

Innovation in Horizon 2020

*Accelerate and diversify the
innovation drive*

Helen Köpman, DG Connect, Innovation



Innovation and Growth

"Innovation is by far the most important driver of growth and productivity.

As much as 85% of productivity growth in modern, developed economies is the direct result of innovation."

Plan I, Innovation for Europe, Nesta & The Lisbon Council

WHAT HAS CHANGED IN H2020?

New **emphasis** in the programme:

- Innovation and its impact

New **instruments**:

- Research innovation actions
- Innovation actions
- Innovation procurement
- Inducement prices
- SME instrument
- Fast track to innovation



Support for innovation is mainstreamed in Horizon 2020

- *Support Research and Innovation from lab to market*
- *Encourage incremental and disruptive innovation*
- *Promote a closer relationship between research, innovation and entrepreneurship*
- *Put SMEs in the lead in delivering innovations to the market*
- *Use more evaluators from the business and investor domains involved in the selection process*
- *Ensure a clear emphasis on innovation in the selection of projects*
- *Provide greater access to risk capital for innovative SMEs & midcaps*



The definition of innovation in H2020 is – deliberately – quite broad

"Horizon 2020 will support all forms of innovation, including innovation that results from research and development (R&D) activities or from other activities, such as finding new uses or combinations of existing technologies or developing new business models or new ways of interacting with users."

While innovation is generally understood as the commercial introduction of a new or significantly improved product or service, innovations can also be for non-commercial applications such as for better public services or for addressing social needs ('social innovation')."

[Source: H2020

FAQs: <http://ec.europa.eu/research/index.cfm?lg=en&pg=faq&sub=details&idfaq=42705>]

What is innovation in H2020?

Technology
development
and integration

Technical and economic
viability in operational
environment

Supporting first
application in the market

✓ *Validate*

✓ *Commercialise/
buy*

✓ *Wide market
deployment*

Basic and
applied
research

Technical feasibility
in lab or simulated
environment

R&D projects

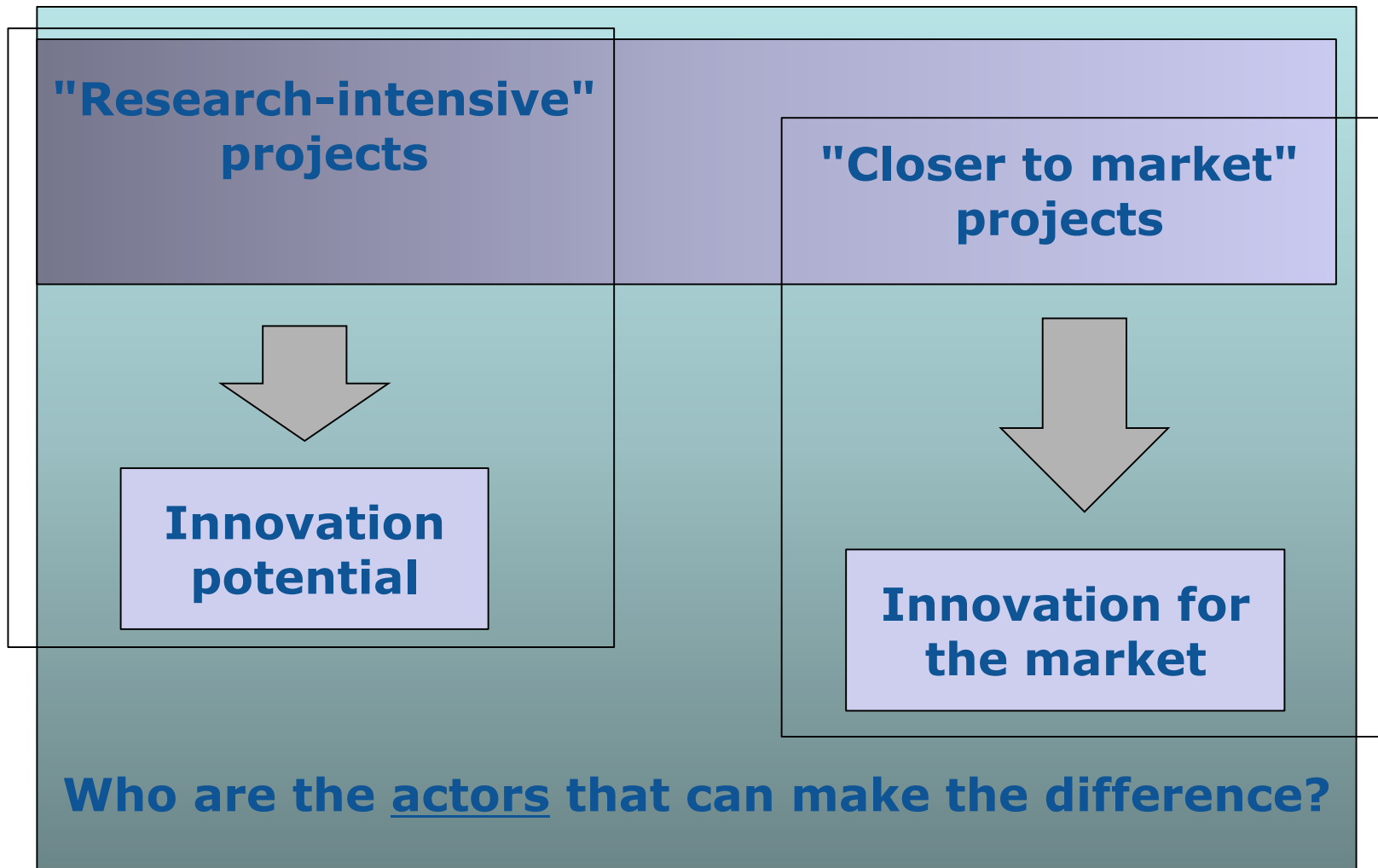
Close-to-market actions

Demonstration/pilot projects

**First market replication
projects**

*Innovation Actions do not have a monopoly on Innovation –
Research & Innovation Actions should also address Innovation*

<i>Research & Innovation Actions</i>	<i>Innovation Actions</i>
<i>Basic & applied research, technology development, integration</i>	<i>Limited R&D activities</i>
<i>Testing / validation on small-scale prototype (in lab or simulated environment)</i>	<i>Prototyping, testing, large-scale product validation & market replication</i>
<i>Limited demo or pilot activities (show tech feasibility in a near to operational environment)</i>	<i>Demo or pilot activities (show tech feasibility in operational environment)</i>
<i>Developing innovations meeting societal or market needs</i>	<i>Developing innovations meeting needs of markets & their delivery to market</i>
<i>Exploitation, standardisation activities</i>	
<i>Innovation management</i>	



Evaluation criteria

- Different aspects of innovation are embedded in **each** of the 3 evaluation criteria used for selecting projects
- The same criteria will be used to evaluate:
 - Research and Innovation actions (100% funded)
 - Innovation actions (70% funded)
 - SME instrument (70% funded)
- Investors (VCs, BAs) and market experts will be secured for panels evaluating proposals

Criteria will be interpreted by evaluators within the context of the topic addressed by the proposal, taking into account the WP text, the type of action and the nature of the proposed activities



INNOVATION ASPECTS IN THE 3 EVALUATION CRITERIA

Excellence

*Extent that proposed work is ambitious, **has innovation potential**, and is beyond the state of the art...*

Impact

***Enhancing innovation capacity** and integration of new knowledge...*

*...developing innovations meeting the needs of European and global markets and, where relevant, by **delivering such innovations to the markets***

Implementation

*Appropriateness of the management structures and procedures, including risk and **innovation management***

Note: For Innovation Actions the score for 'Impact' will be **weighted by a factor of 1.5**



Innovation Management

"Innovation management is a process which requires an understanding of both market and technical problems, with a goal of successfully implementing appropriate creative ideas.

A new or improved product, service or process is its typical output.

It also allows a consortium to respond to an external or internal opportunity."

(ref. p 7 of H2020 Research & Innovation and Innovation actions proposals template - <http://tinyurl.com/innov-mgmt3>)

LOOKING FOR INNOVATION IN PROPOSALS ...

- ✓ *Innovation potential*
 - ✓ **Is there entrepreneurial spirit in the consortium? innovation expertise (e.g. SMEs, entrepreneurs)**
- ✓ *Innovation in the core of the approach/objectives?*
 - ✓ **Involvement of experts in innovation/markets in defining the objectives**
- ✓ *Impact*
 - ✓ **Expected impact statement in WP**
- ✓ *Delivering innovations to the market*
 - ✓ **Credible roadmap**
- ✓ *Innovation management considered?*
 - ✓ **Project follow up activities**

Less is more...

Page limits to encourage clarity in proposals

- SME instrument:
 - 10 pages for phase 1
 - 30 pages for phase 2
- Support actions: 50 pages
- 'Innovation' / 'Research & Innovation' actions: 70p
- PCP / PPI proposals: 90 pages

AVAILABLE MATERIAL

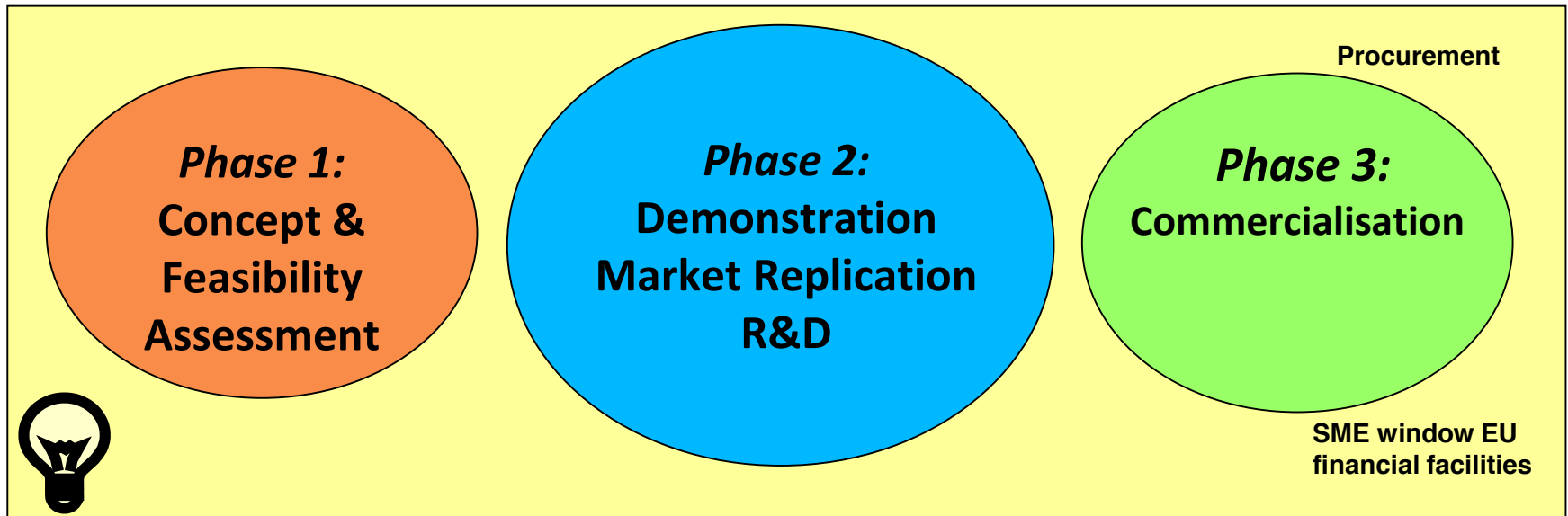
- *Work programmes (FAQs, info days)*
- *Definition of "innovation" and "innovation management"*
- *New template for proposals, with innovation aspects to be considered in the different sections*
- *Specific innovation aspects to be assessed, included in the evaluation criteria*



H2020 encourages participation of SMEs

- ***Integrated approach*** - around 20% of the total budget for Societal Challenges and Lead Enabling Industrial Technologies budget to go to SMEs
- ***Simplification*** of particular benefit to SMEs (e.g. single entry point)
- The ***SME instrument*** will be used across all societal challenges as well as for the LEITs
- A dedicated activity for research-intensive SMEs in ***'Innovation in SMEs'***
- ***'Access to risk finance'*** will have a strong SME focus (debt and equity facility)

SME Instrument



50 k€
6 months

0,5 to 2,5 M€
1 – 2 years

e.g.: Access to risk
finance

IDEA

business coaching throughout the project

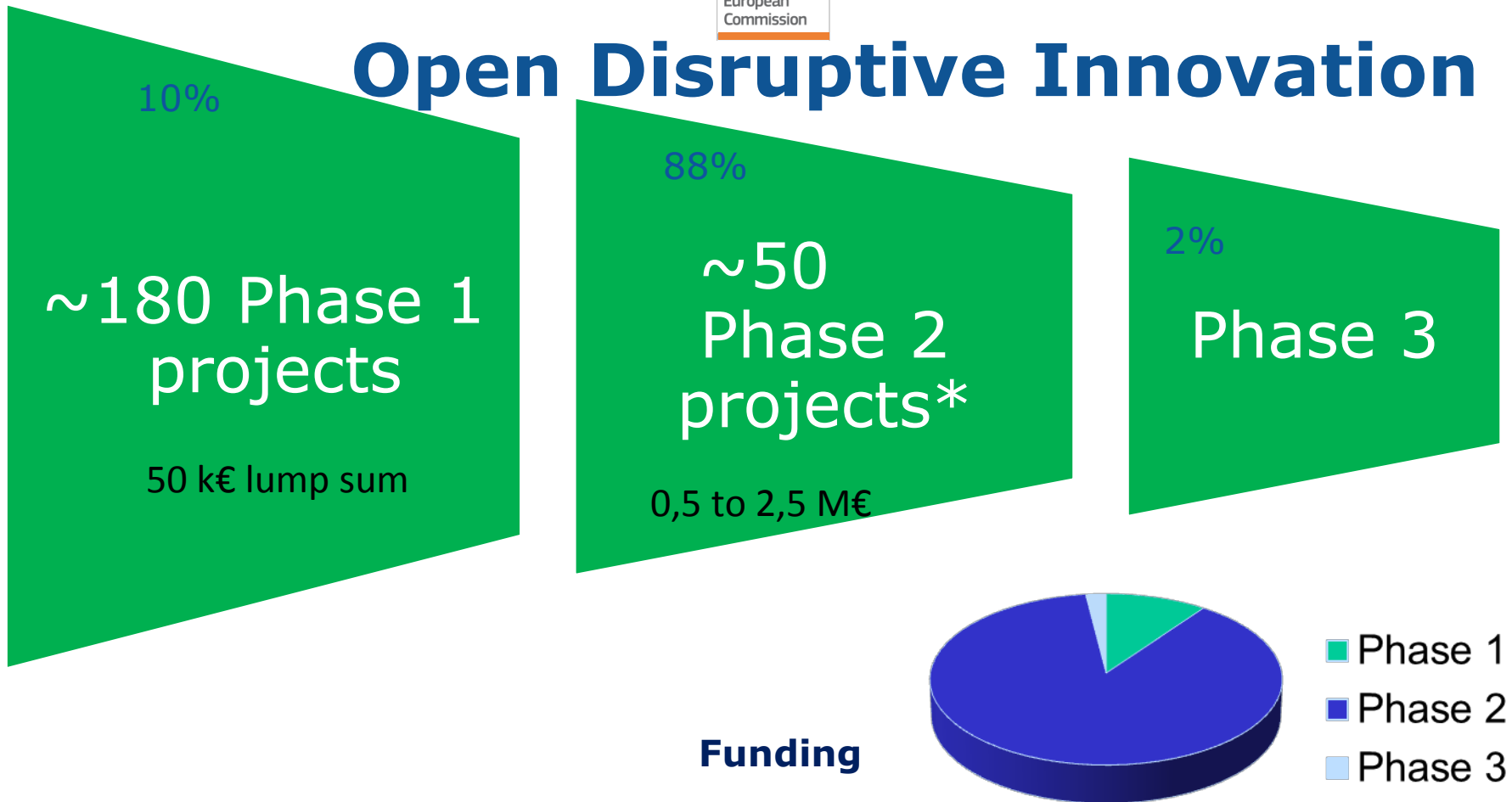
MARKET



Open Disruptive Innovation

- Support to a large set of **early stage, high risk, innovative ICT SMEs** with international ambition
- Proposals to present **potentially disruptive ideas**
- **Open** in terms of...
 - **substance** (no predefined areas, topic or themes in ICT)
 - **time** (continuously open call with 4 cut-off dates/year)
- **Single SMEs** or groups of SMEs can submit a proposal
- Implementation through the **SME instrument** and Executive Agency
- Total budget available (2014-2015): €90m
- Next cut-off dates: 18 March, 17 June, 17 September, 16 December 2015 for both phase 1 and Phase 2

Open Disruptive Innovation



Total budget 90 M€ over 2014-15

NEW

Fast Track to Innovation

- Stimulate private investment and participation of industry, first-time applicants, SMEs
- Accelerate development of innovative products, processes and services (from existing R&I results)
- One common call for H2020, continuously open, 3 cut-offs per year, time-to-grant 6 months
- Innovation actions, project size up to 3M€
- Small consortia of 3-5 members
- Budget 200 M€ for 2015 & 2016, ~100 projects expected