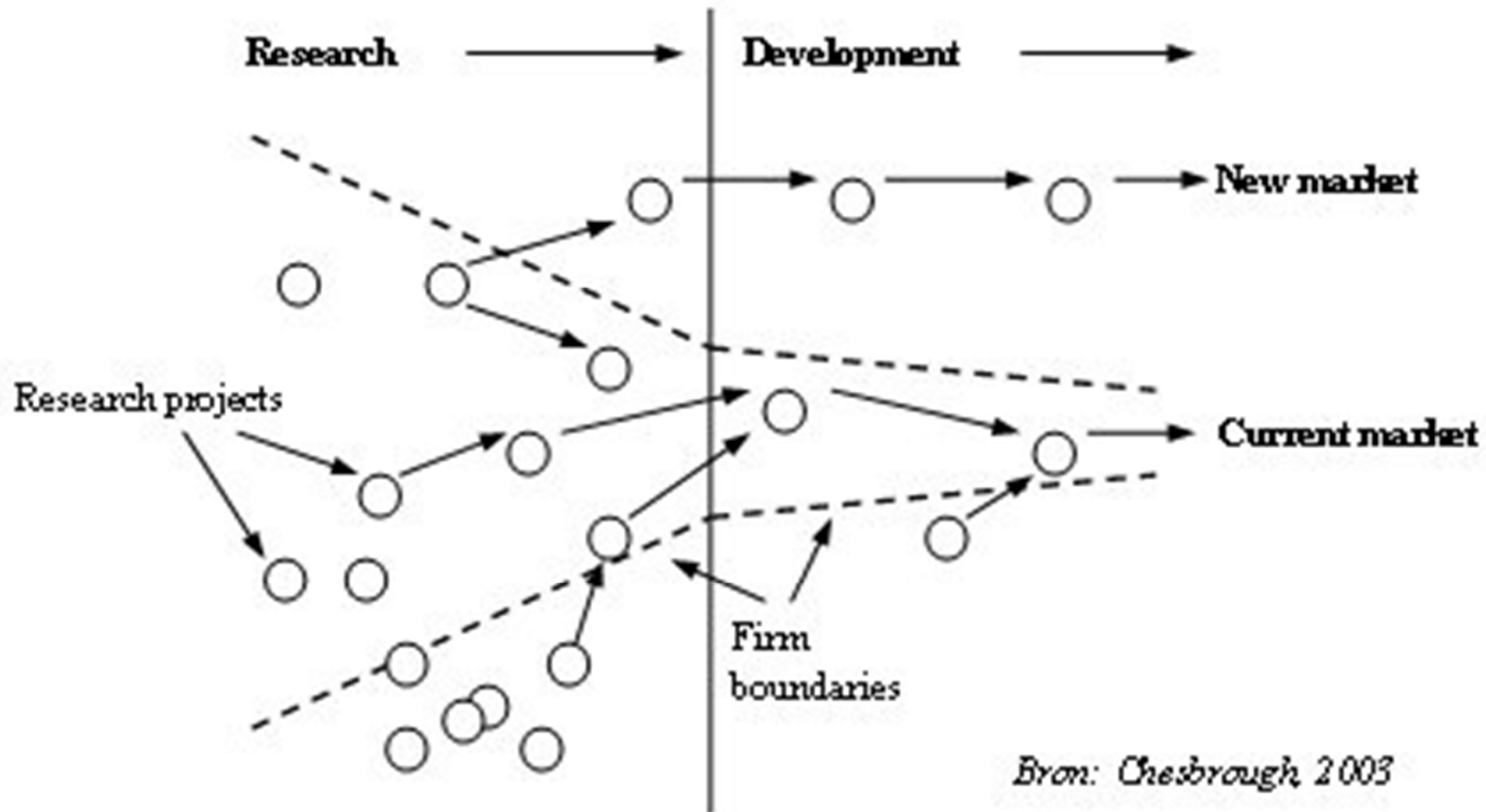
'Open Innovation' Henry Chesbrough 2003*



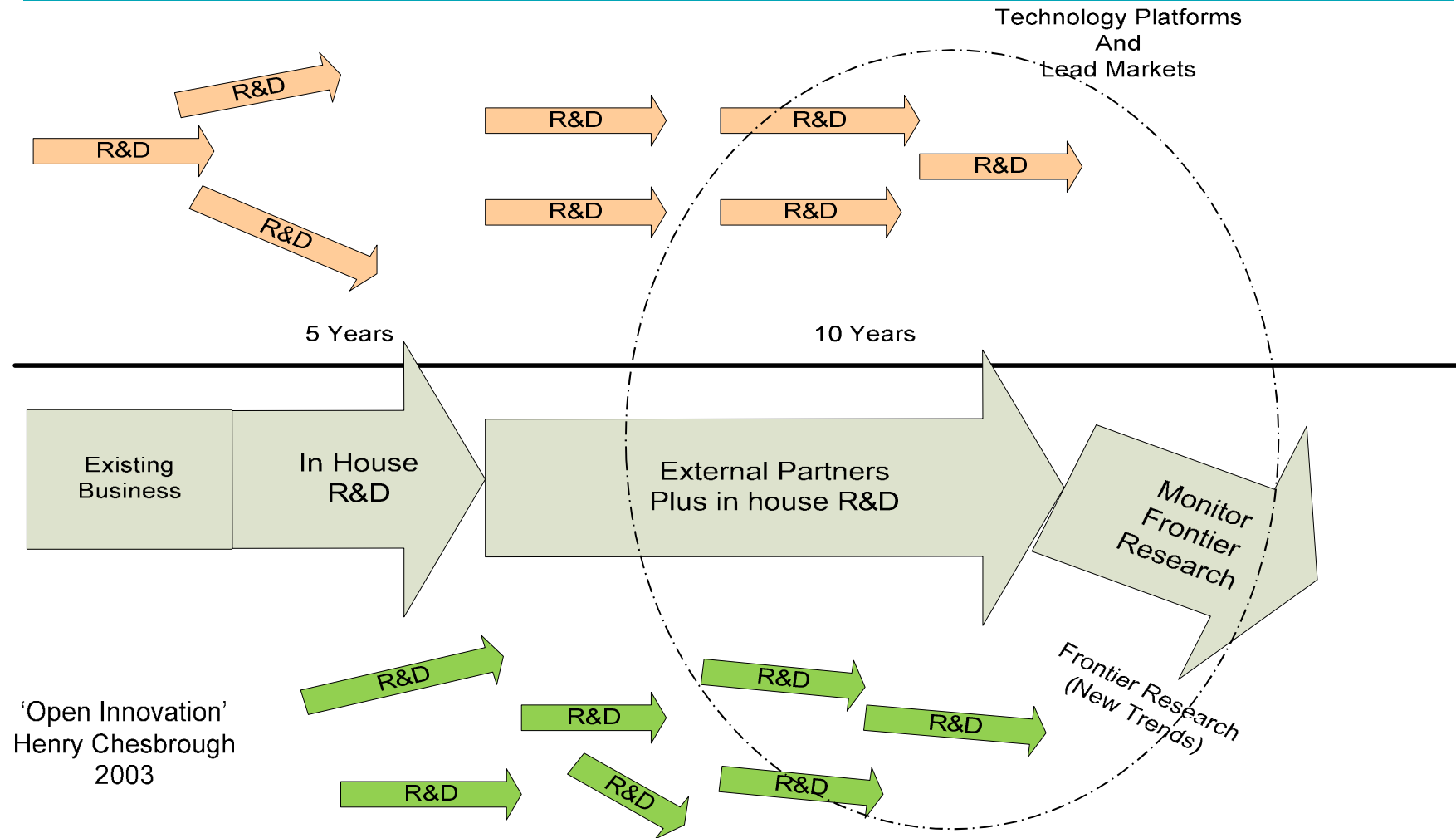
Enterprise Innovation Strategy: The Past



'Open Innovation' Henry Chesbrough 2003



Enterprise Open Innovation Strategy 2011+



Proposed funding (million euro, 2014-20)

Leadership in enabling and industrial technologies (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 781
Access to risk finance Leveraging private finance and venture capital for research and innovation	3 538
Innovation in SMEs Fostering all forms of innovation in all types of SMEs	619

Rules for Participation: *what's new? (1)*

❑ A SINGLE SET OF RULES

- Adapted for the whole research and innovation cycle
- Covering all research programmes and funding bodies
- Aligned to the Financial Regulation, coherent with other new EU Programmes.

❑ ONE PROJECT - ONE FUNDING RATE.

- Maximum of 100% of direct costs (except for actions close to market, where a 70% maximum will apply)
- Indirect eligible costs: a flat rate of 20% of direct eligible costs

Rules for Participation: *what's new?* (2)

- ❑ SIMPLE EVALUATION CRITERIA
 - Excellence – Impact - Implementation (Excellence only, for the ERC)

- ❑ NEW FORMS OF FUNDING aimed at innovation: pre-commercial procurement, inducement prizes, dedicated loan and equity instruments.

- ❑ INTERNATIONAL PARTICIPATION: facilitated but better protecting EU interests

Rules for Participation: *what's new?* (3)

❑ SIMPLER RULES FOR GRANTS:

- broader acceptance of participants accounting practices for direct costs, flat rate for indirect costs, no time-sheets for personnel working full time on a project, possibility of output-based grants.

❑ FEWER, BETTER TARGETED CONTROLS AND AUDITS:

- Lowest possible level of requirements for submission of audit certificates without undermining sound financial management;
- Audit strategy focused on risk and fraud prevention.

Rules for Participation: *what's new?* (4)

❑ IMPROVED RULES ON INTELLECTUAL PROPERTY

- Balance between legal security and flexibility;
- Tailor-made IPR provisions for new forms of funding;
- A new emphasis on open access to research publications

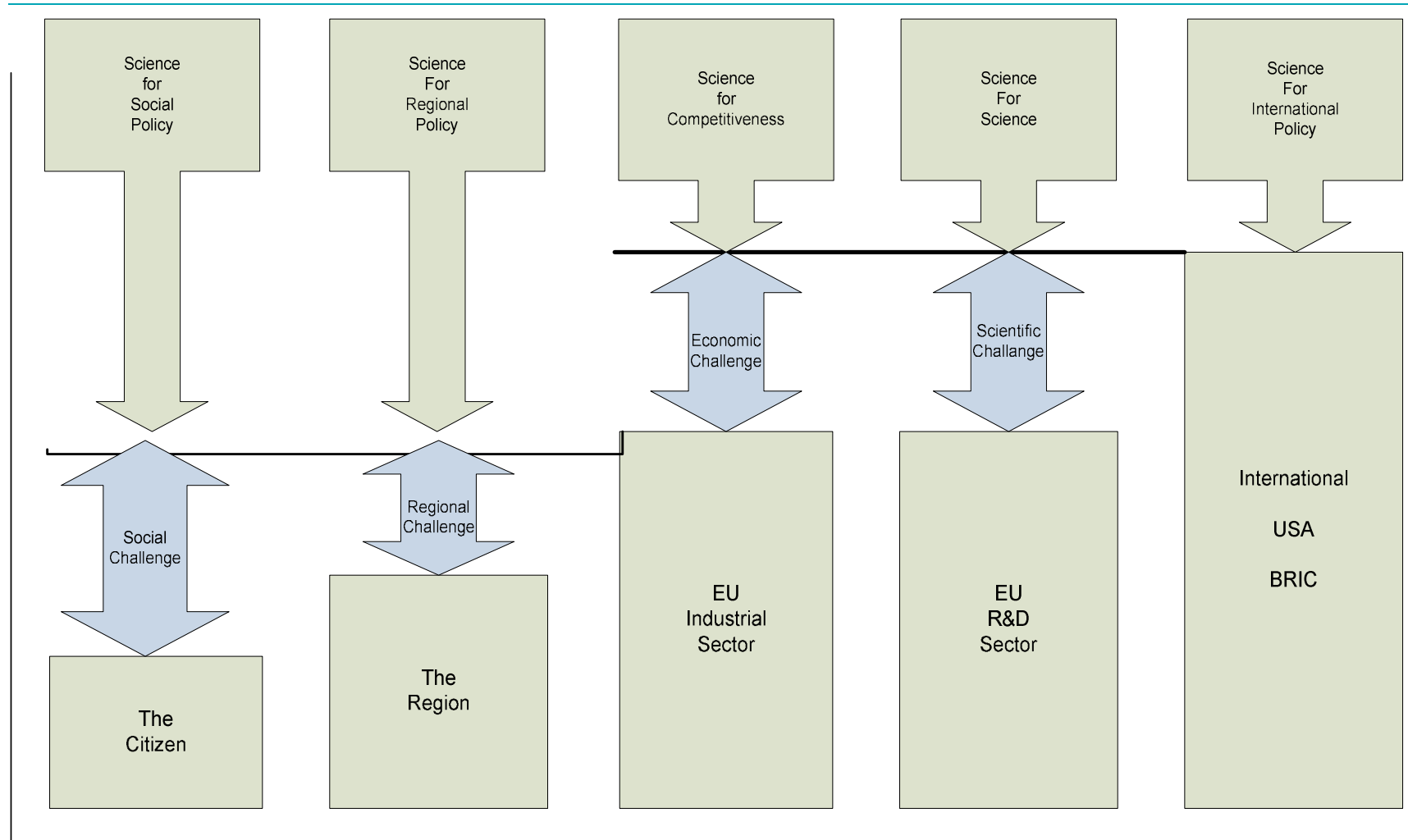
Advice

- ❑ Start the process early
- ❑ Find common topics and strengths
- ❑ Think of the impact and justification (EU)
- ❑ Present a united voice to the Government and the European commission
- ❑ Don't lobby for narrow interests
- ❑ Communicate with other regions, M/S, EU networks and other stakeholders

Conclusions

- ❑ Extremely competitive process with large amounts of funding
- ❑ EU questions require EU solutions and partners
- ❑ Always think of the expected impact and justification
- ❑ Use your strengths at EU level for more bid success

Answer the questions that Horizons 2020 asks



Wrapping up

Any Questions?

Thank You



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