



# HORIZON 2020

## A European Perspective for Denmark

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November 2014

# 1. Implementation of Horizon 2020



# Response to first six months of Horizon 2020

- 65 calls launched for 2014 embedding new approach
- More than 16,000 proposals submitted (end September: 30,000);
- Nearly 5,300 expert evaluators contracted (60,000 registered);
- Attracted newcomers and increased in industry participation;
- Positive response to new innovation actions and SME instrument;
- High oversubscription reflect the popularity of Horizon 2020.



## Lessons Learned from first H2020 Calls

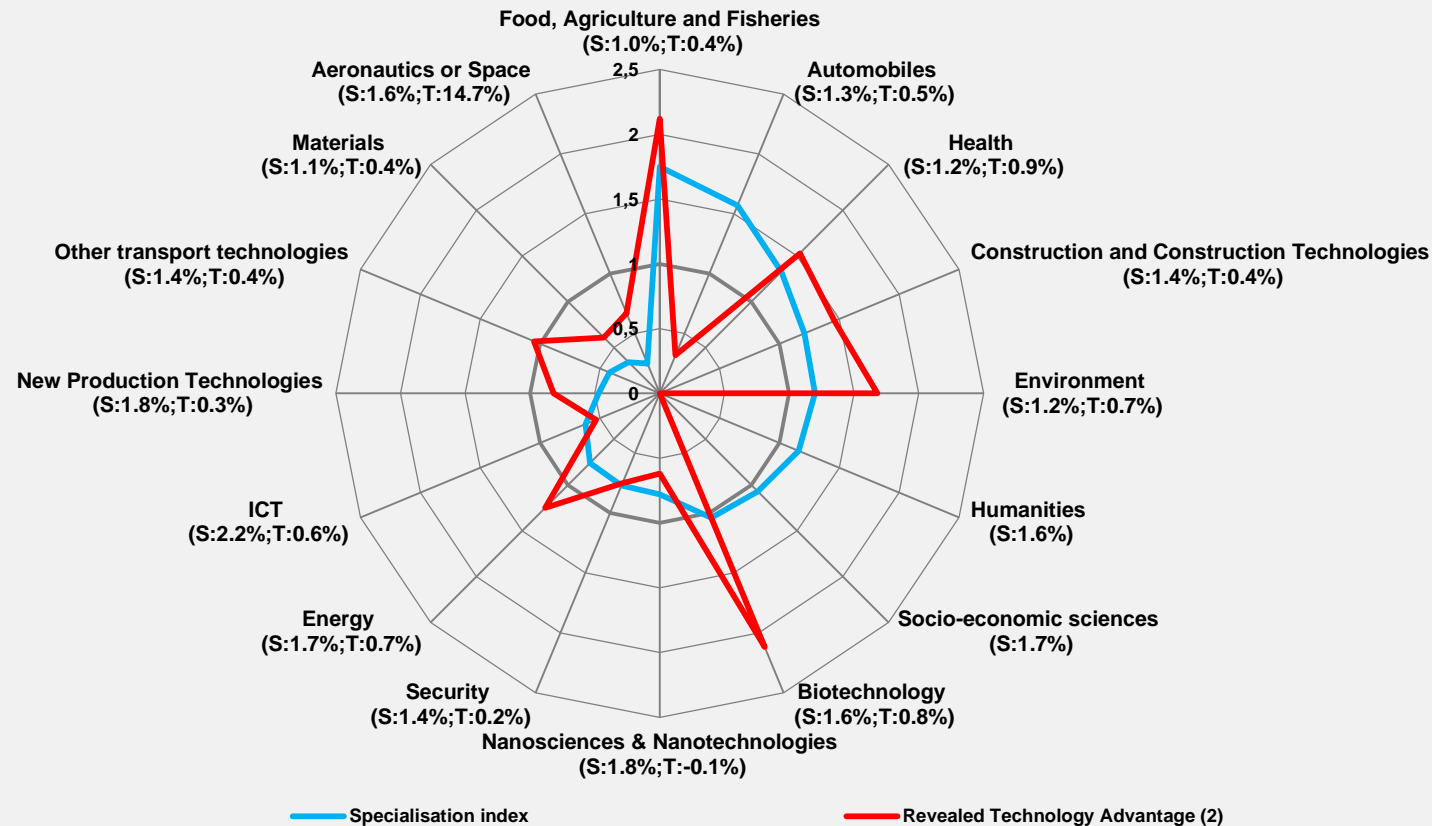
- ✓ **Continue** the **challenge-based approach** in delivering topics while improving their clarity and tightening impact requirements;
- ✓ Address **key features** and **novelties upstream** in the work programme preparation cycle;
- ✓ **Increase international cooperation activities** (flagship initiatives, accompanying actions)
- ✓ Make **better use** of the **whole toolbox** of funding instruments;
- ✓ Conduct **further analysis of oversubscription** and devise measures to effectively manage large demand, esp.in two-stage calls;
- ✓ Step-up efforts to **attract experts** and **further improve evaluation process**, esp. impact and innovation
- ✓ **Continue monitoring the implementation of calls** and ensure adequate level of feedback to applicants.

## 2. Some assessment of Danish strengths and weaknesses

# Assessment of Danish 2014 national reform programme

- "Denmark could benefit from better leveraging its world-class science base into more innovative economy solutions."
- "the innovation strategy appears not to sufficiently tackle a major bottleneck, namely the rigid legal framework governing collaboration between universities and firms."

# High quality science (mostly) aligned with technology specialisations



**Specialisation index** based on number of scientific publications

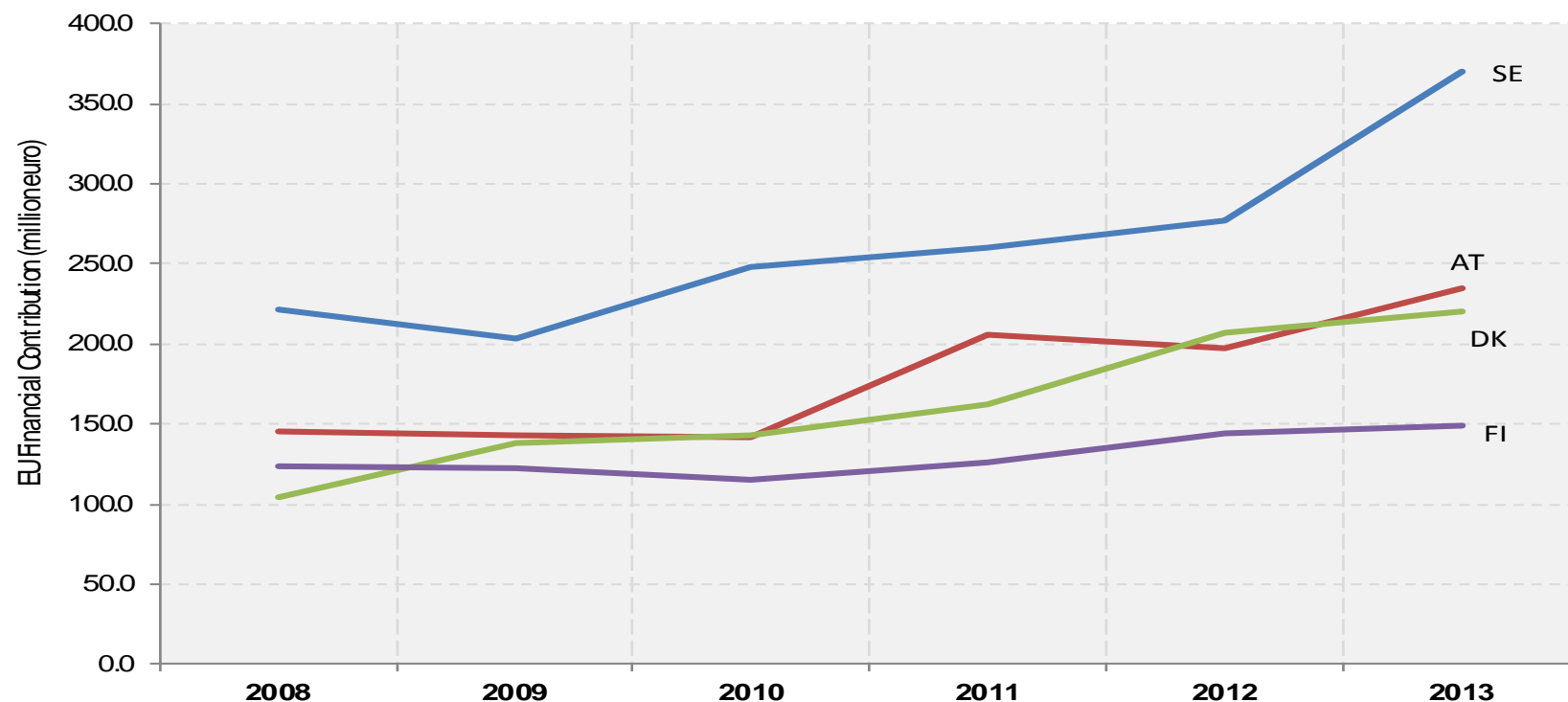
**Revealed Technology Advantage** based on number of PCT Patent Applications

Source: *Research and Innovation Performance in the EU*, European Commission, September 2014

## Over €1 billion from 7<sup>th</sup> Framework Programme

But other countries  
increasing their  
participation faster...  
Below average ERC  
grants...

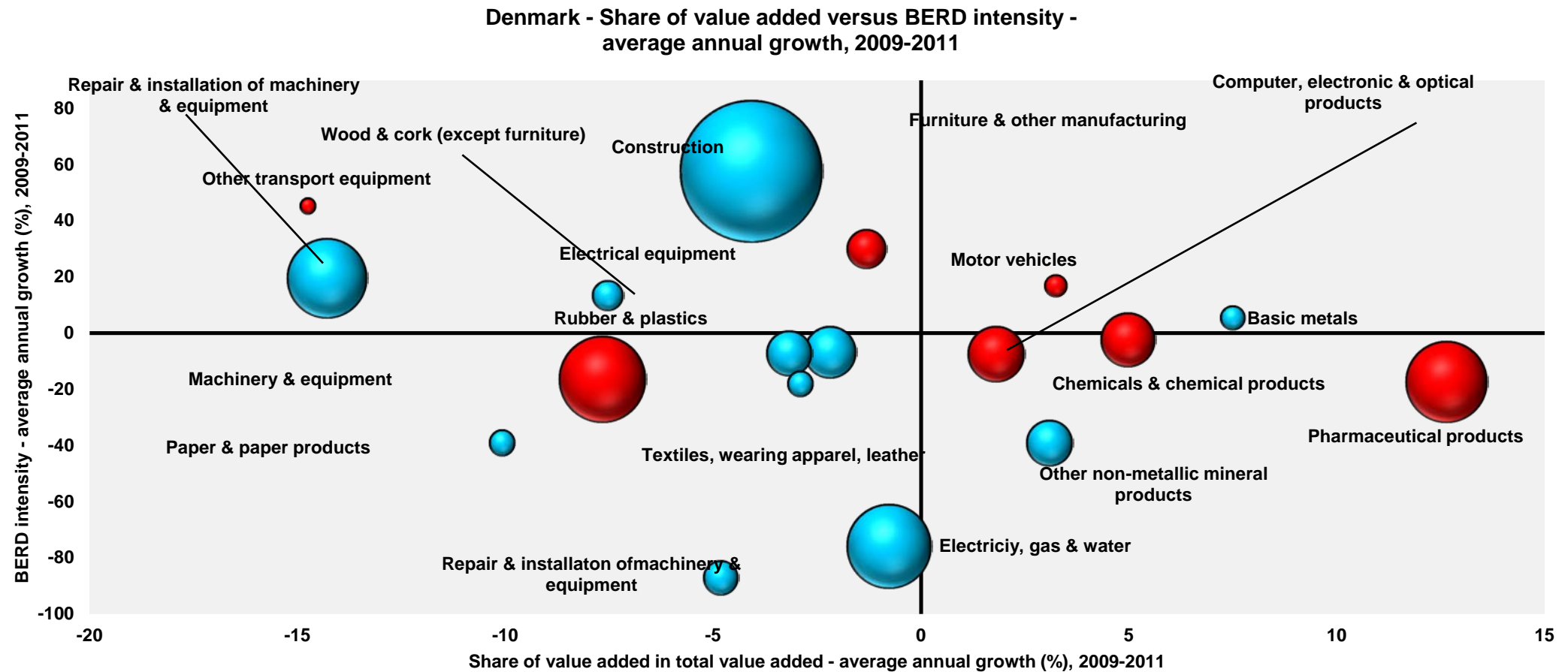
Seventh Framework Programme EU Financial Contribution (million euro)



Source: DG Research and Innovation - Unit for the Analysis and Monitoring of National Research Policies  
Data: DG Research and Innovation (FP7 grant agreements and participation figures, eCORDA as of 2014/10/06)



## But low productivity growth and stagnating business R&D



Source: Research and Innovation Performance in the EU, European Commission, September 2014



### 3. EU R&I Policy Outlook

- Growth impacts of R&I
- Open science

## Research and Innovation for Growth as a European Priority

- **European Council strategic guidelines, June 2014**

"The recovery remains fragile and uneven and efforts to implement growth-enhancing structural reforms must continue and be enhanced in order to strengthen Europe's capacity to grow and create more and better jobs. Increased action is needed to ... improve the business and RDI environment, and facilitate access to finance...."

- **European Commission President Elect, Jean-Claude Juncker, September 2014**

"After years of economic hardship, Europeans expect a performing economy, sustainable jobs, more social protection, safer borders, energy security and digital opportunities."



# Commission Communication "Research and Innovation as Sources of Renewed Growth", COM(2014) 339, 10 June 2014

- Joint between DG RTD & DG ECFIN (Vice President Olli Rehn & Commissioner Geoghegan-Quinn)
- Key messages:
  - Member States need to prioritise growth enhancing expenditures, notably R&I
  - Given that budget constraints in many MS, it is critical to implement reforms to maximize the impact from public R&D spending
  - Improved framework conditions and reduced internal market fragmentation is equally crucial to attract private investments in R&D



## Prioritising three axes of reform

### 1 *Quality R&I strategies*

- Coupling R&I, multi-annual budgets, evidence based

### 2 *Quality R&I programmes*

- Competitive, simple to access, focused on challenges & future market opportunities

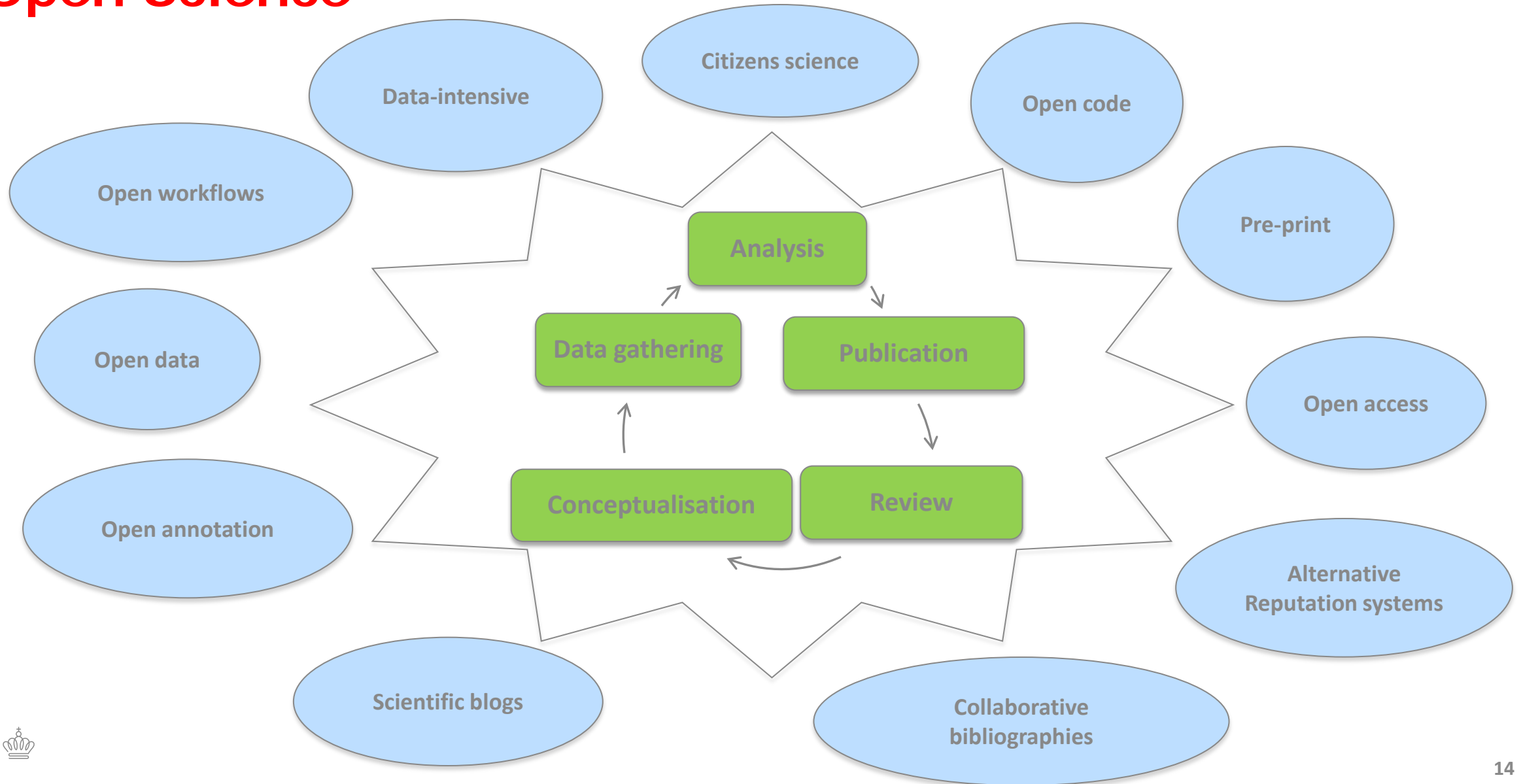
### 3 *Quality governance of R&I performing institutions*

- Open recruitment, freedom to work with industry, subject to performance assessment

### **With EU level support through a Policy Support Facility:**

- Country Peer Reviews; Advice on Specific Reforms
- Mutual Learning between countries; Better access to evidence

# Open Science



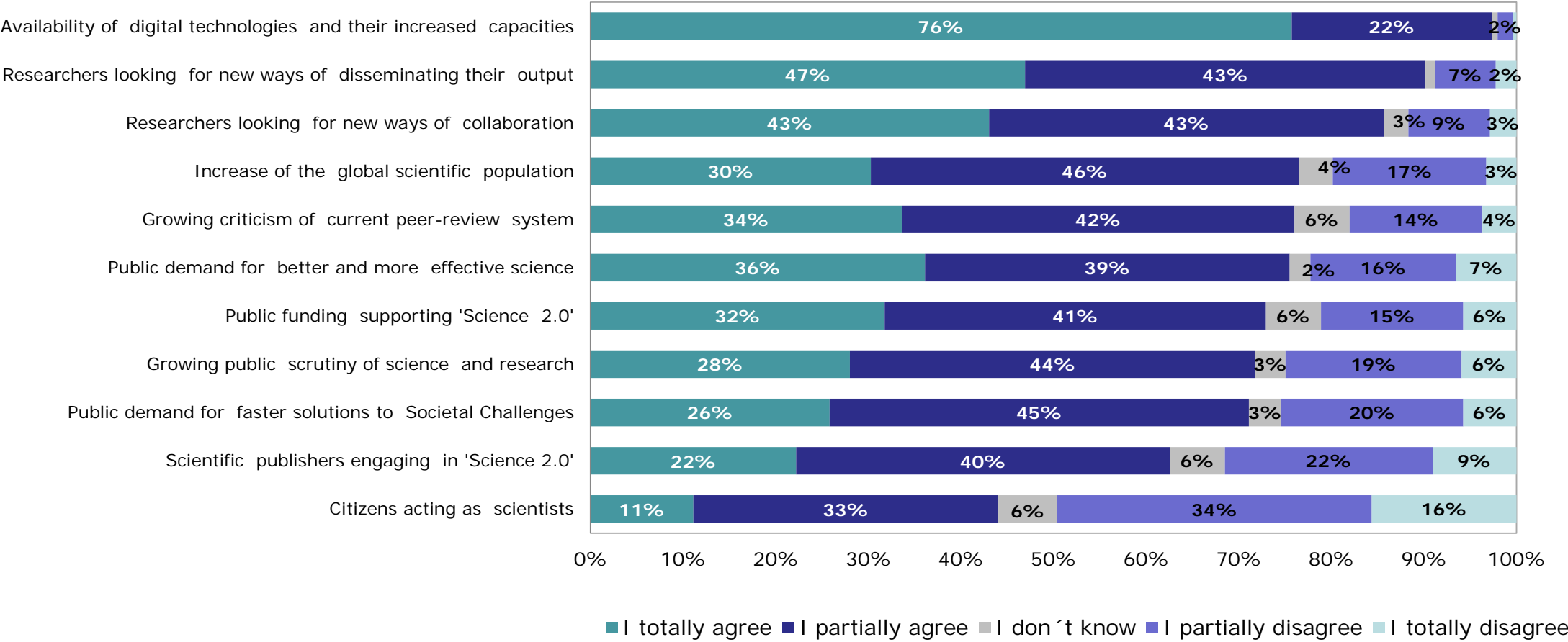
# Public Consultation on Open Science (Science 2.0)

- Purpose of the consultation:
  1. **Assess the degree of awareness**
  2. Assess the perception of the **opportunities and challenges**,
  3. **Identify possible policy implications**
- From 03.07.2014 to 30.09.2014
- 498 submitted responses of which 164 Organisations and 38 Public Authorities
- 28 position papers voluntarily submitted in addition to questionnaire
- 31 Responses from Denmark

Some first preliminary analysis of the closed questions (graphs)



# What are the key drivers of 'Science 2.0'?

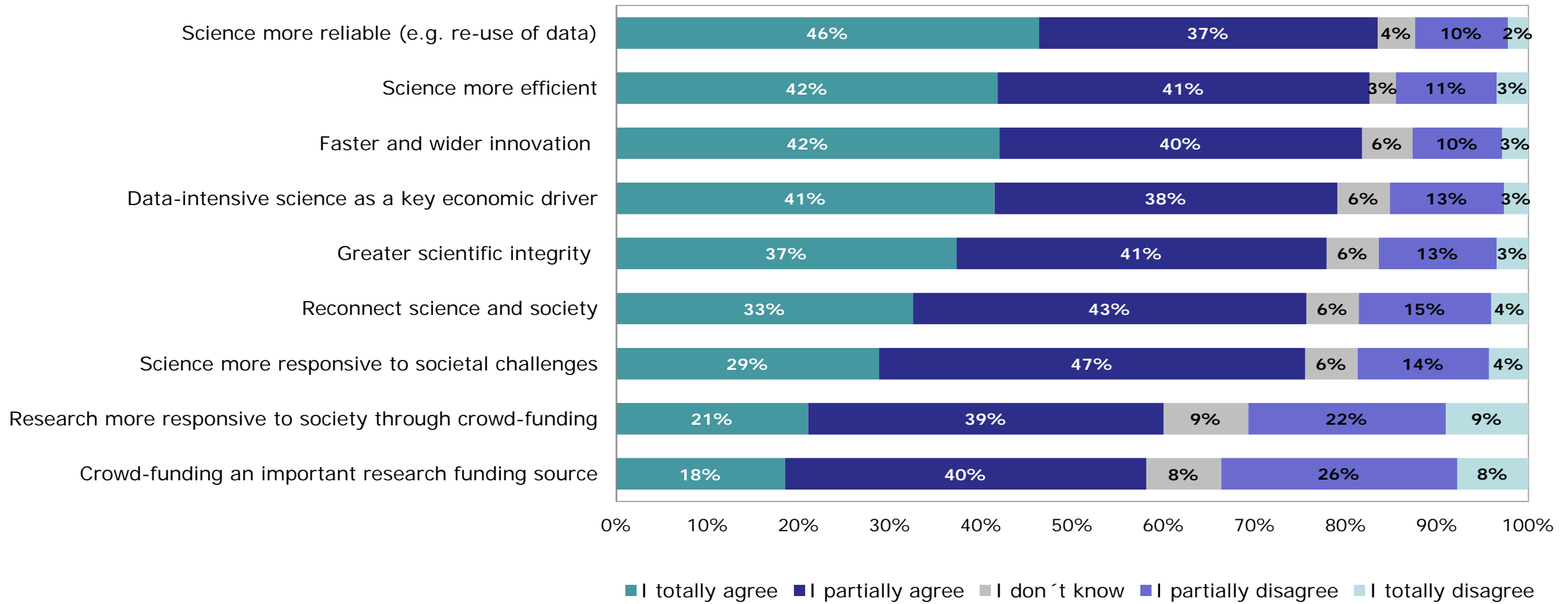


Sample size: 498

Missing: 8 to 12

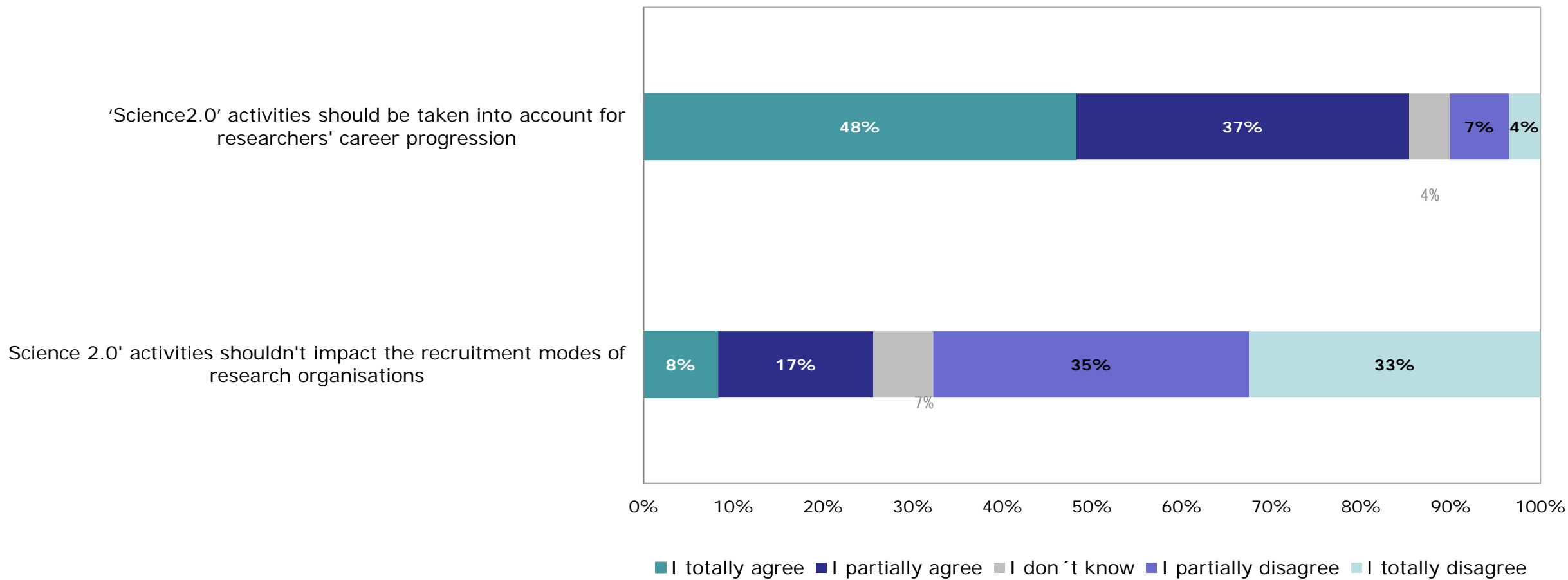


# What are the implications of 'Science 2.0' for society, the economy and the research system? (All respondents)




 Sample size: 498  
 Missing: 8 to 13

Implications of 'Science 2.0' for researchers: Acknowledgement of 'Science 2.0'-based activities



Sample size: 498  
Missing: 13 to 18



# HORIZON 2020

**Thank you**

**Find out more:**

[www.ec.europa/research/horizon2020](http://www.ec.europa/research/horizon2020)

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