



EUROPEAN / Research &
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Innovation Union Atlas

2011 edition





EUROPEAN COMMISSION

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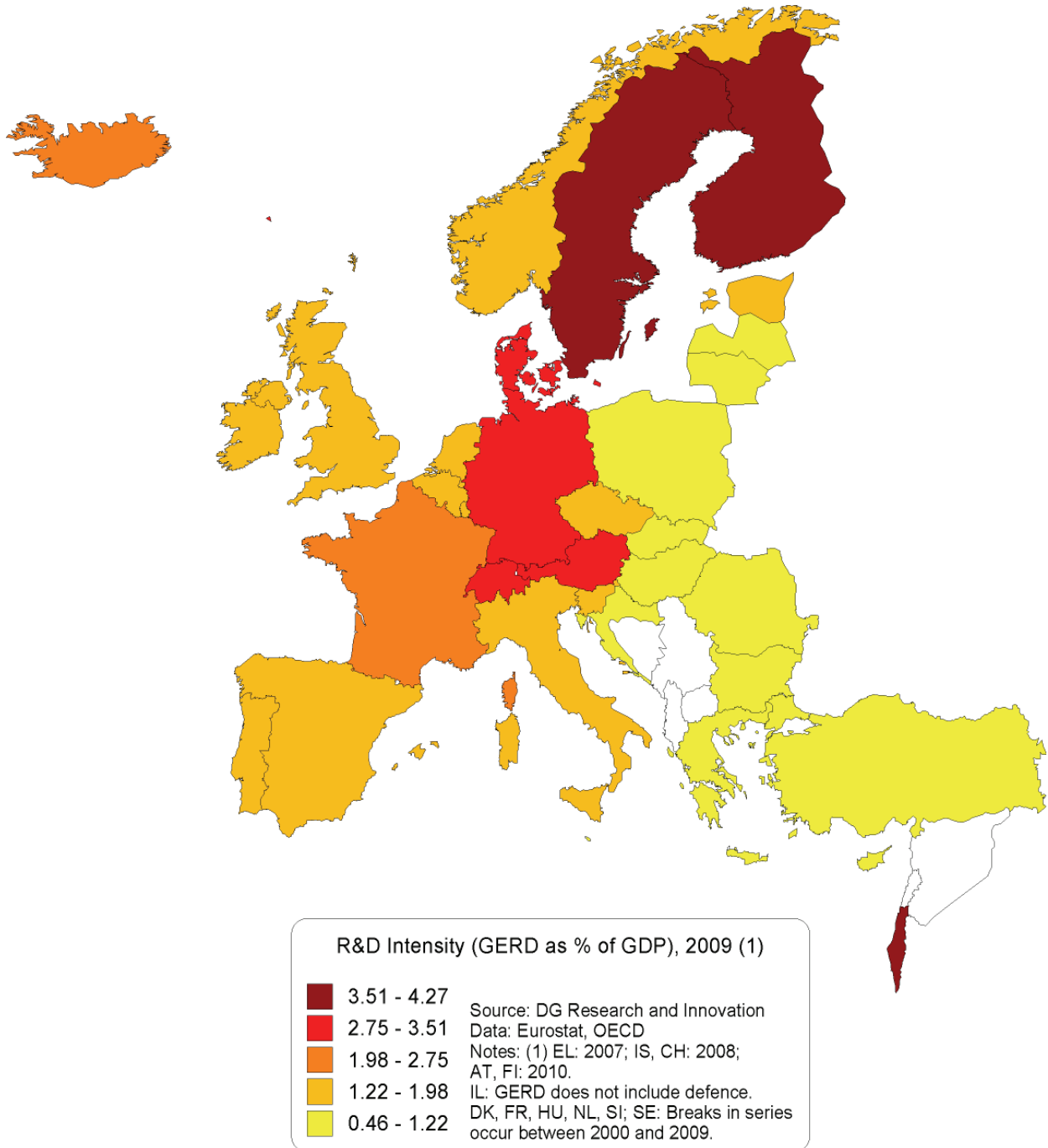
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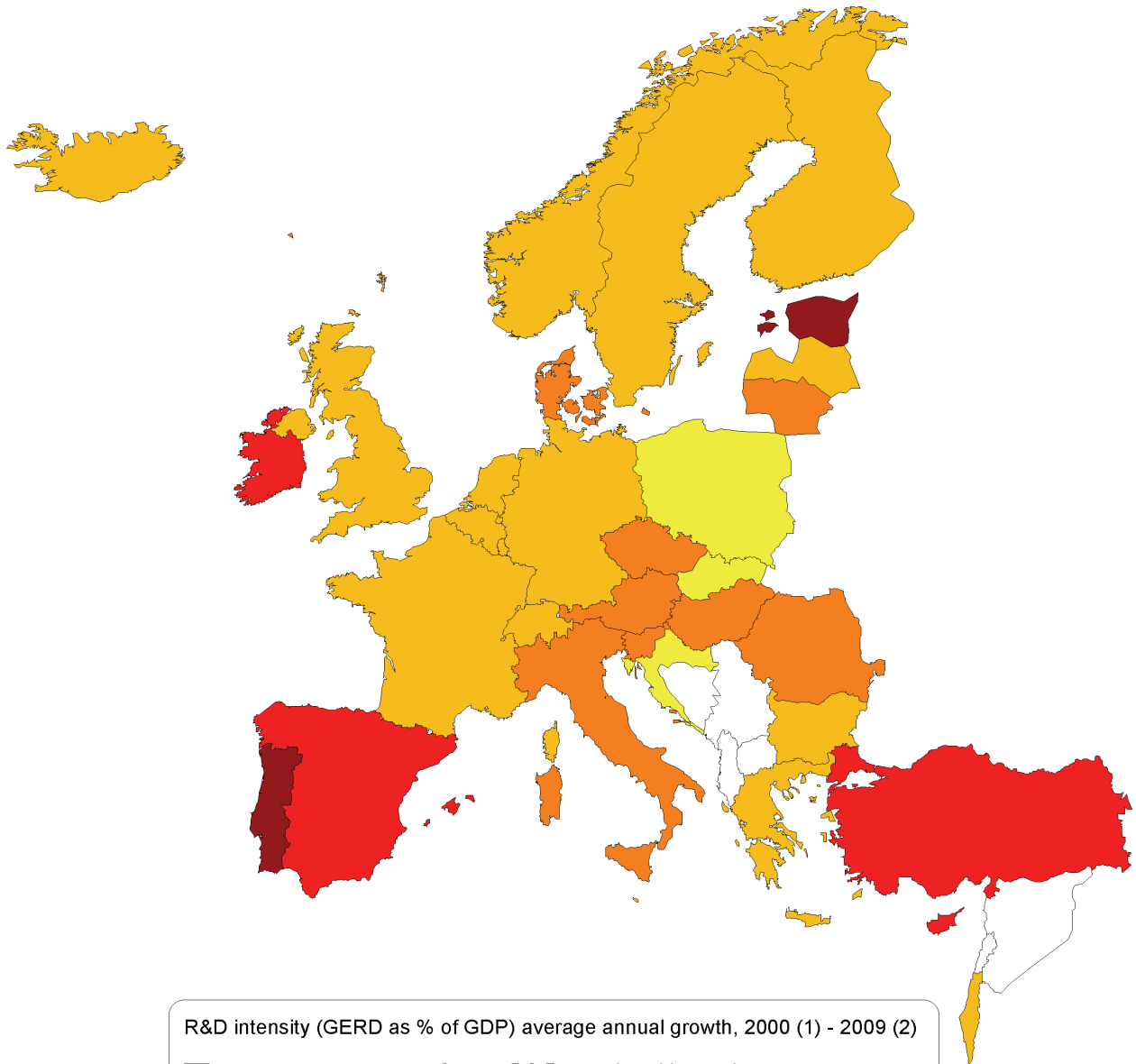
Investments in Research and Innovation

R&D intensity (GERD as % of GDP), 2009



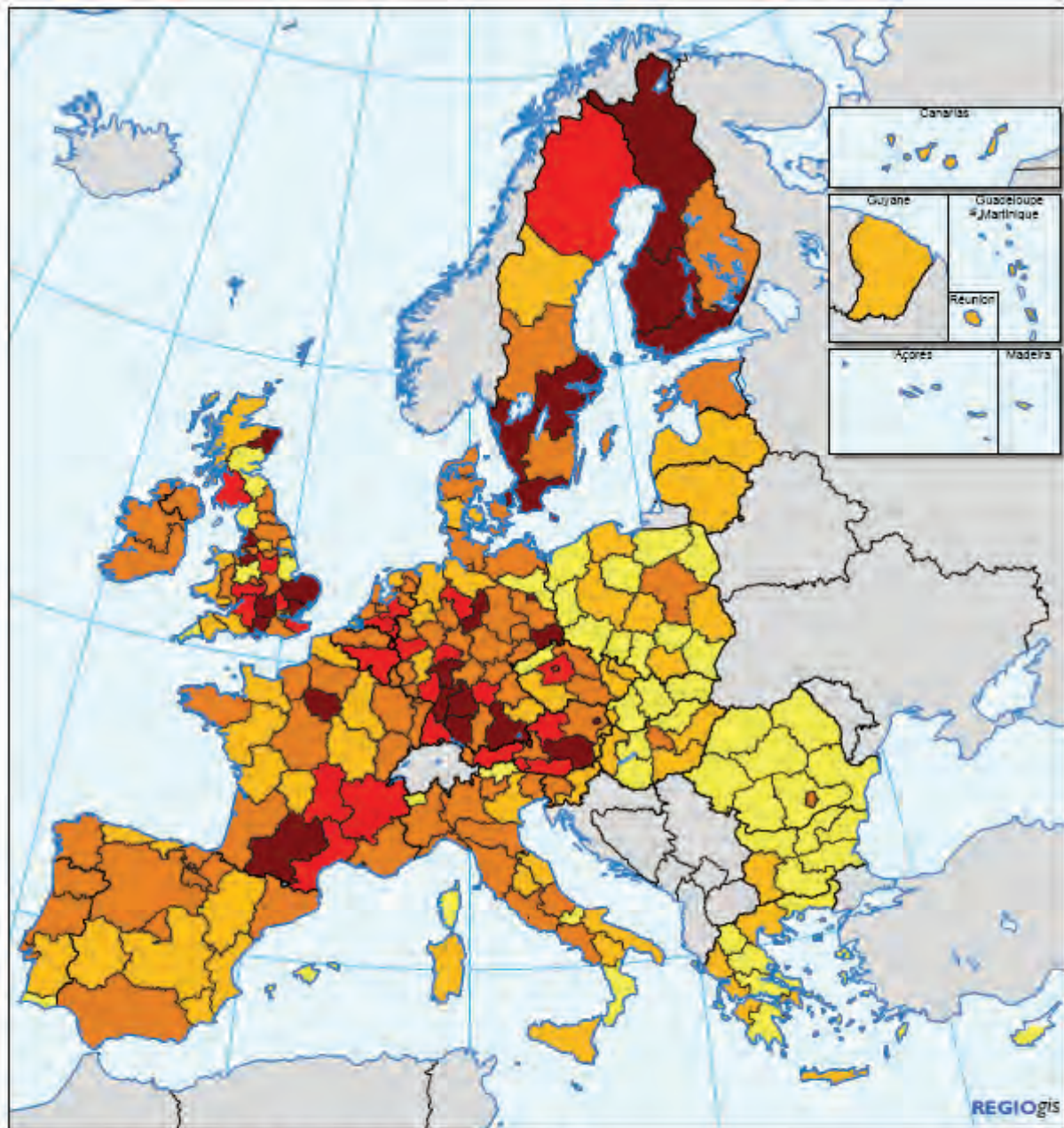
Investments in Research and Innovation

R&D intensity average annual growth 2000-2009



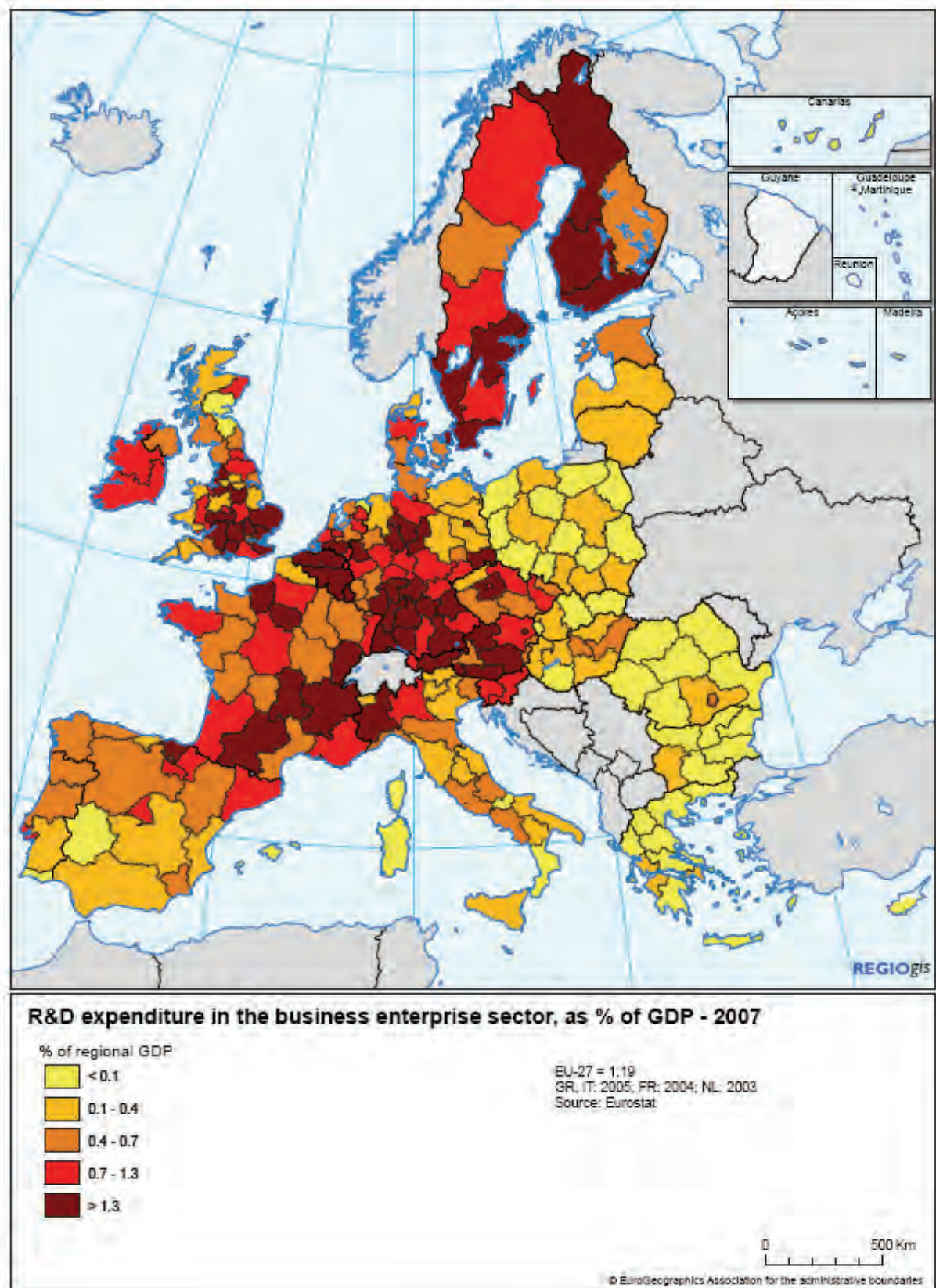
Investments in Research and Innovation

Gross Domestic expenditures in R&D (GERD) as % of regional GDP, 2007



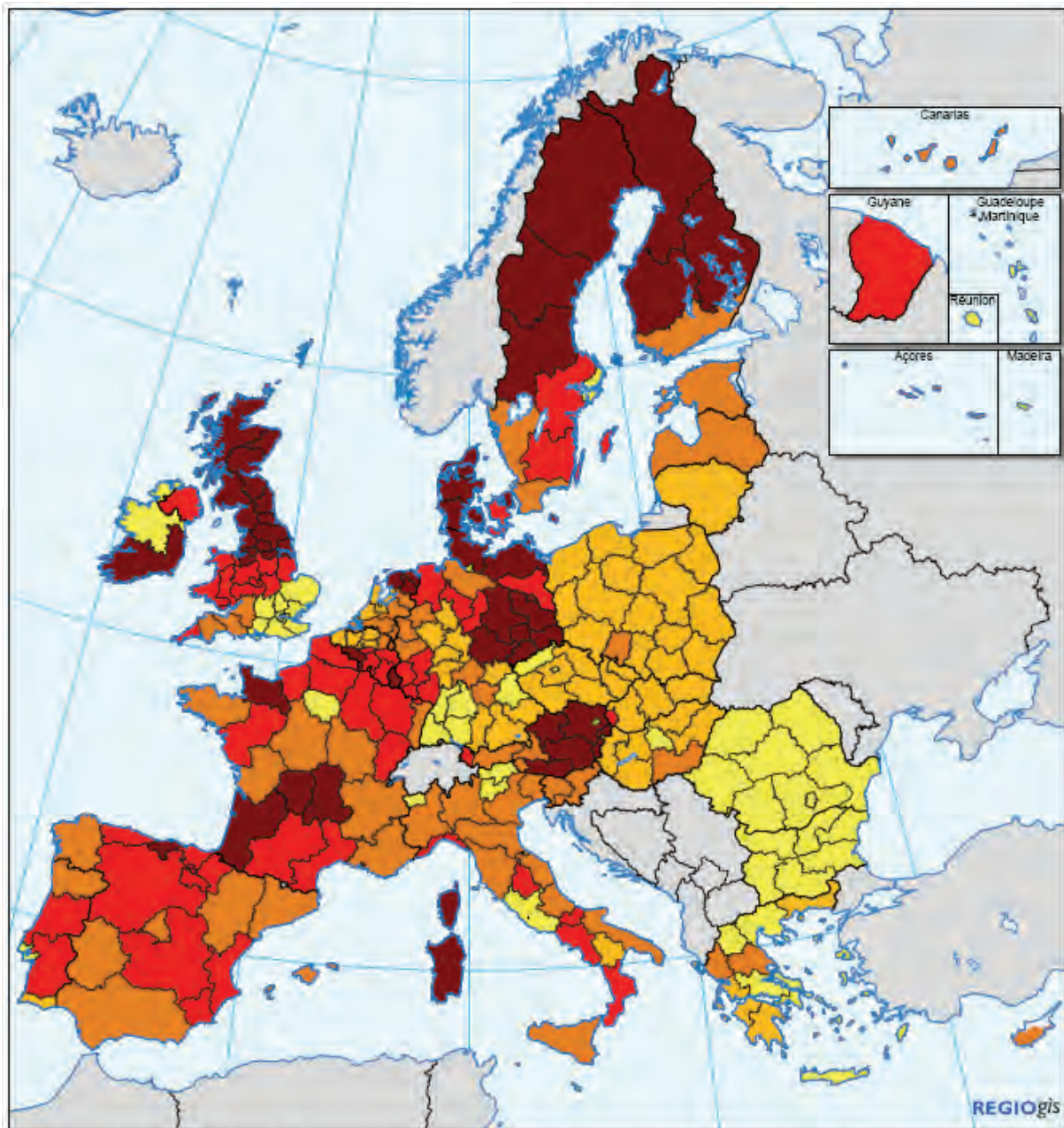
Investments in Research and Innovation

Business R&D expenditure (BERD) as % regional GDP, 2007



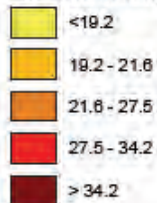
Investments in Research and Innovation

Regional Structural Funds planned investments in Research and Innovation, 2007-2013



Planned investments of Cohesion Policy in RTD, innovation, enterprise environment, 2007-2013

% of total funding

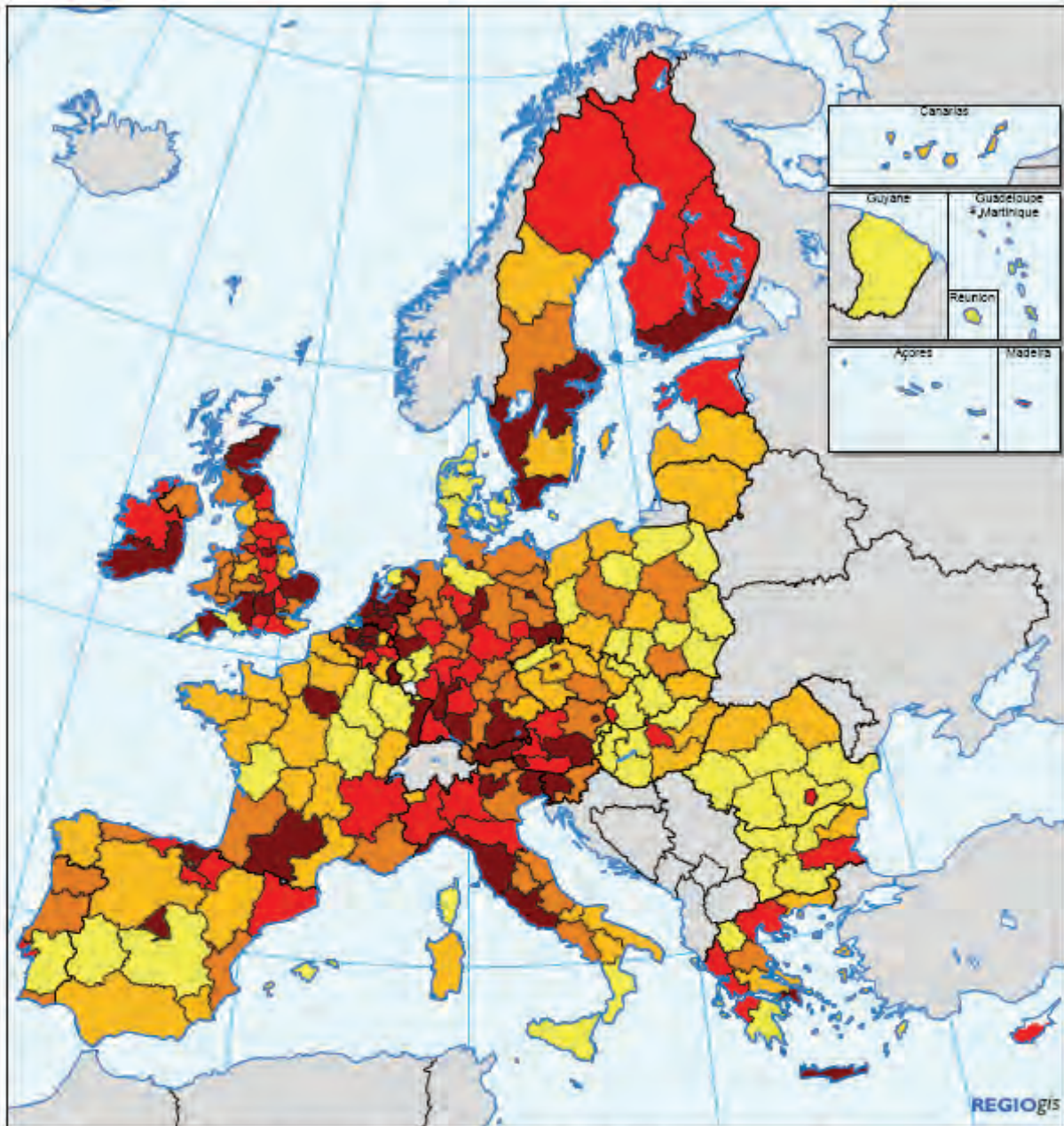


EU27 = 23.0
 Funding for RTD, innovation and enterprise amounts to some €79 billion
 Source: DG REGIO



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FP7 average funding per head



7th Framework Programme, average funding per head

Index, EU27 = 100

- < 10
- 10 - 25
- 25 - 60
- 60 - 130
- > 130

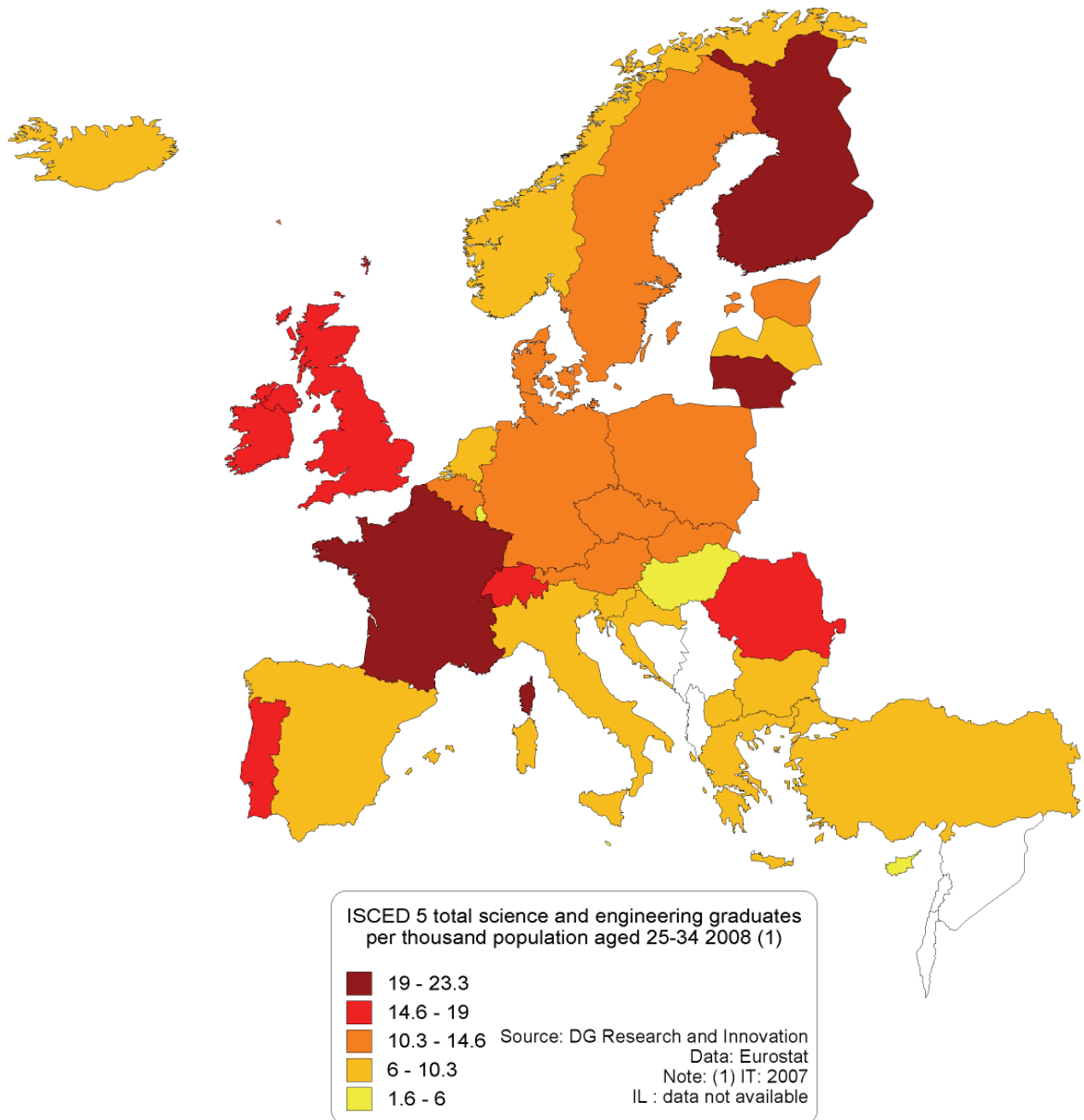
Source: DG Research and Innovation, DG REGIO calculations

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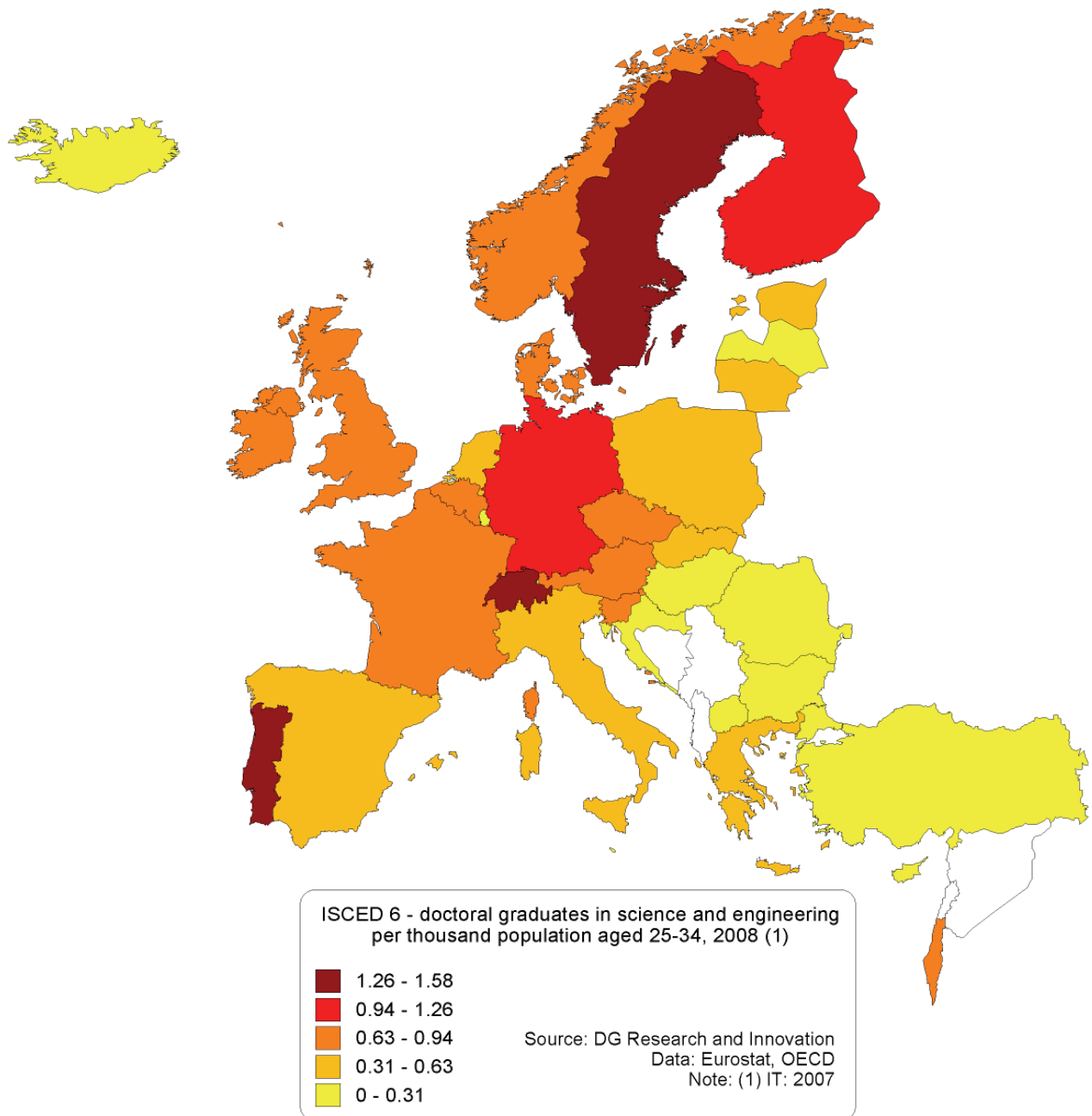
Human resources

New graduates in Science and Engineering per thousand population aged 25-34, 2008



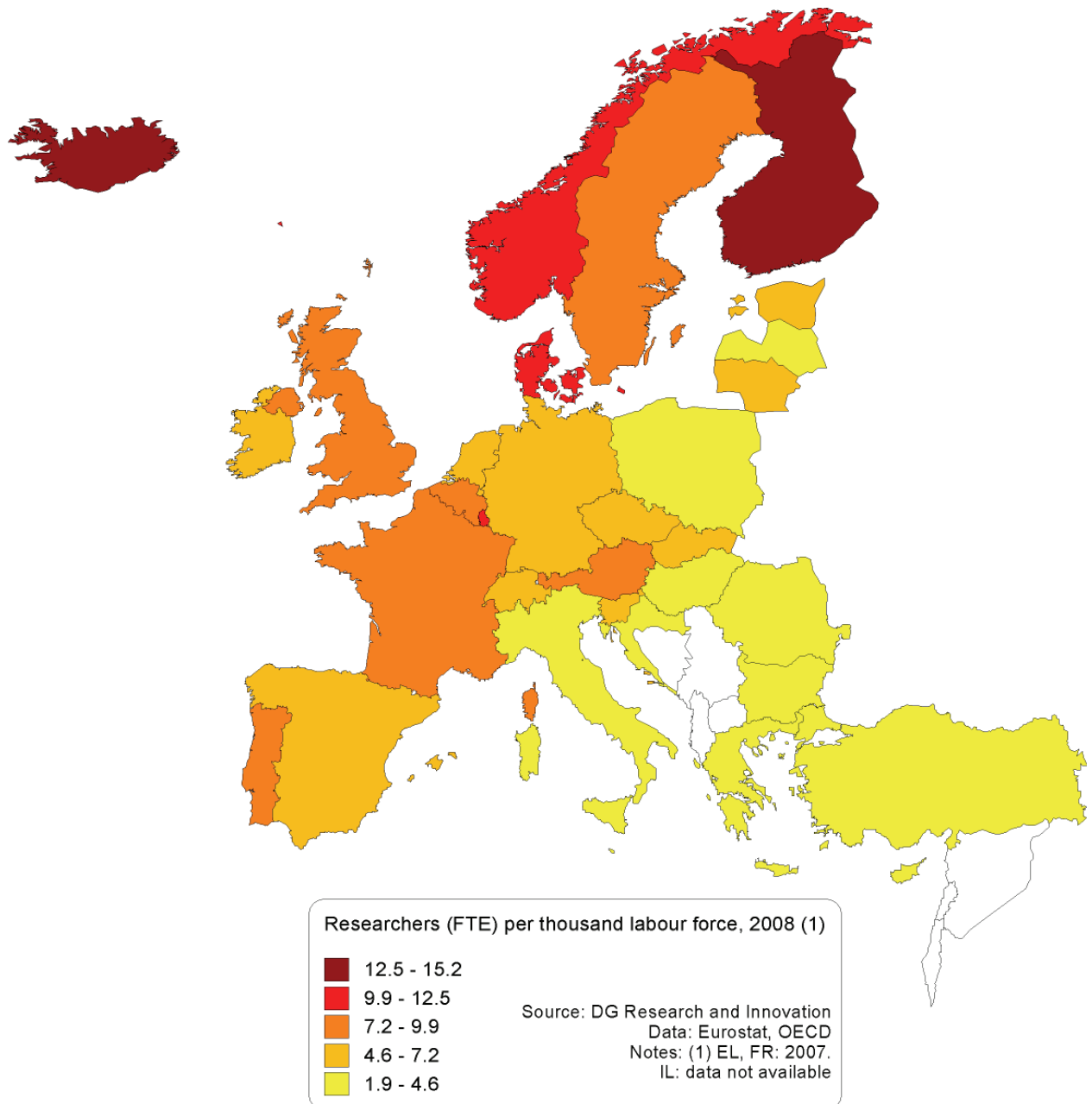
Human resources

New doctoral graduates in Science and Engineering per thousand population aged 25-34, 2008



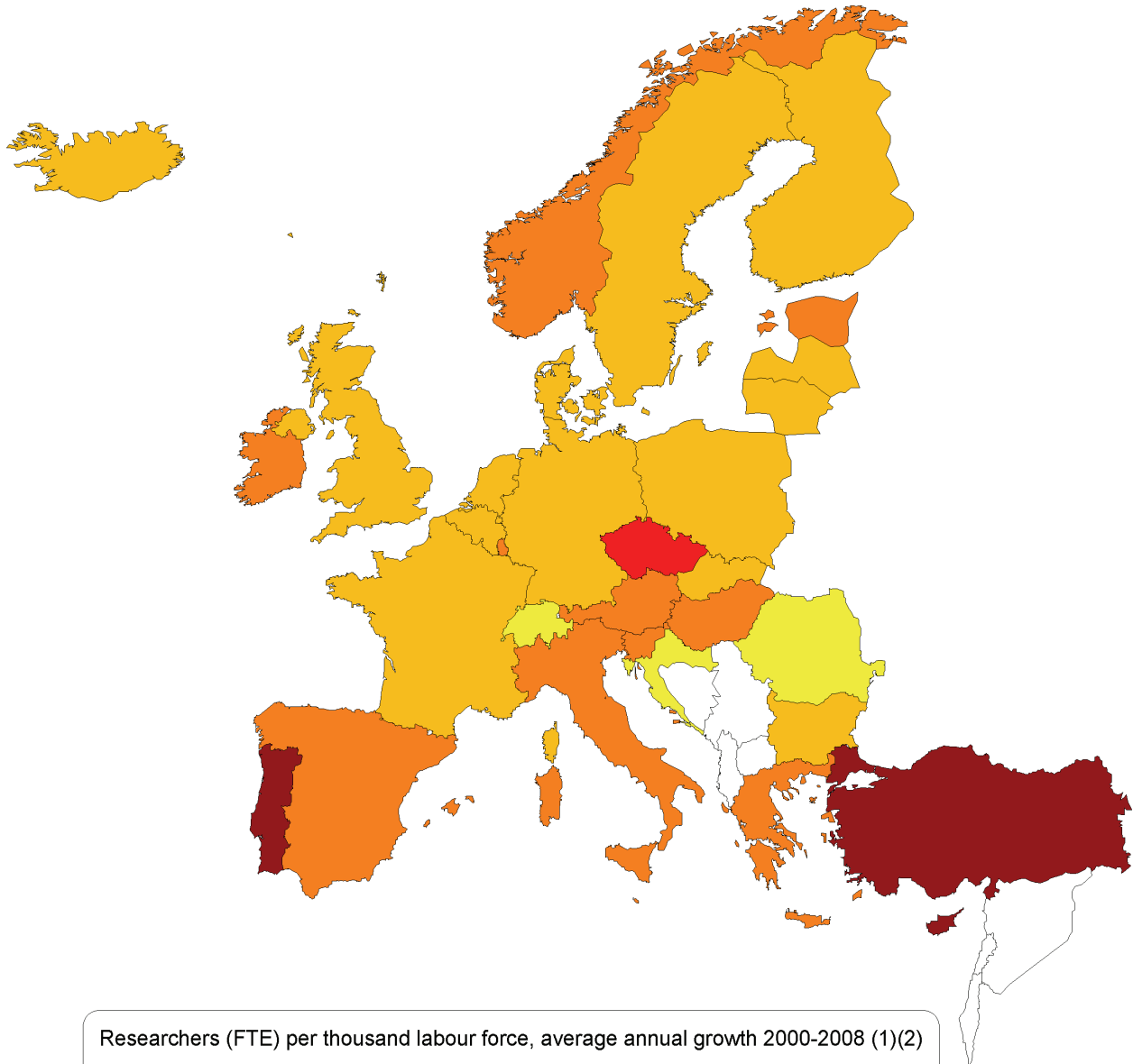
Human resources

Researchers (FTE) per thousand labour force, 2008



Human resources

Researchers (FTE) per thousand labour force, average annual growth 2000-2008

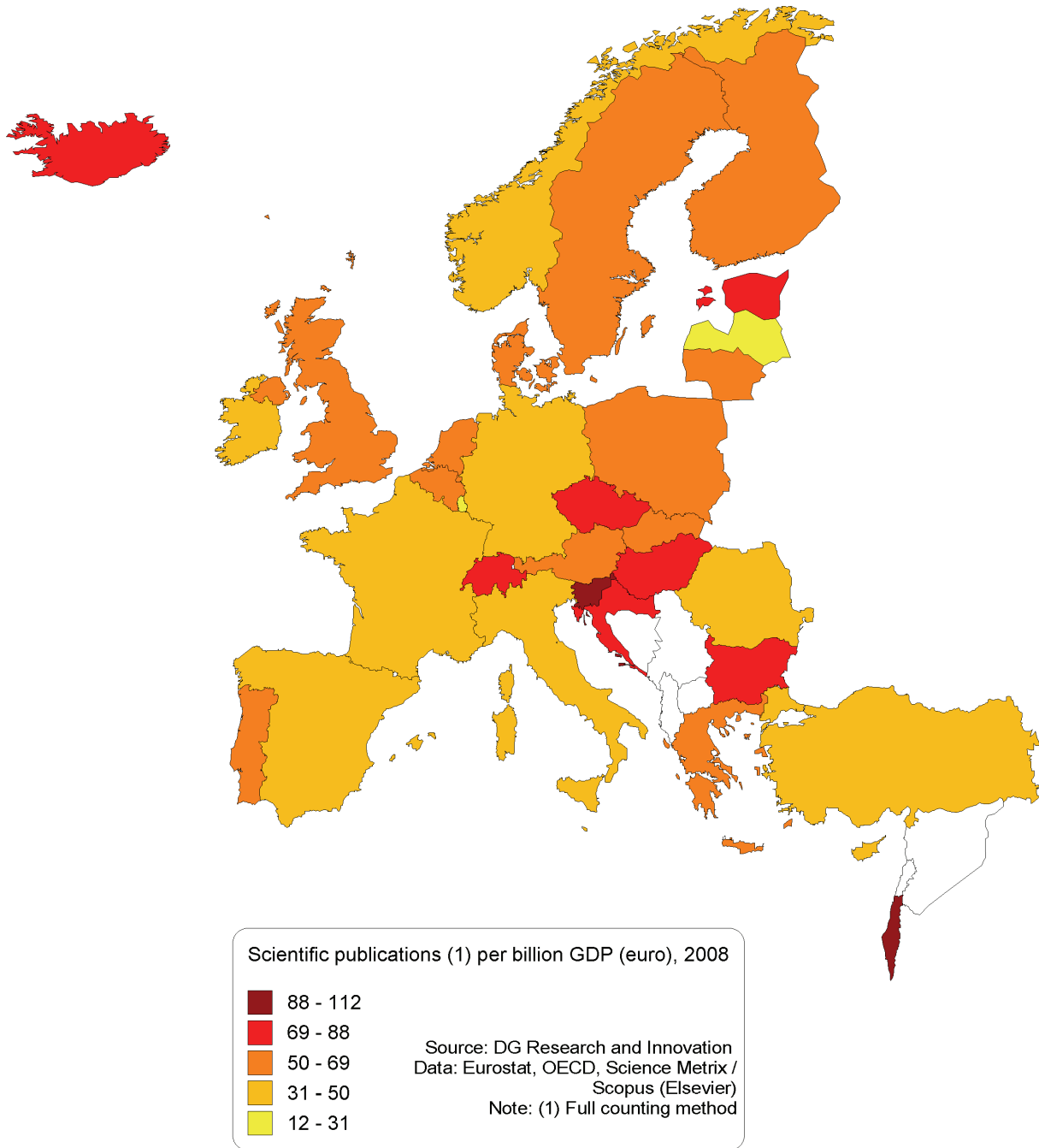


Researchers (FTE) per thousand labour force, average annual growth 2000-2008 (1)(2)

- 10.7 - 14.3
- 7.0 - 10.7
- 3.3 - 7.0
- 0.4 - 3.3
- 4.0 - -0.4

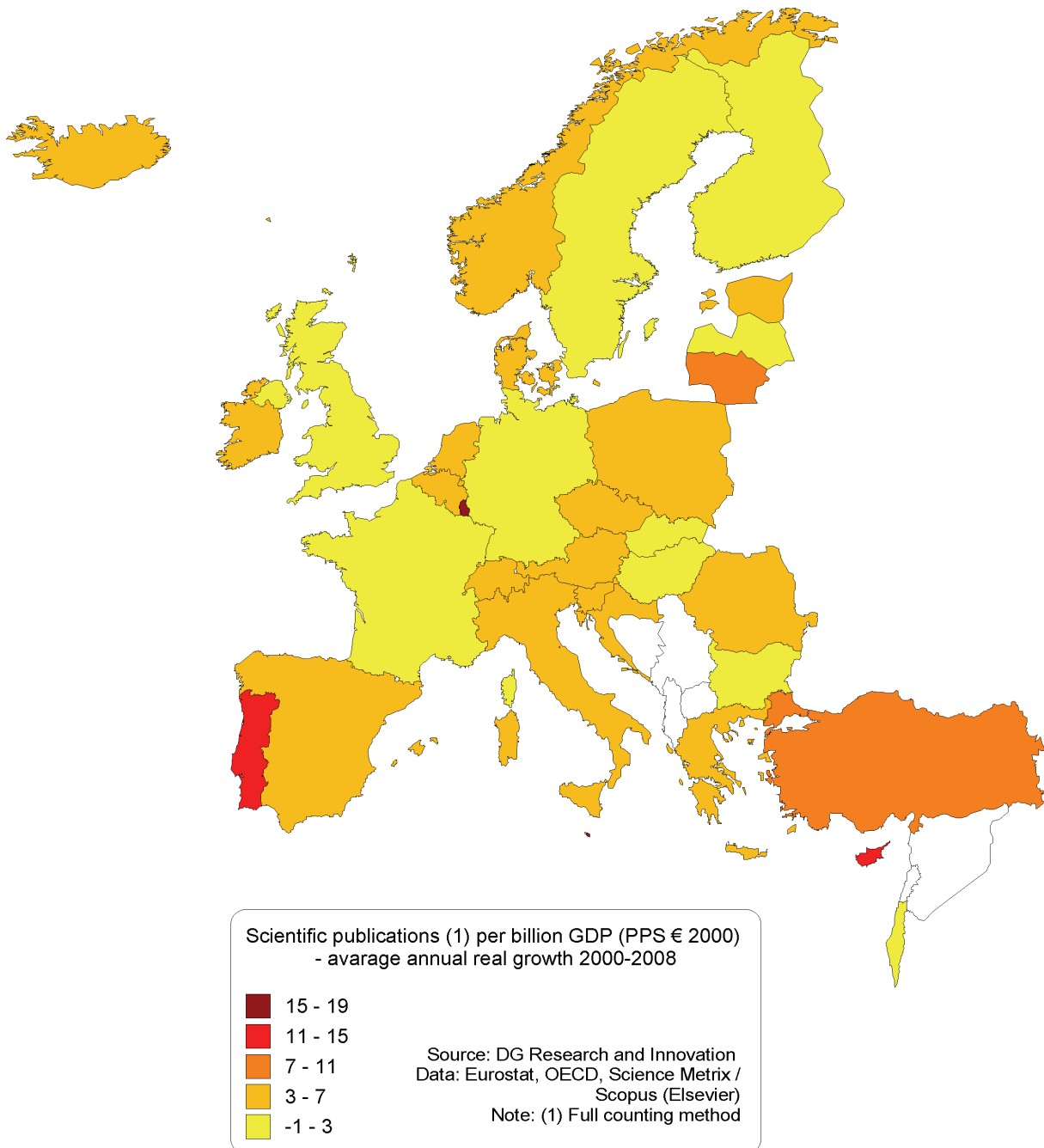
Source: DG Research and Innovation
Data: Eurostat
Notes: (1) EL: 2001-2007; IS, NO: 2001-2008; AT, HR: 2002-2008; HU, MT, FI: 2004-2008; CZ, UK: 2005-2008;
(2) CZ, DK, HU, NL, SE, UK, : Breaks in series occur between 2000 and 2008.
Innovation Union Competitiveness Report 2011

Scientific publications per billion GDP (euro), 2008



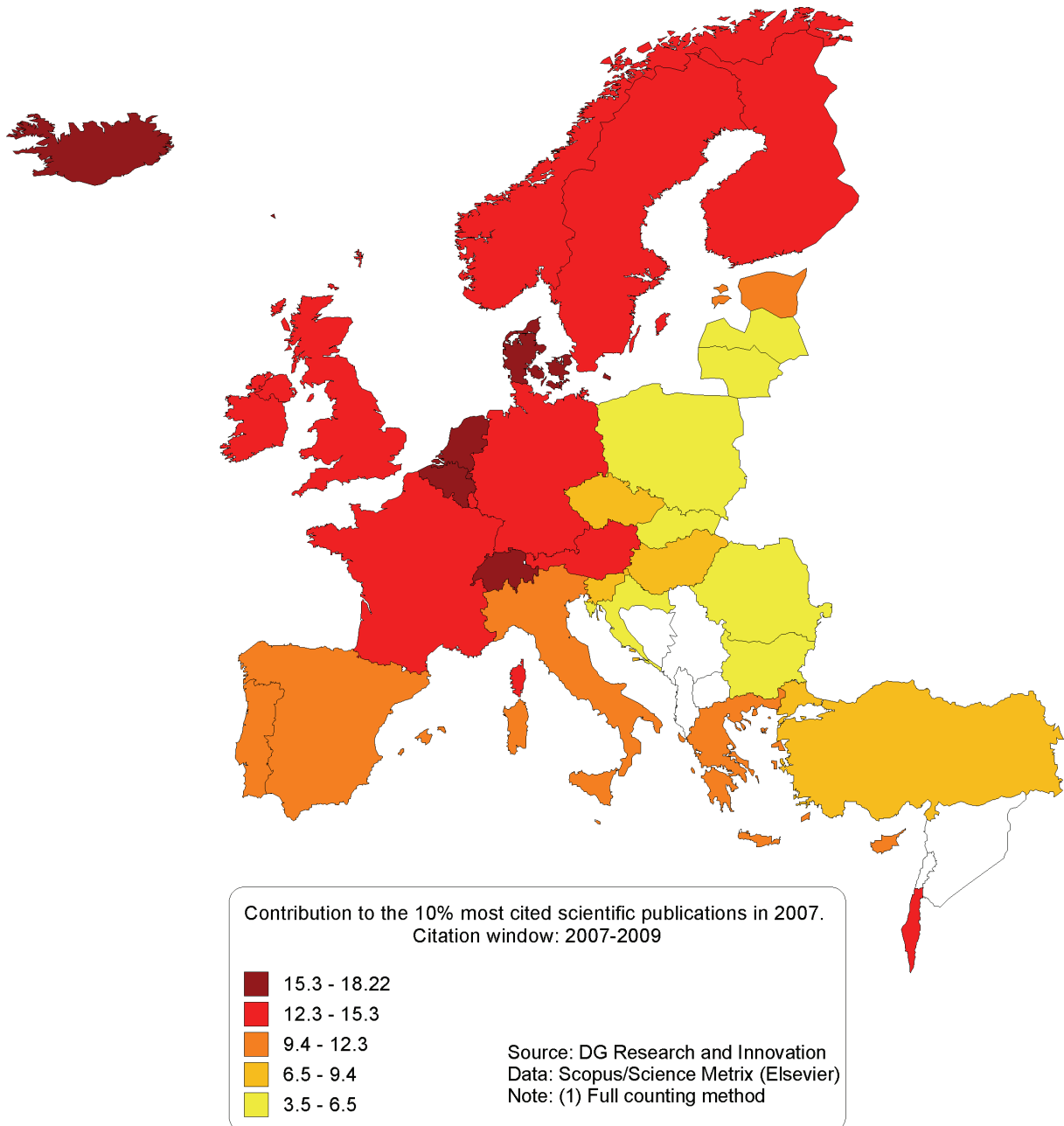
Performance

Scientific publications per billion GDP (PPS€2000) - average annual real growth, 2000-2008



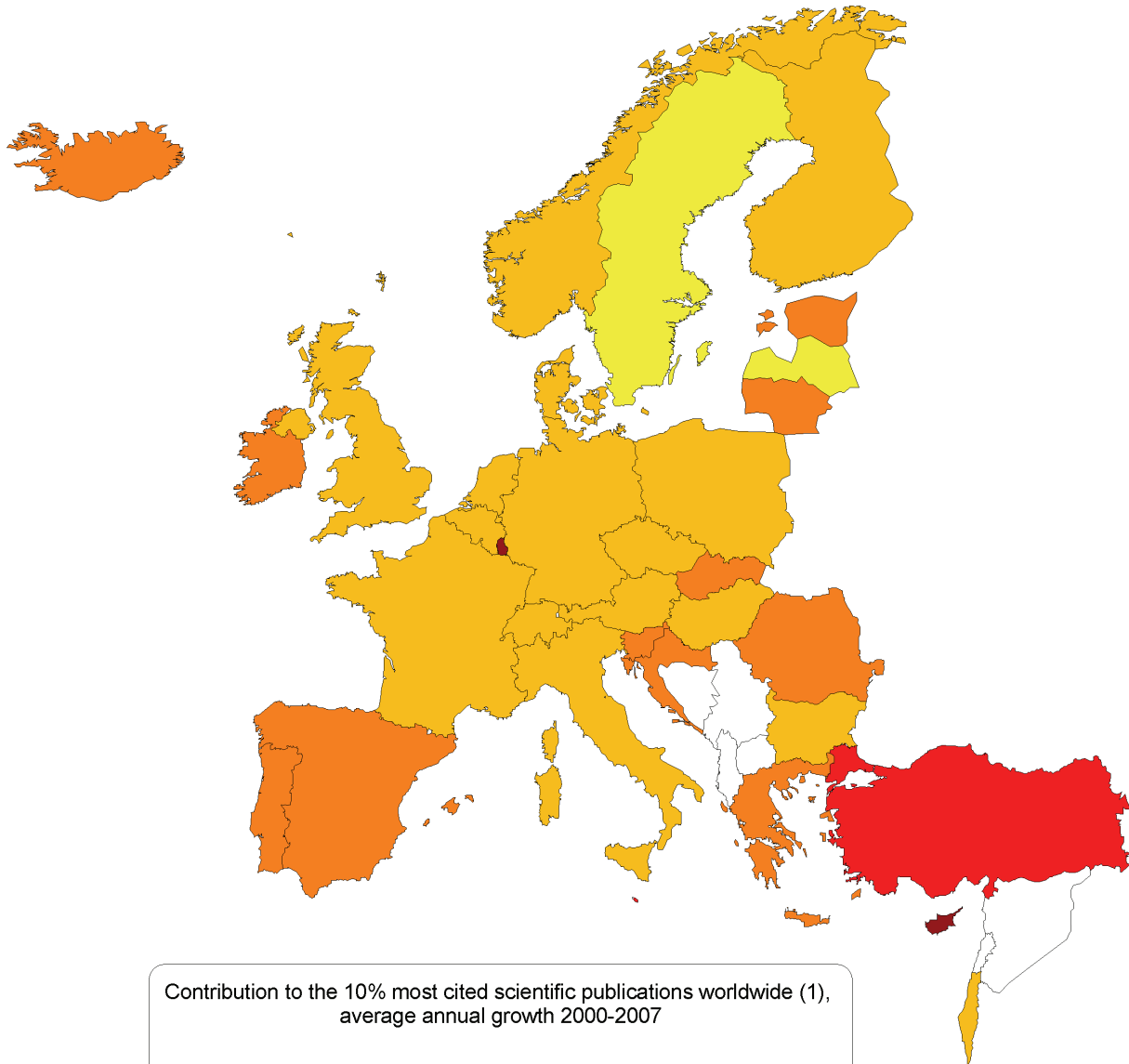
Performance

Contribution to the 10% most cited scientific publications worldwide as % of total national publications, 2007; citation window 2007-2009

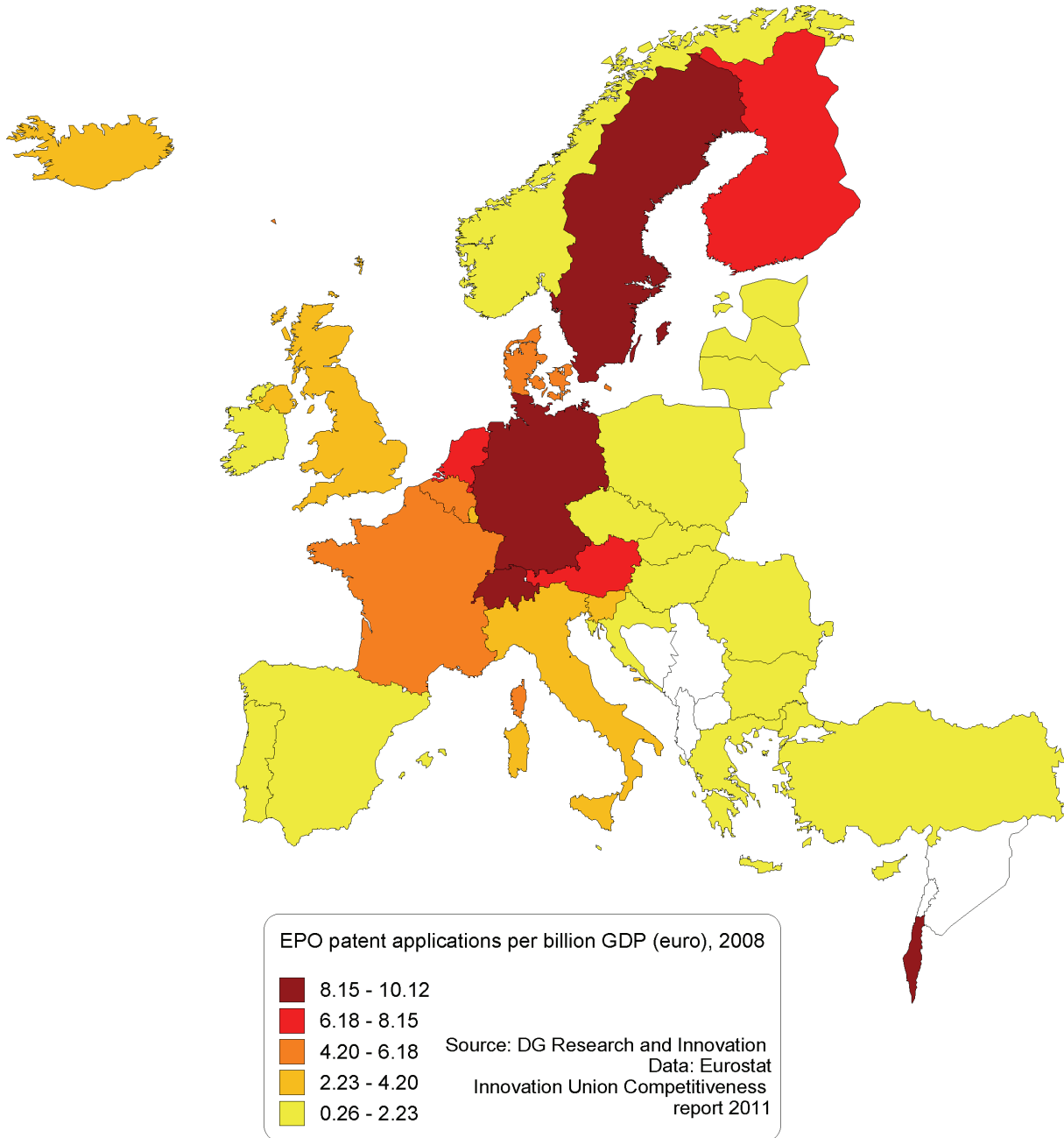


Performance

Contribution to the 10% most cited scientific publications worldwide as % of total national publications, average annual growth 2000-2007

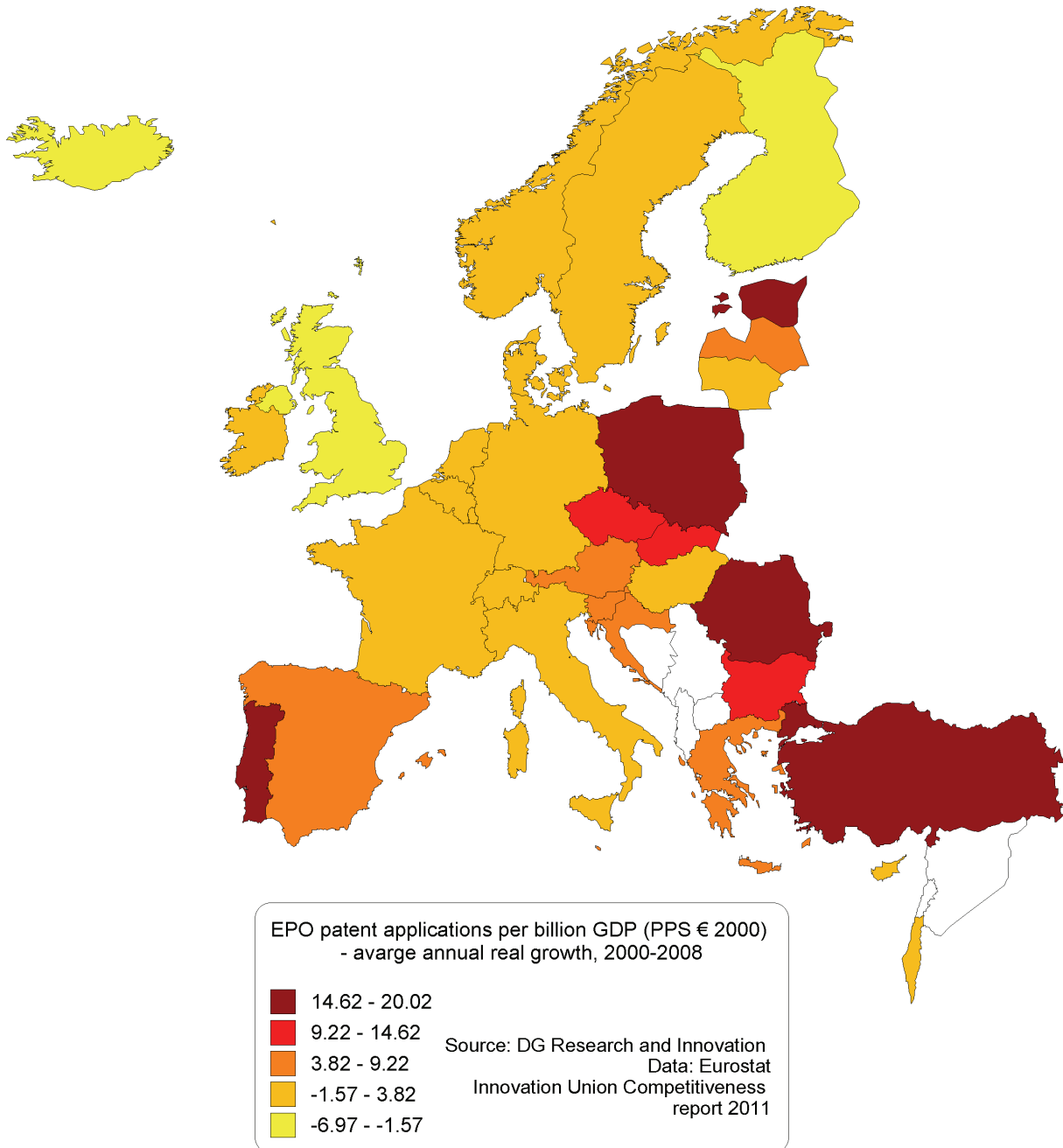


EPO patent applications per billion GDP (euro), 2008

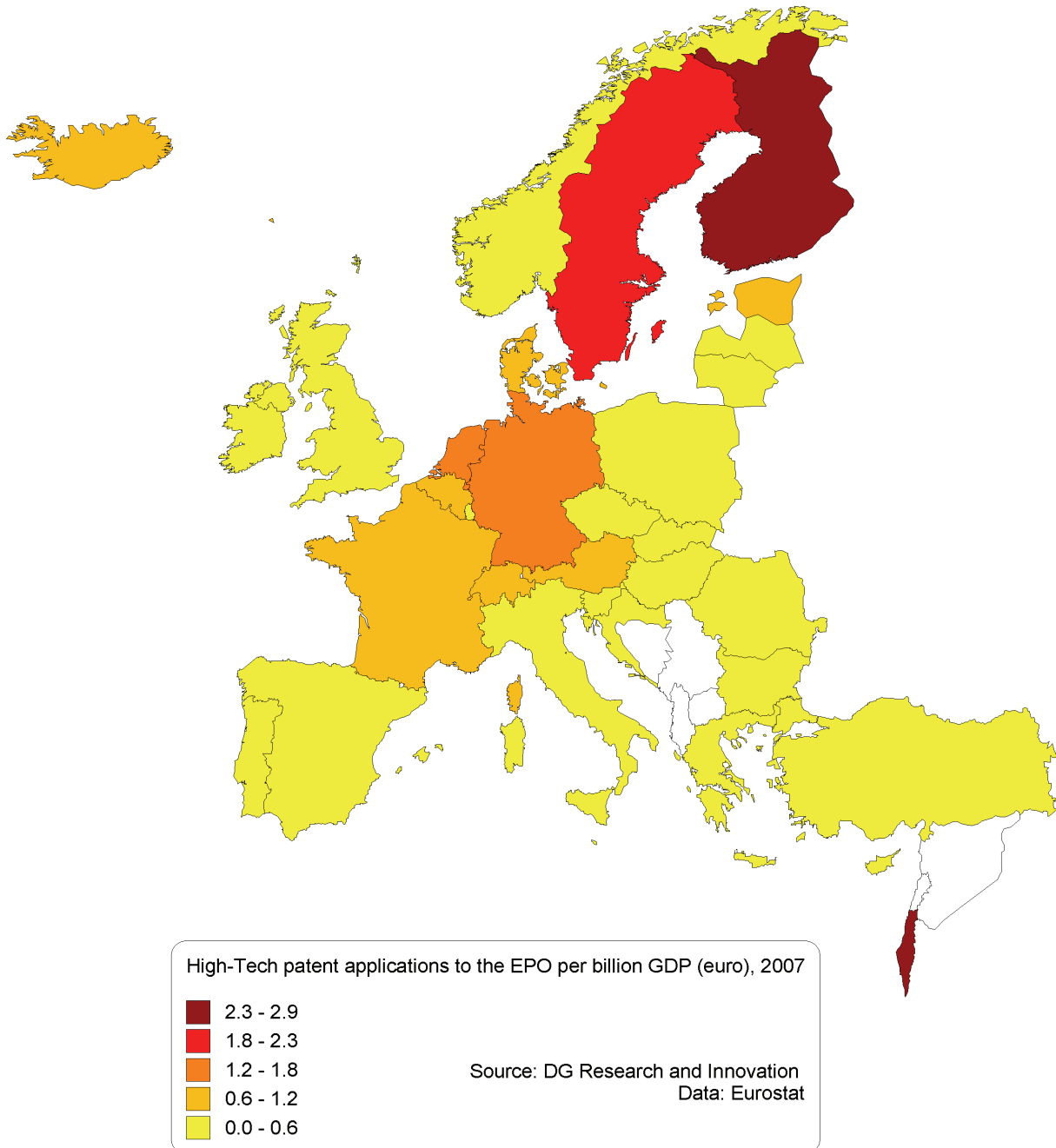


Performance

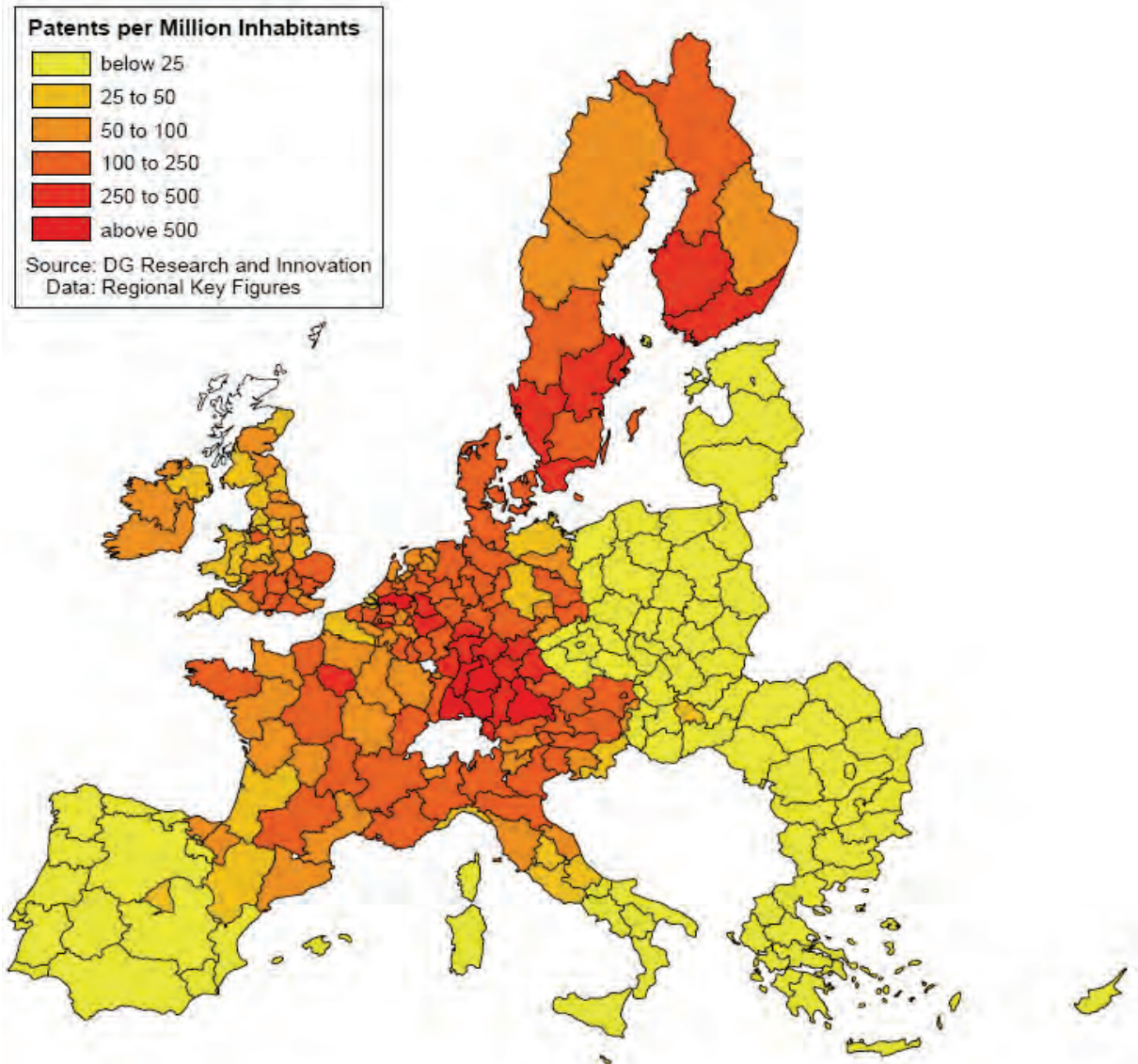
EPO patent applications per billion GDP (PPS €2000) - average annual real growth, 2000-2008



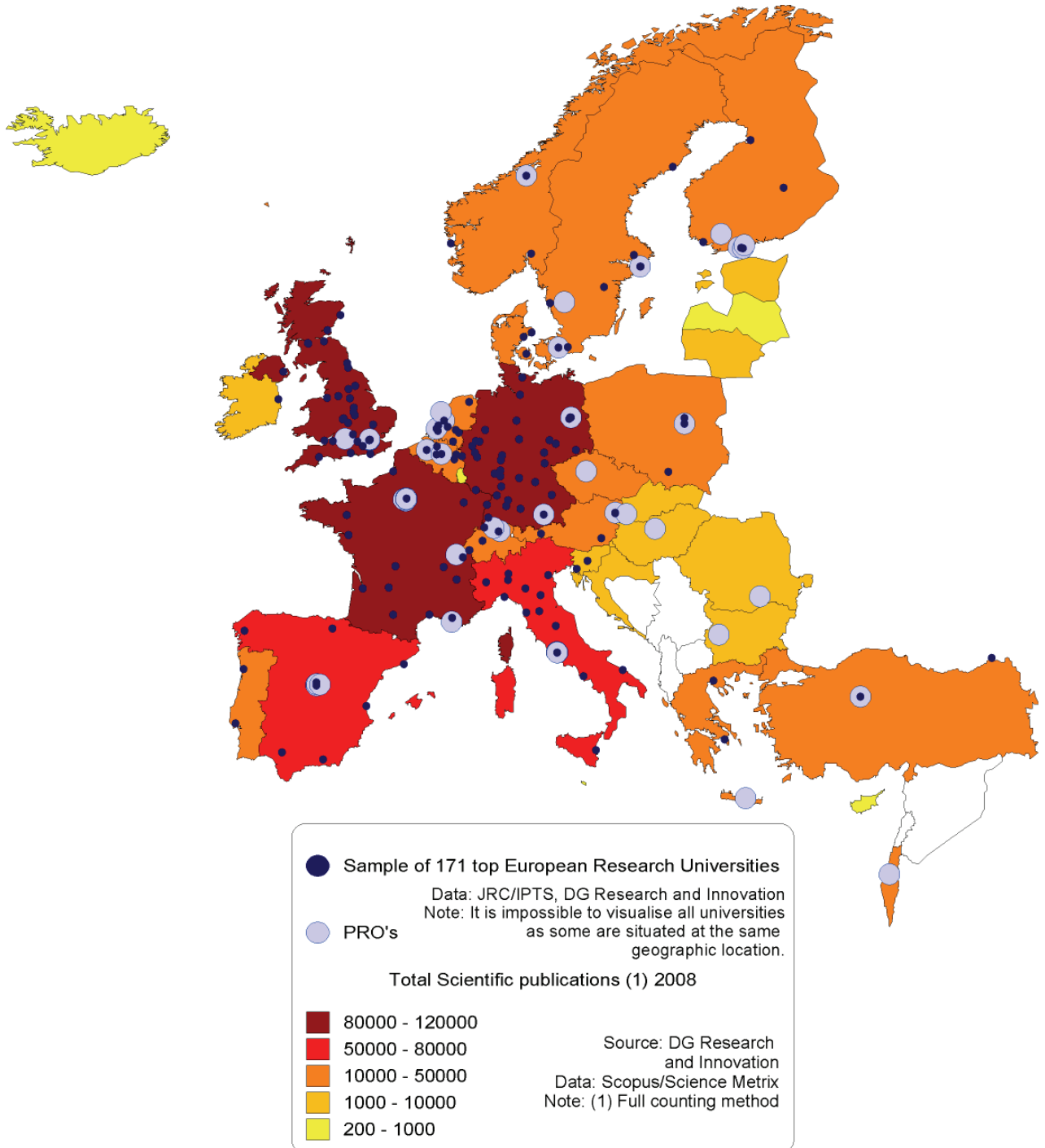
High-Tech patent applications to the EPO per billion GDP (euro), 2007



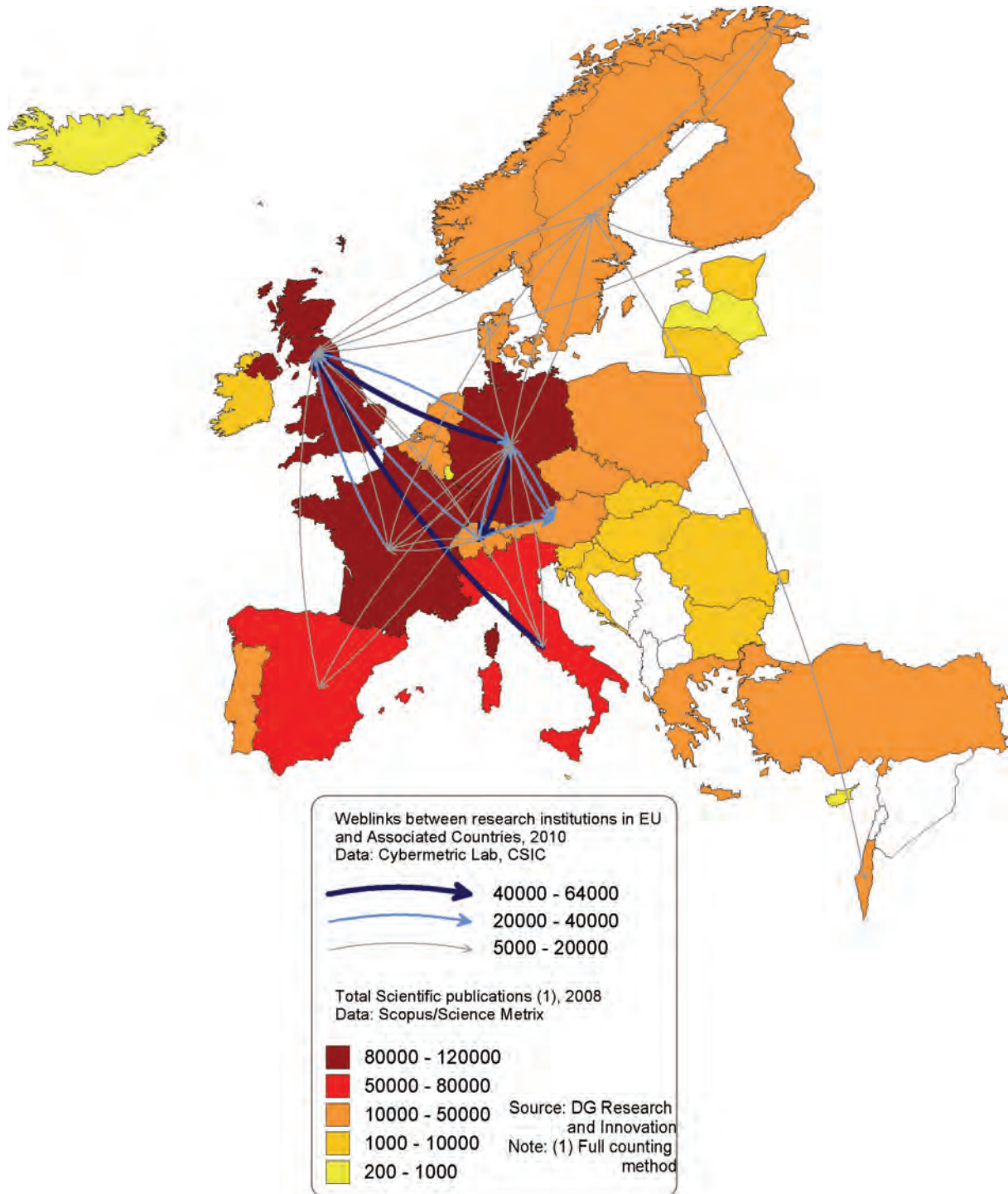
Patent intensity in the EU, NUTS 2 region, 2007



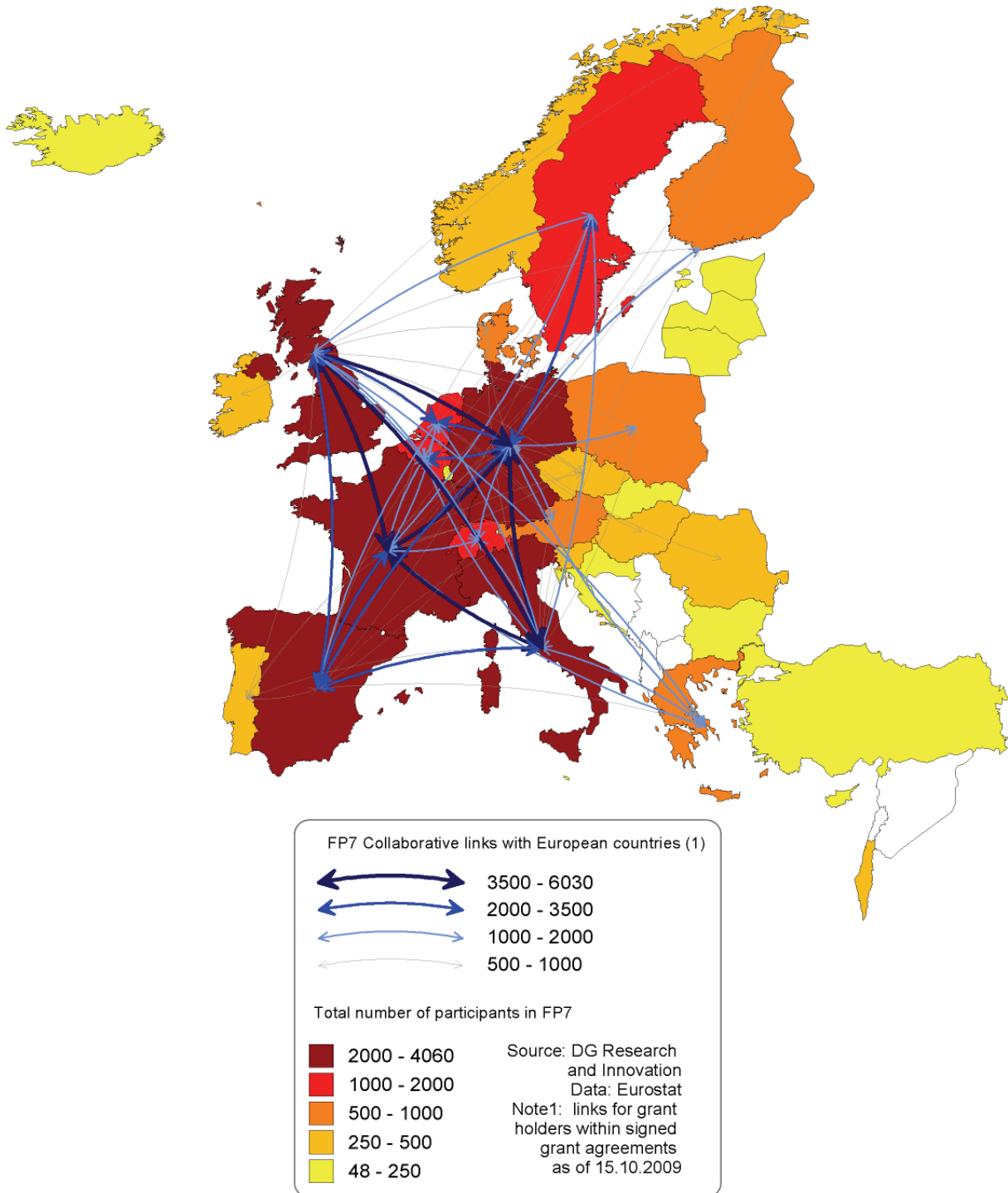
Distribution of top research institutions in Europe, 2008



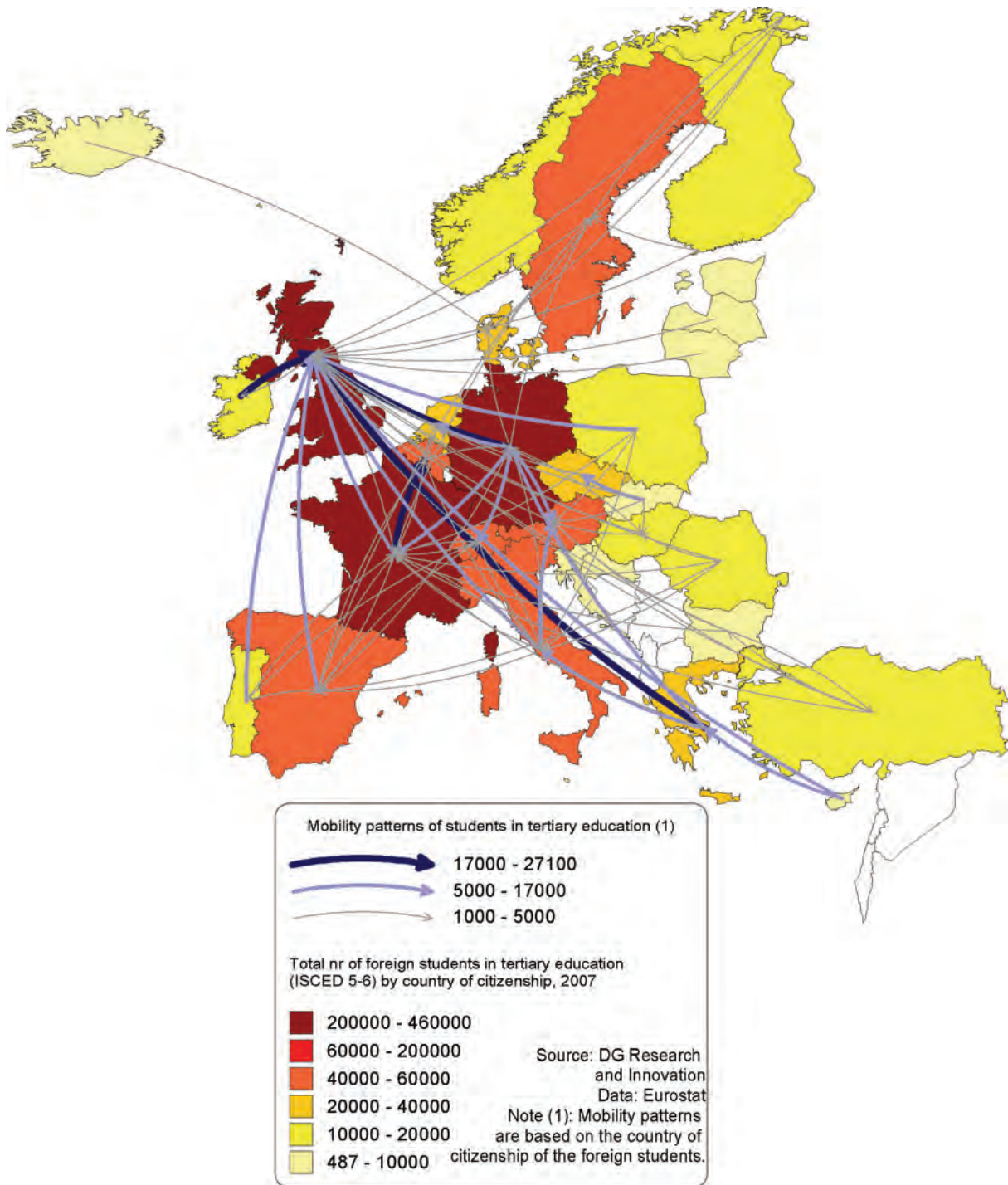
Web-based links between the top research institutions at country level, 2010



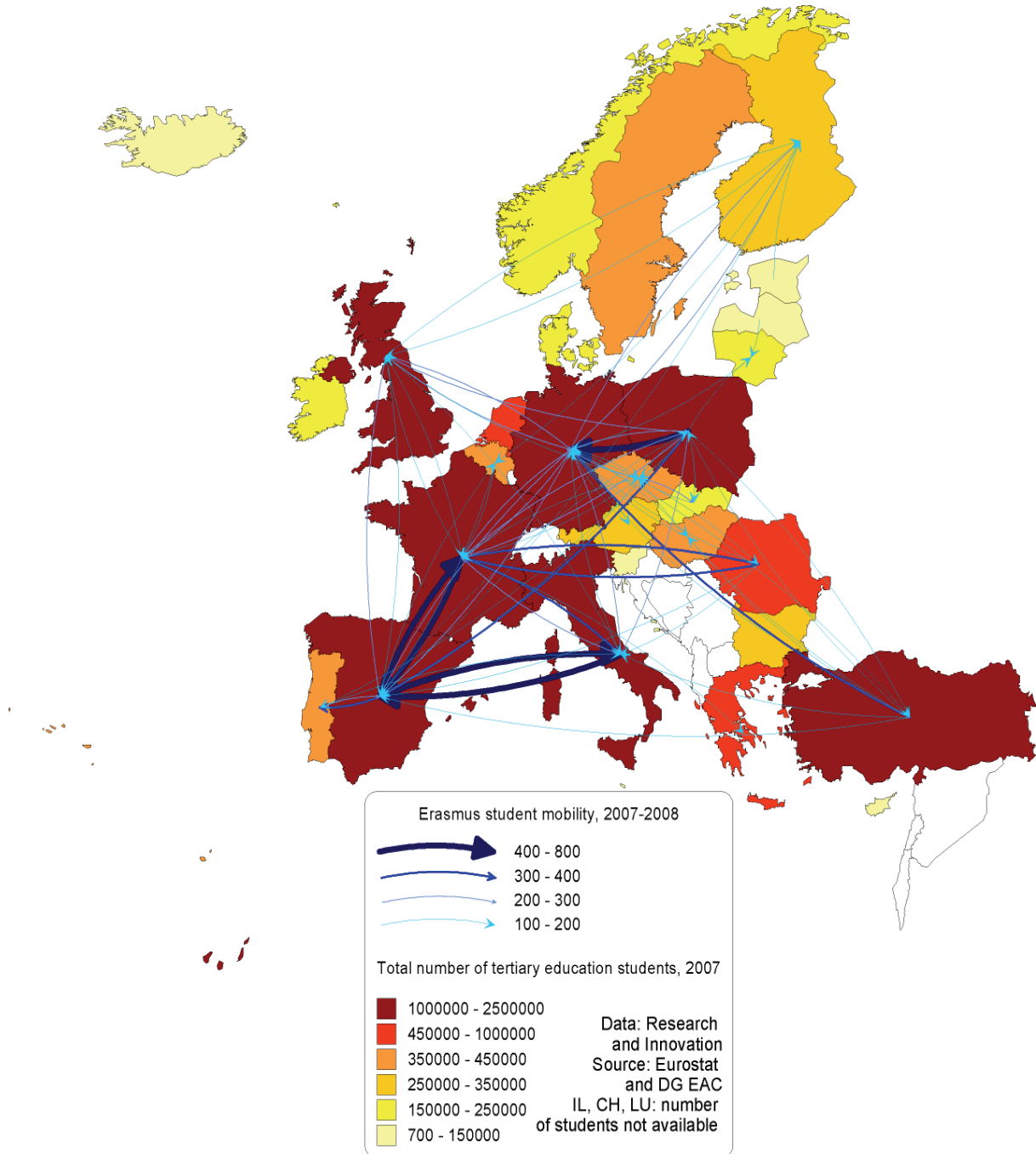
Seventh Framework Programme (FP7) - Collaborative links



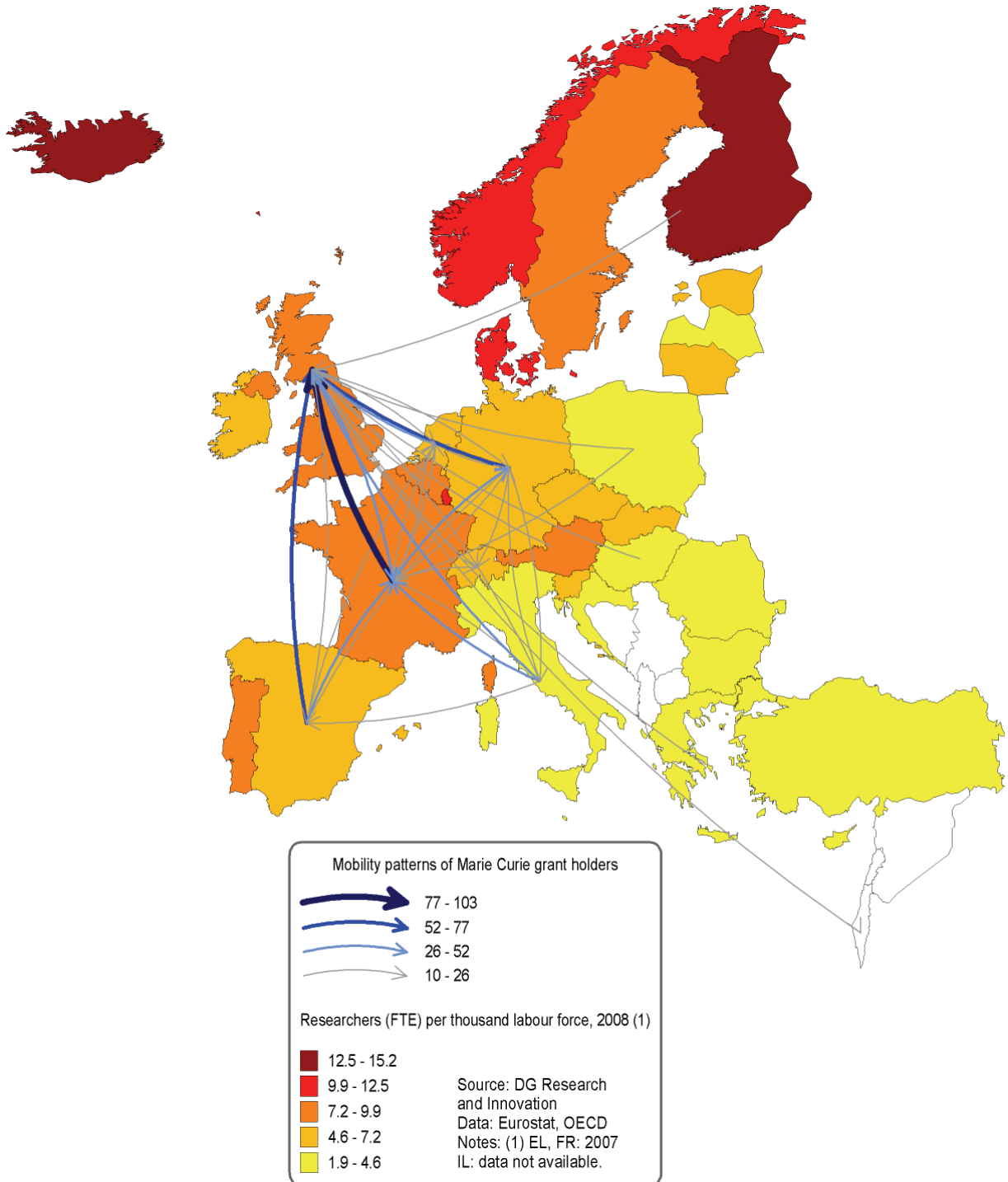
Mobility of student in tertiary education, 2007



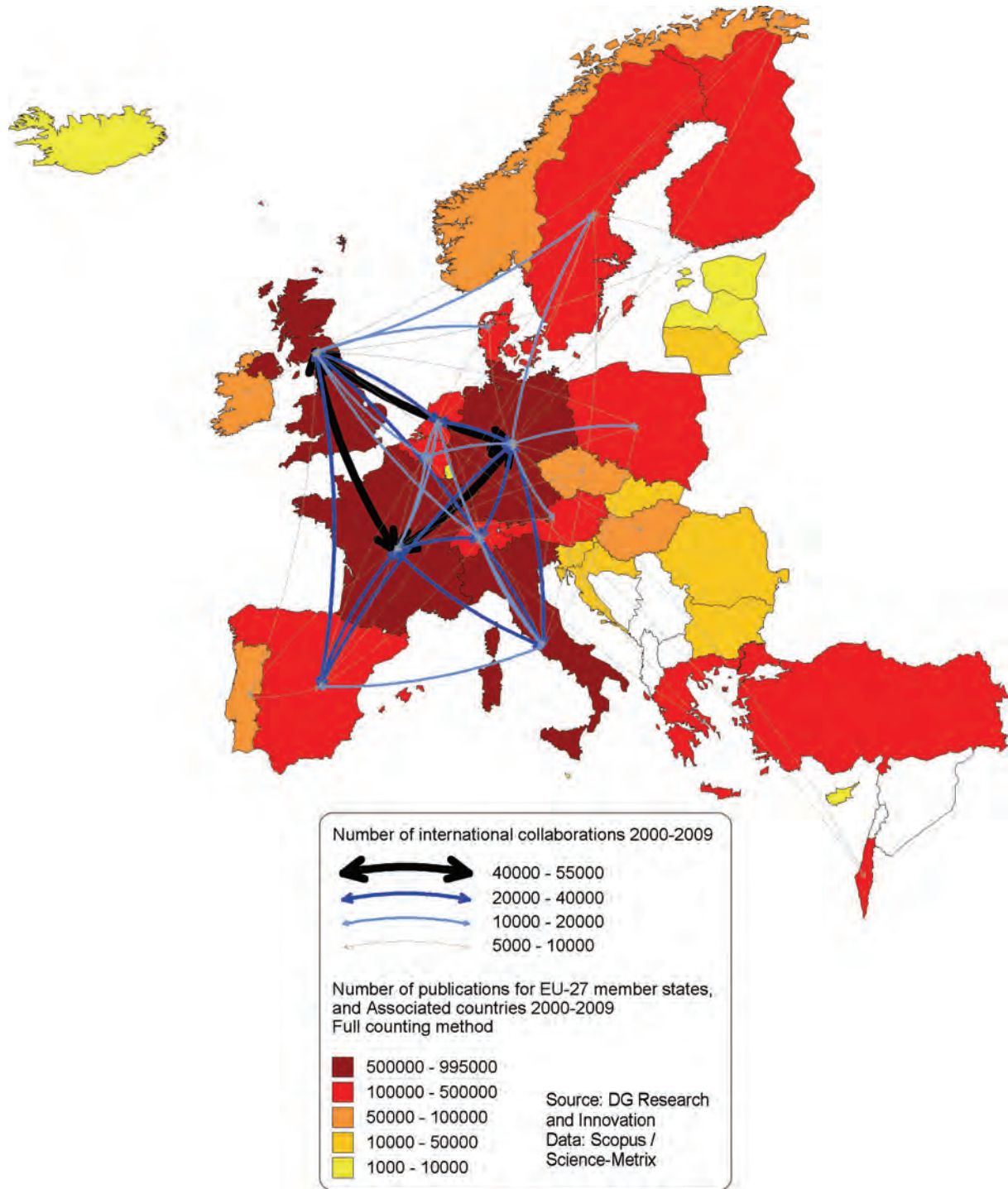
Mobility of Erasmus students, 2007-2008



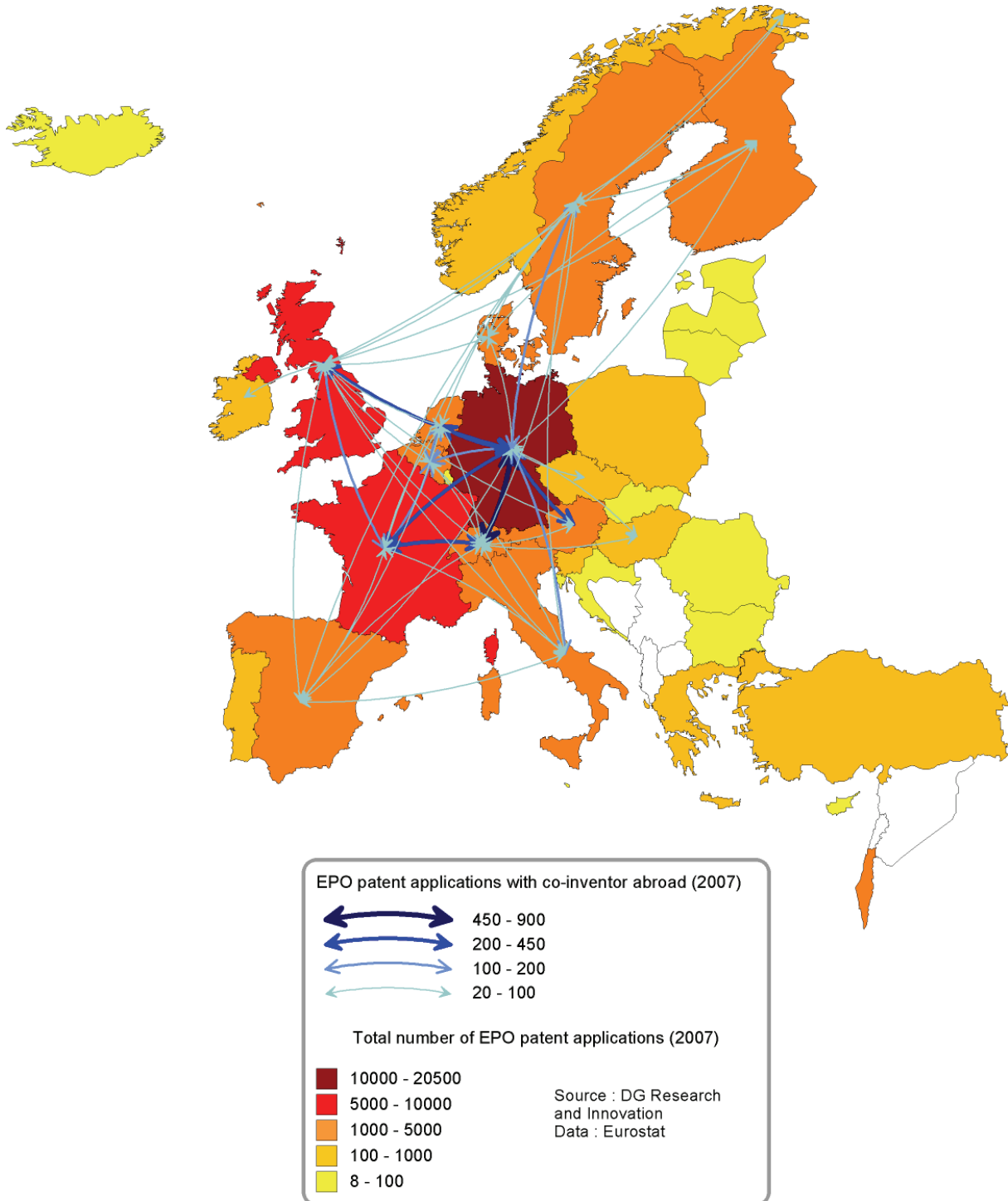
Mobility of Marie Curie grant holders, FP6



Co-publications between European countries, 2000-2009

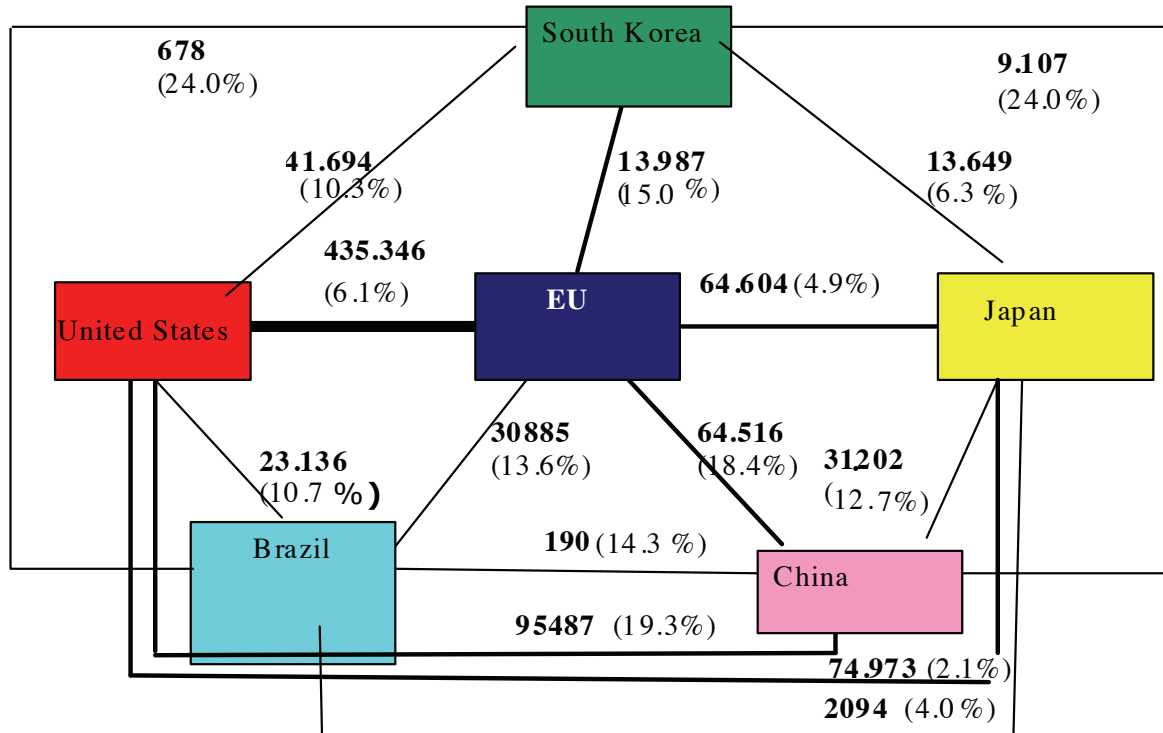


Co-inventions of EPO patent applications between European countries, 2007



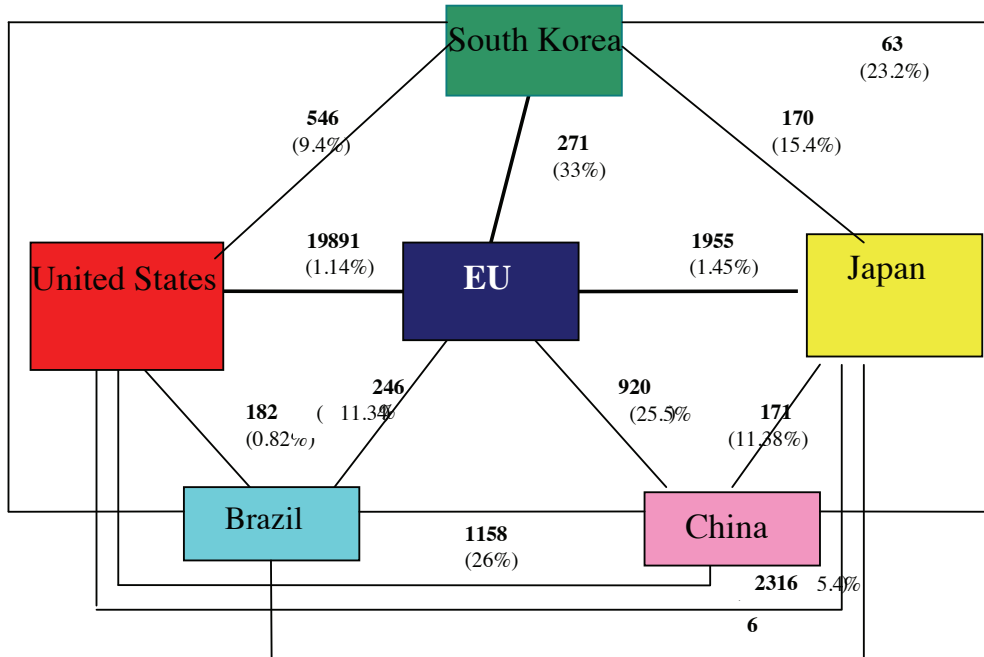
A more efficient Research and Innovation system

Scientific co-publications between the EU, the United States, Japan, South Korea, China and Brazil, 2000-2009

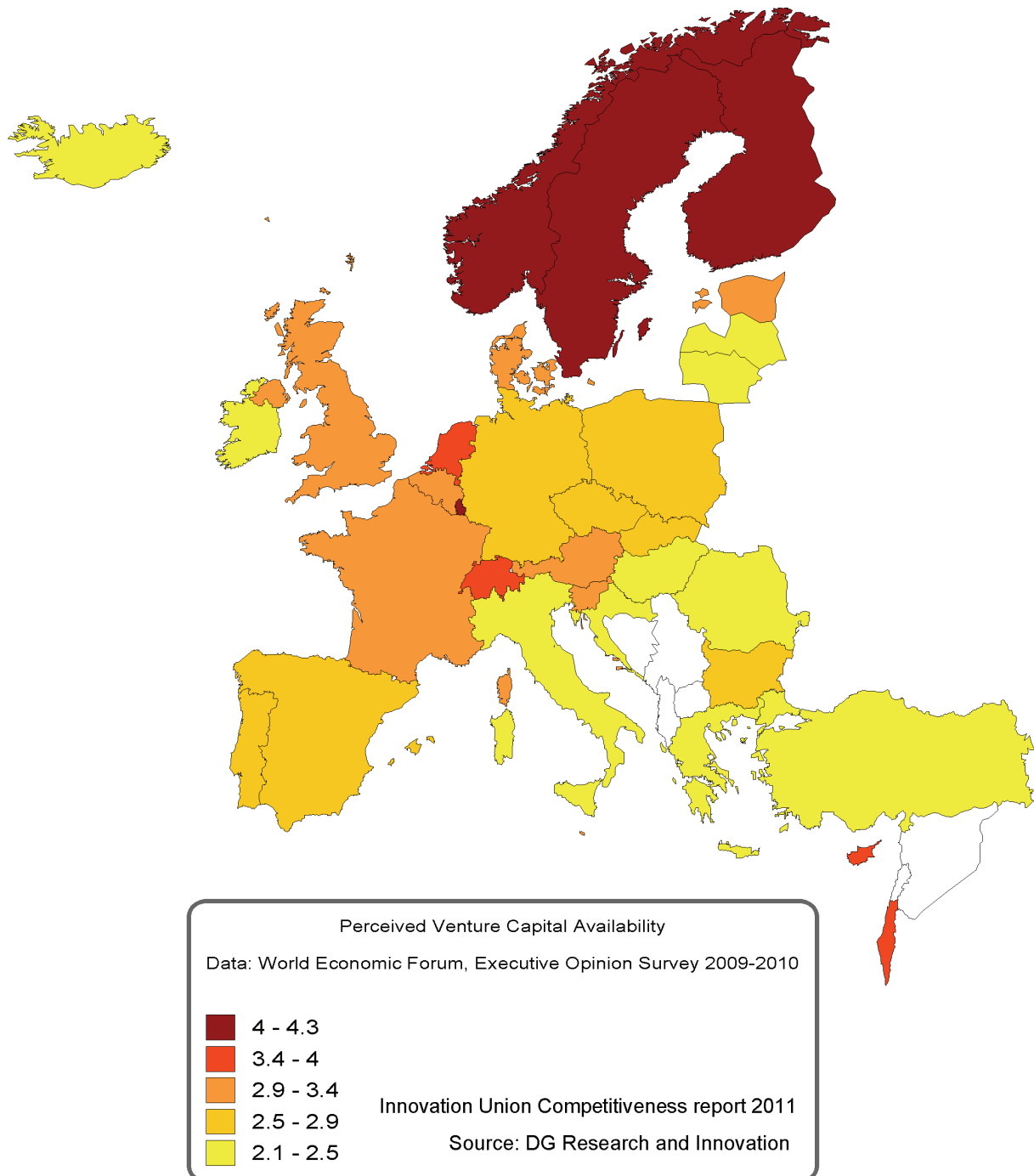


A more efficient Research and Innovation system

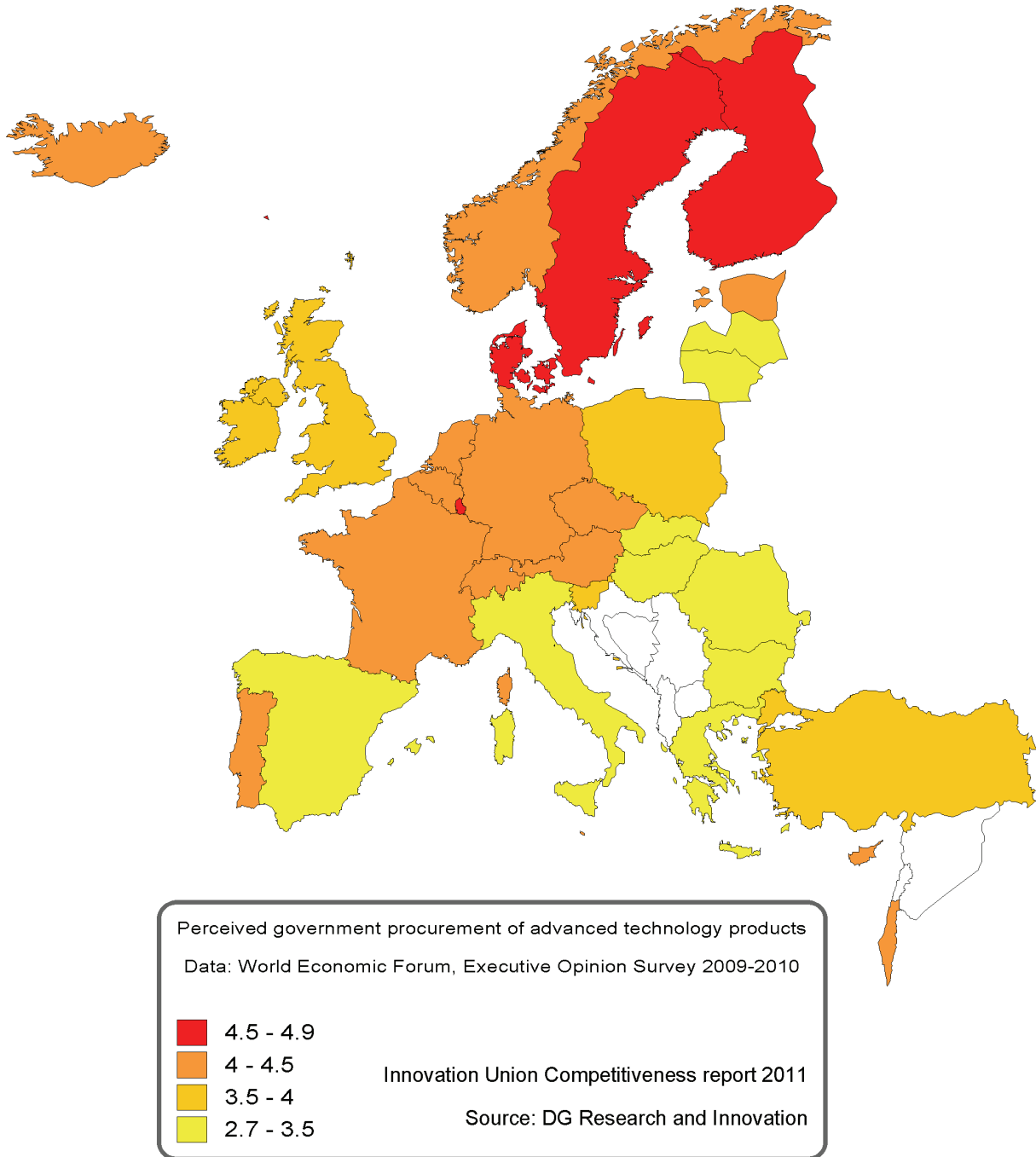
Co-patents between the EU, the United States, Japan, South Korea, China and Brazil, 2000-2007



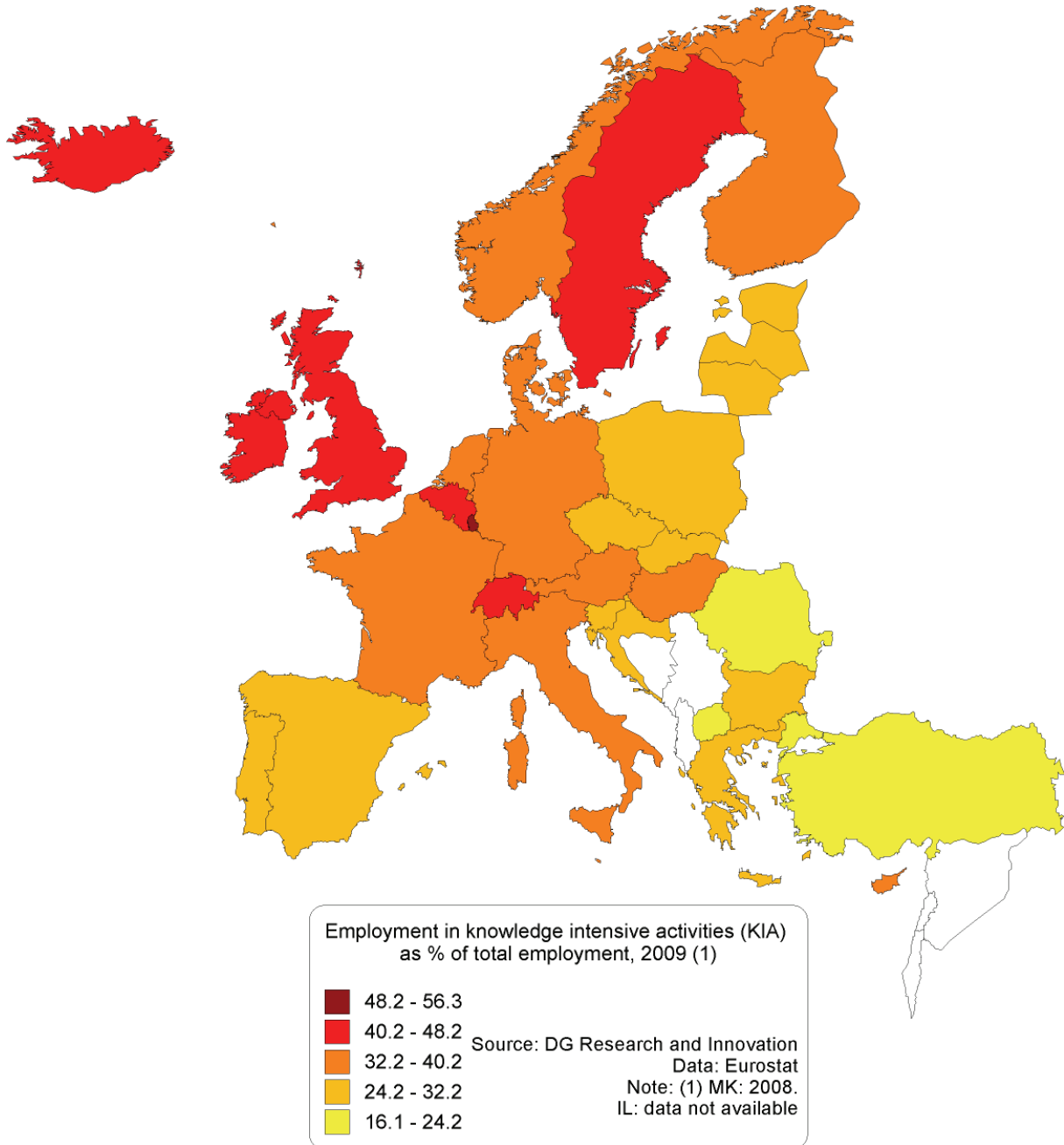
Perceived Venture Capital Availability, 2009



Government procurement of advanced technology products, perception of suppliers, 2009

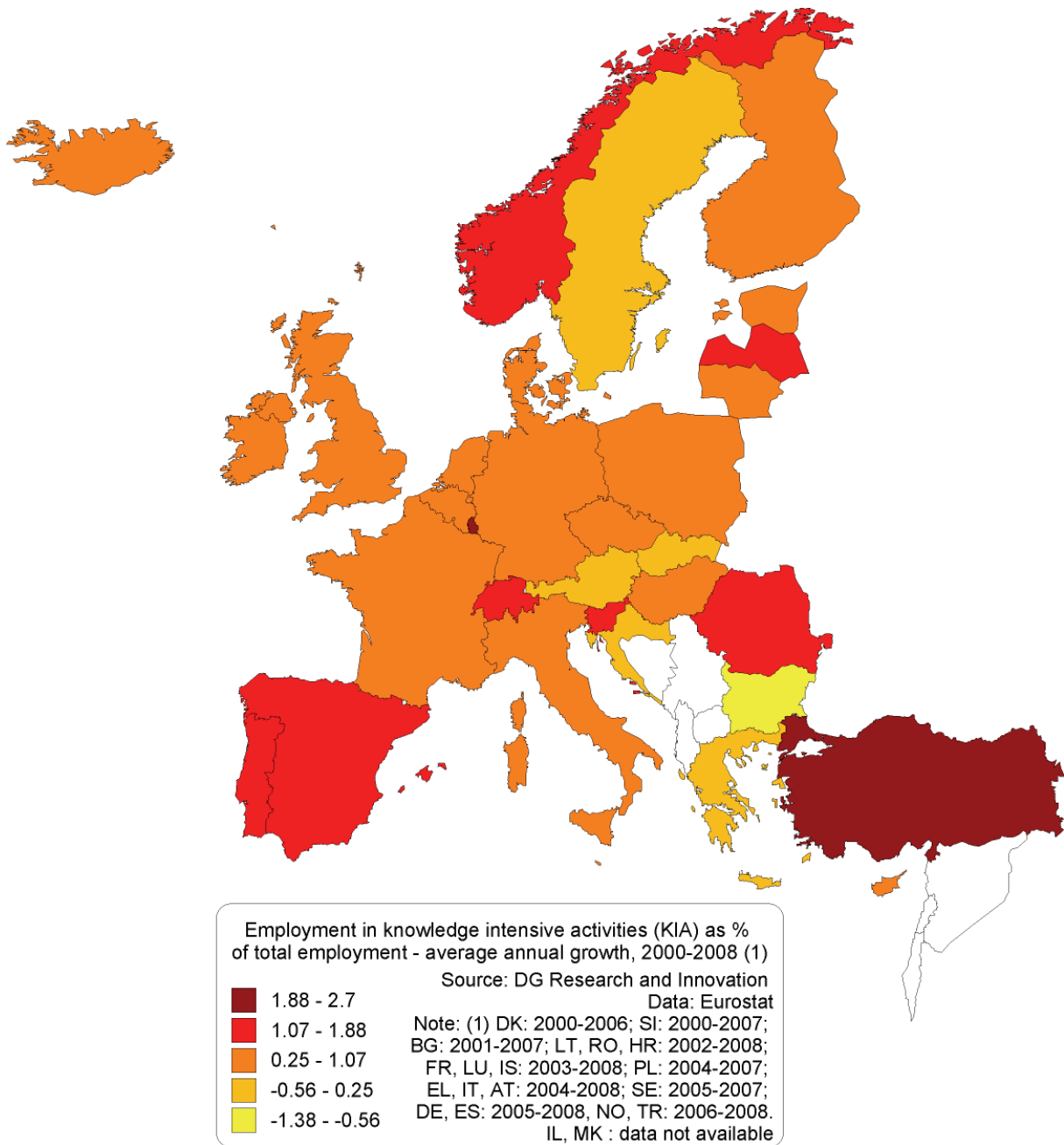


Employment in Knowledge-Intensive Activities as % of total employment, 2009



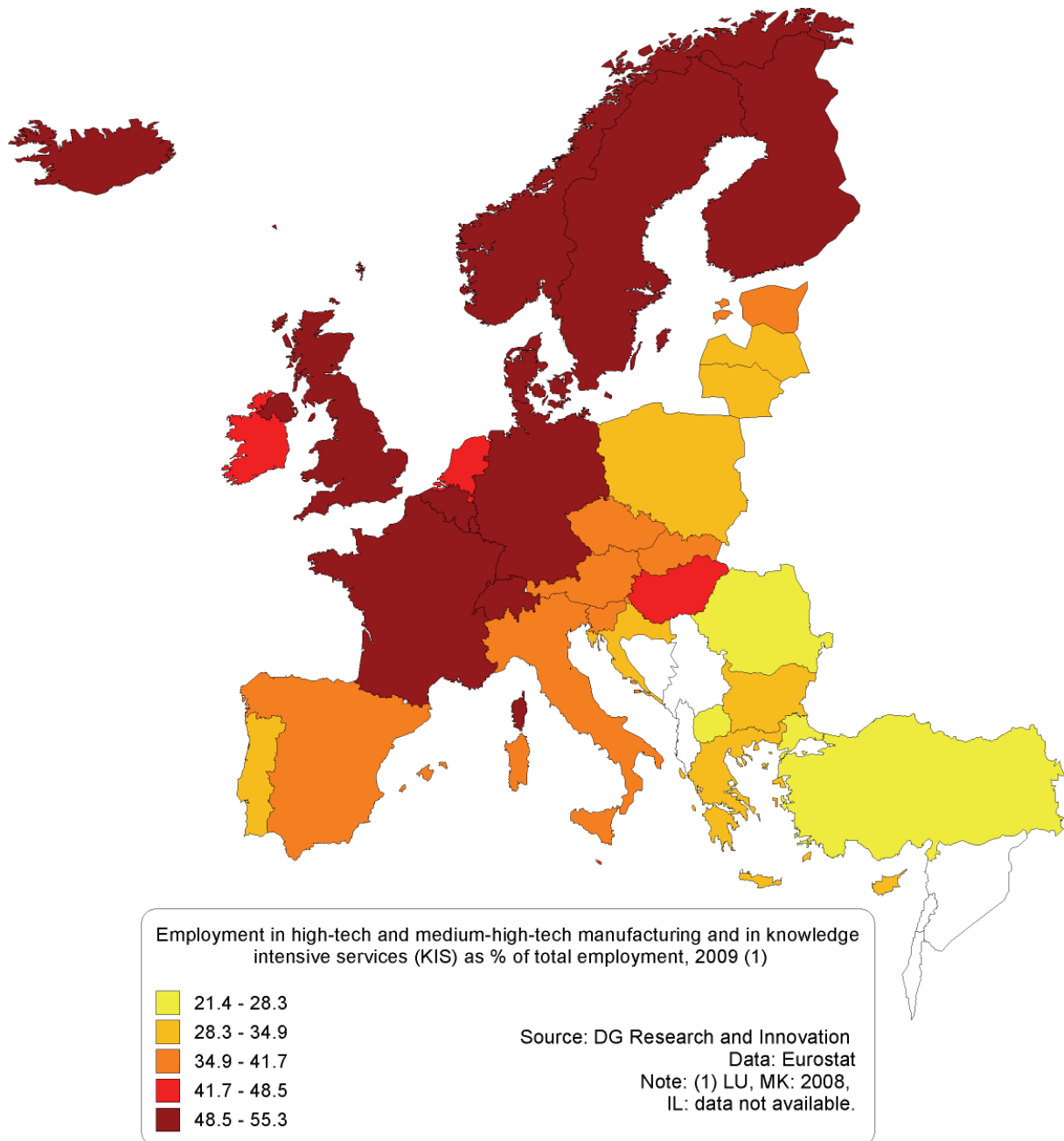
Structural change for a knowledge-intensive economy

Employment in Knowledge-Intensive Activities as % of total employment, average annual growth 2000-2008



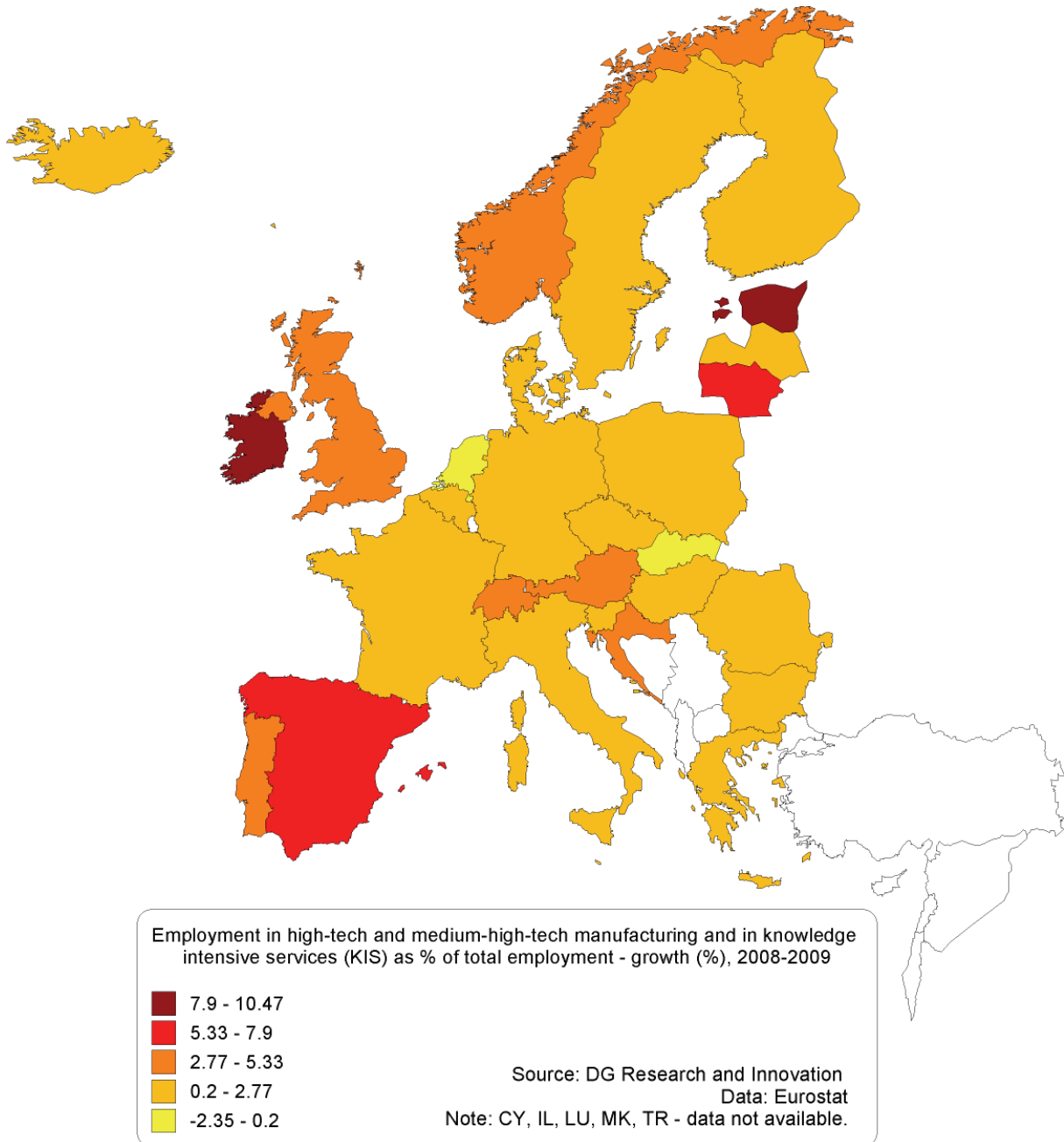
Structural change for a knowledge-intensive economy

Employment in high-tech and medium-high-tech manufacturing and in knowledge-intensive services as % of total employment, 2009

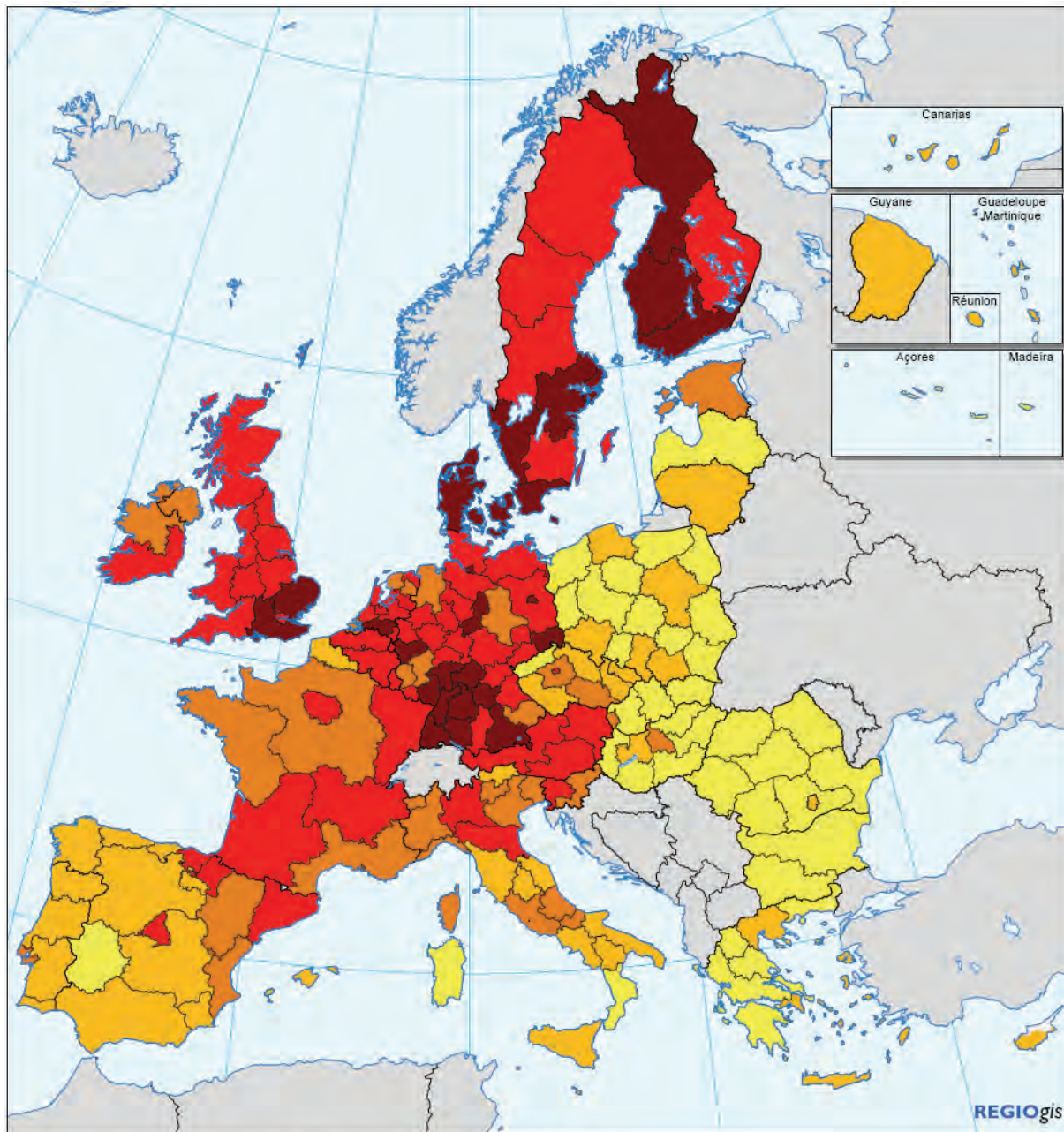


Structural change for a knowledge-intensive economy






Employment in high-tech and medium-high-tech manufacturing and in knowledge-intensive services as % of total employment, average annual growth, 2008-2009



Regional Innovation Performance index, 2006



Regional Innovation Performance Index, 2006

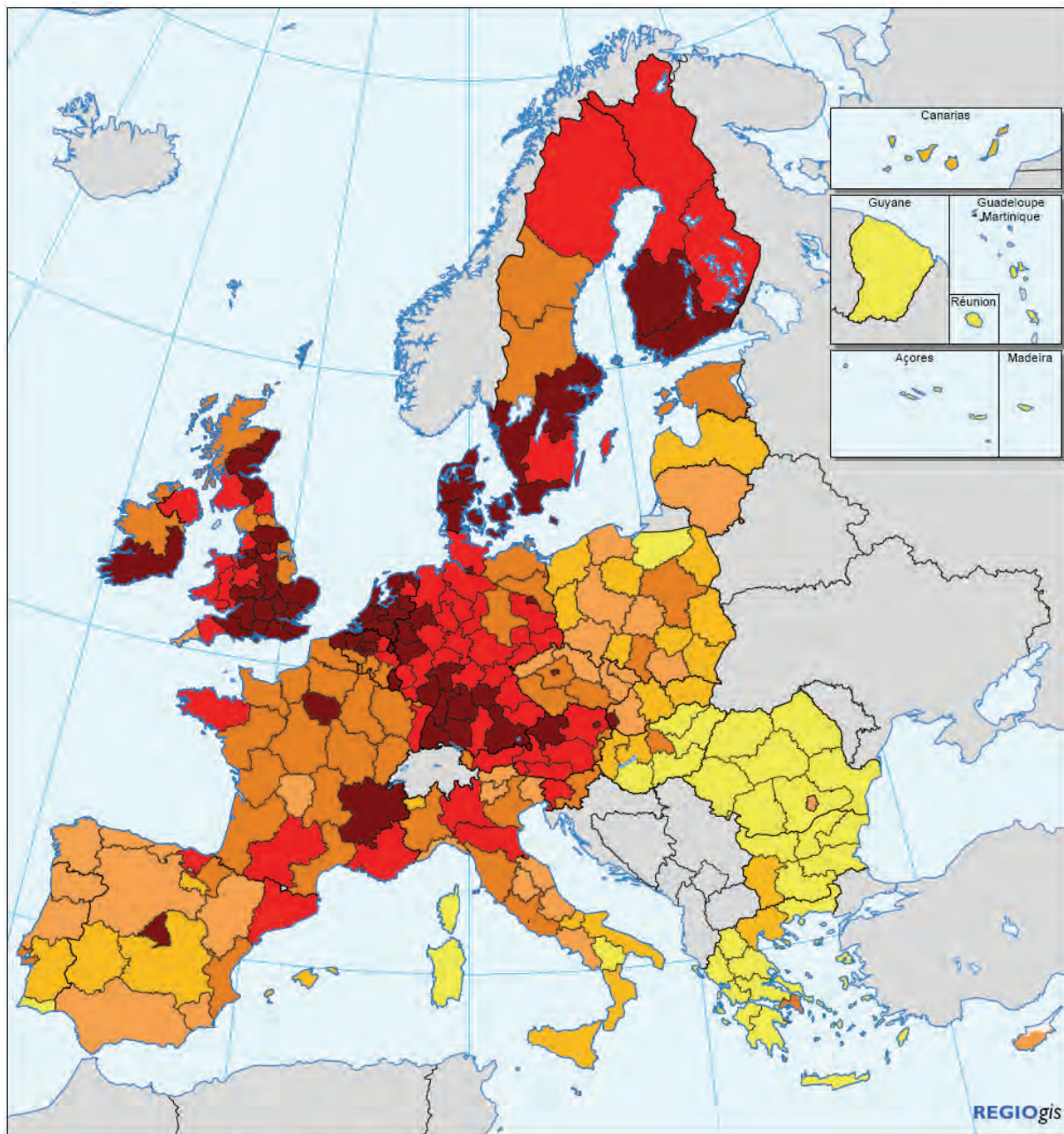
-  Low innovation performance
-  Medium - Low innovation performance
-  Average innovation performance
-  Medium - High innovation performance
-  High innovation performance

Source: DG Enterprise, MERIT

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Competitiveness index, 2010



Competitiveness Index, 2010

Index - Values range between 0 (low) and 100 (high)

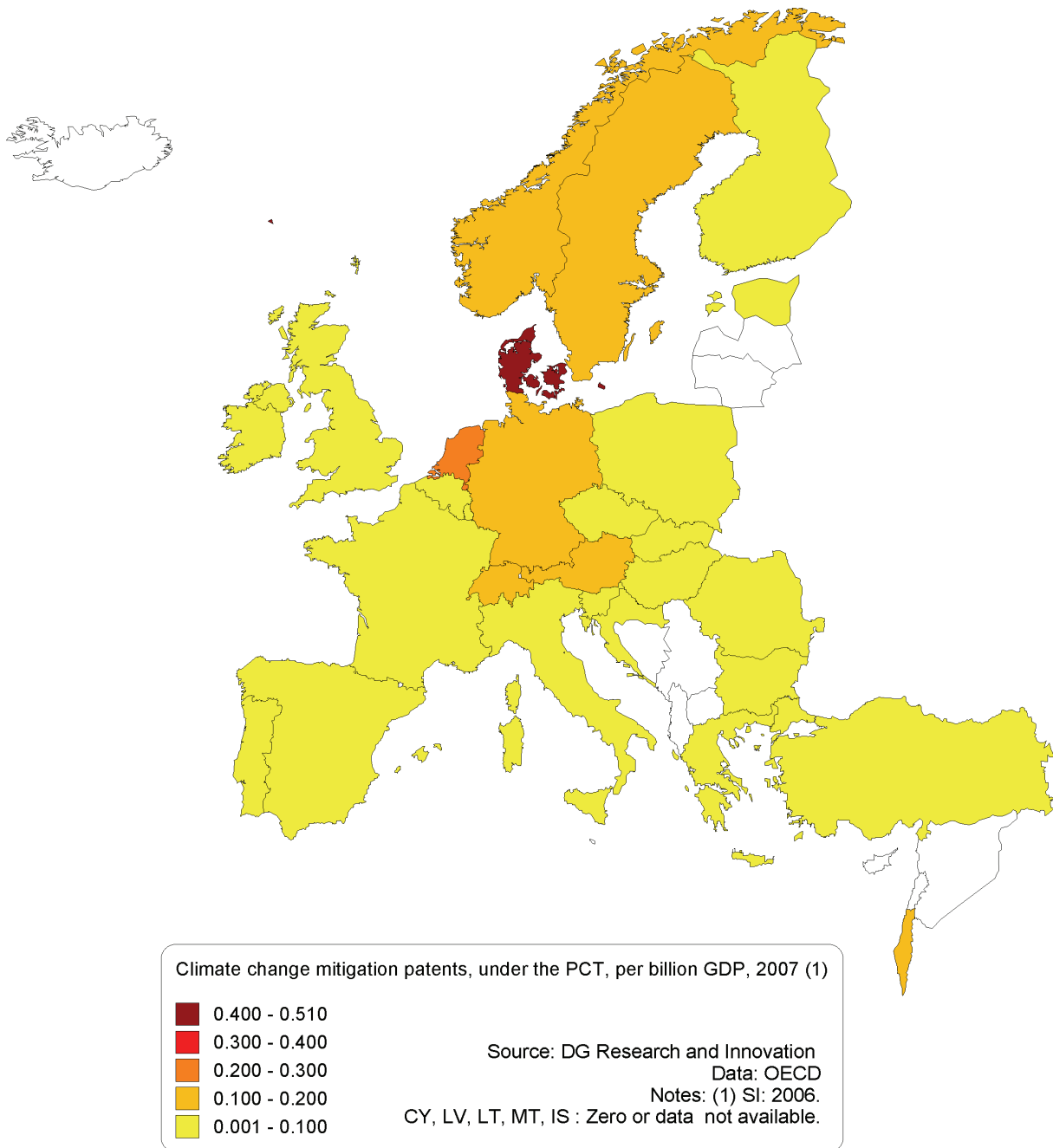
- <30
- 30 - 40
- 40 - 50
- 50 - 60
- 60 - 70
- > 70

EU27 = 55
Source: JRC and DG REGIO

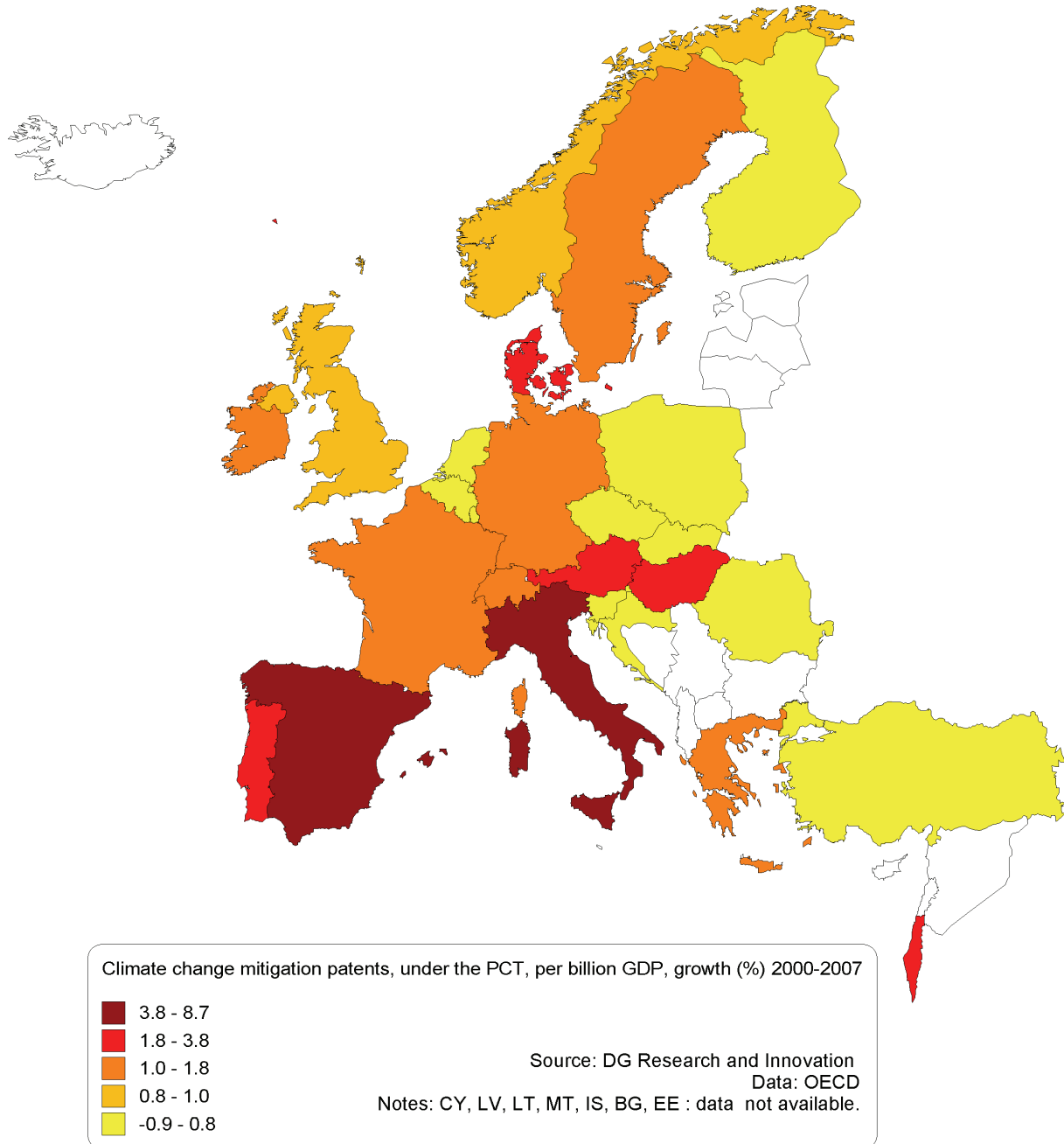
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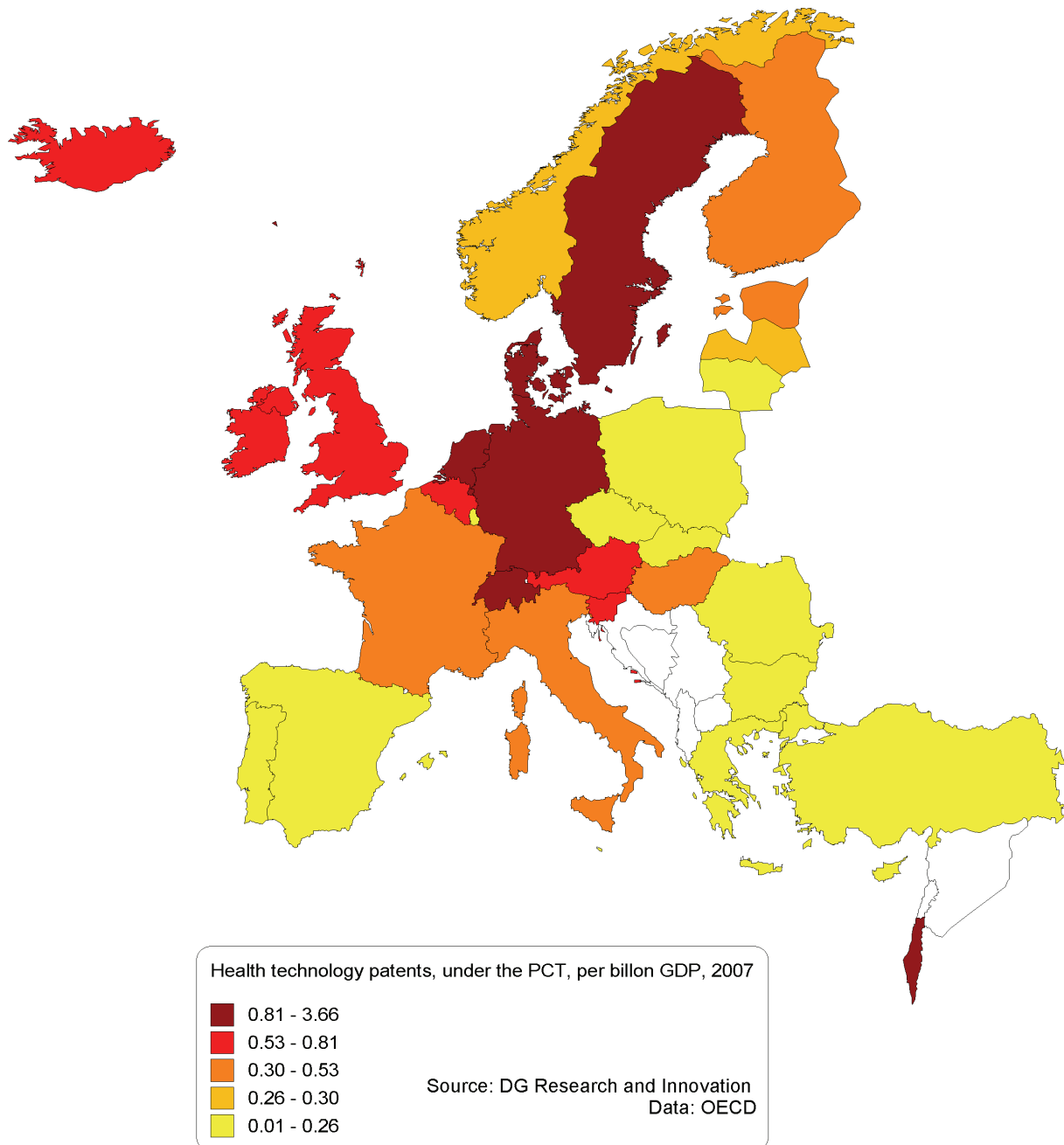
Climate change mitigation patents, under the PCT, per billion GDP, 2007



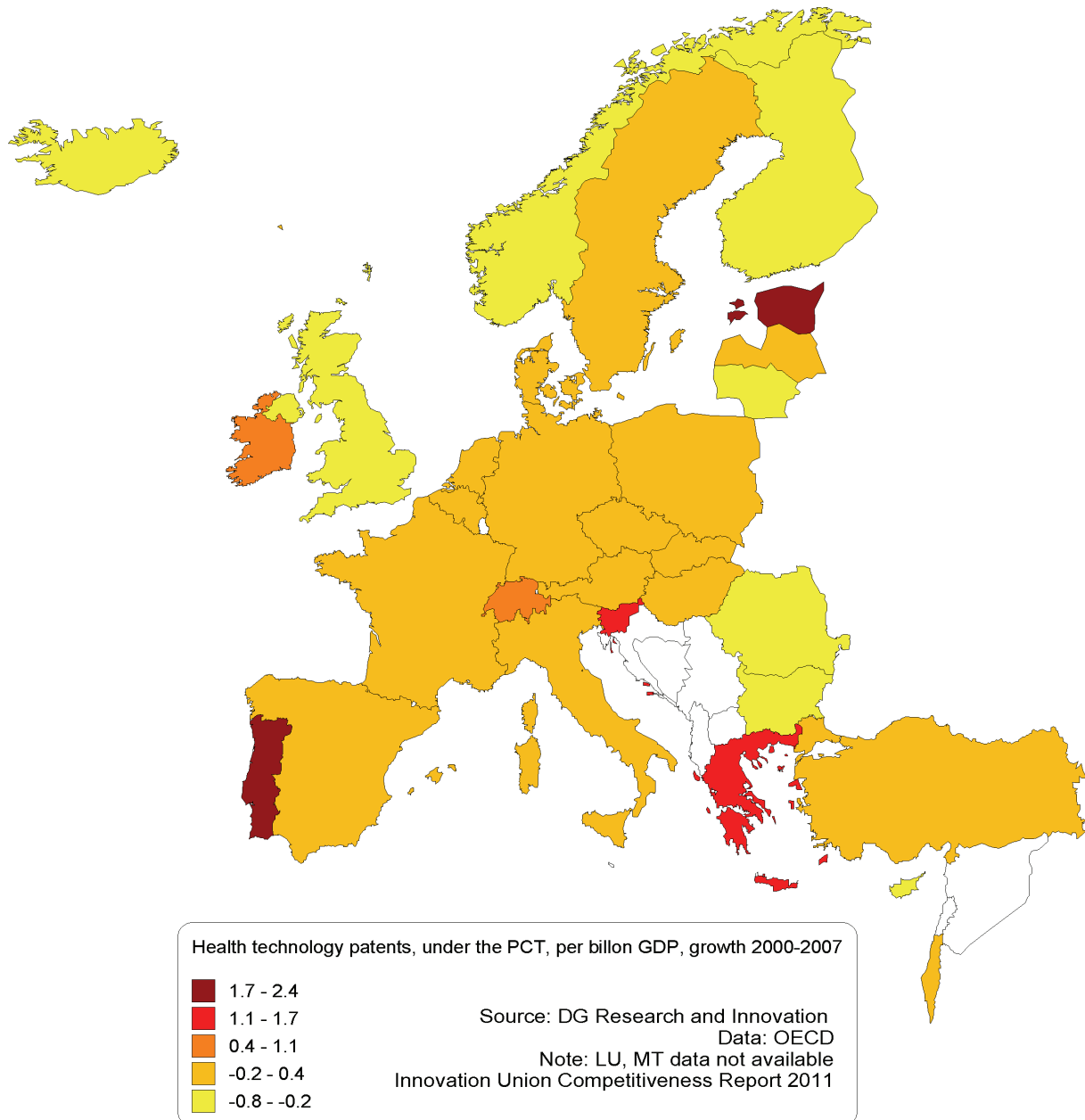
Climate change mitigation patents, under the PCT, per billion GDP, growth 2000-2007



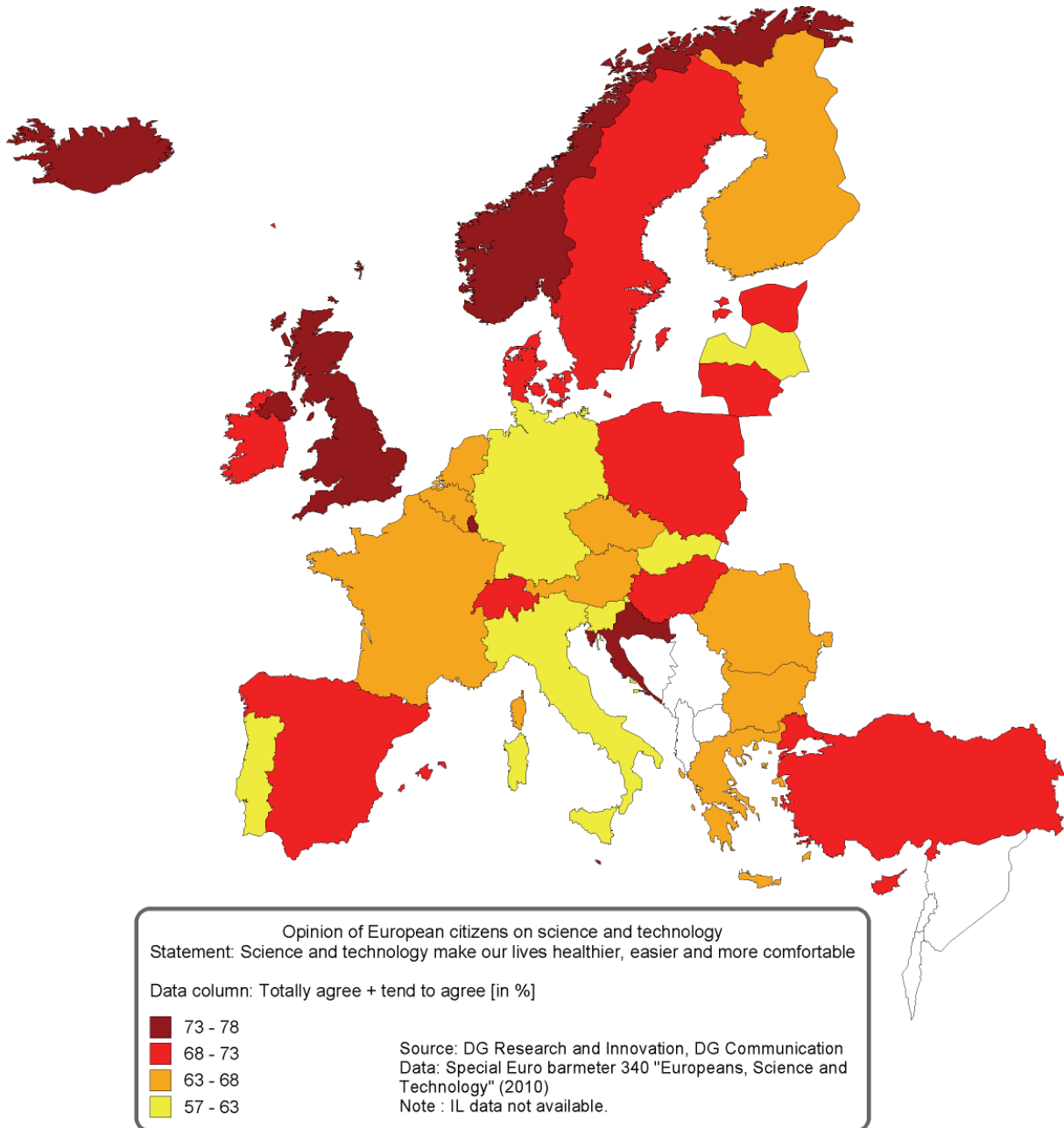
Health technology patents, under the PCT, per billion GDP, 2007



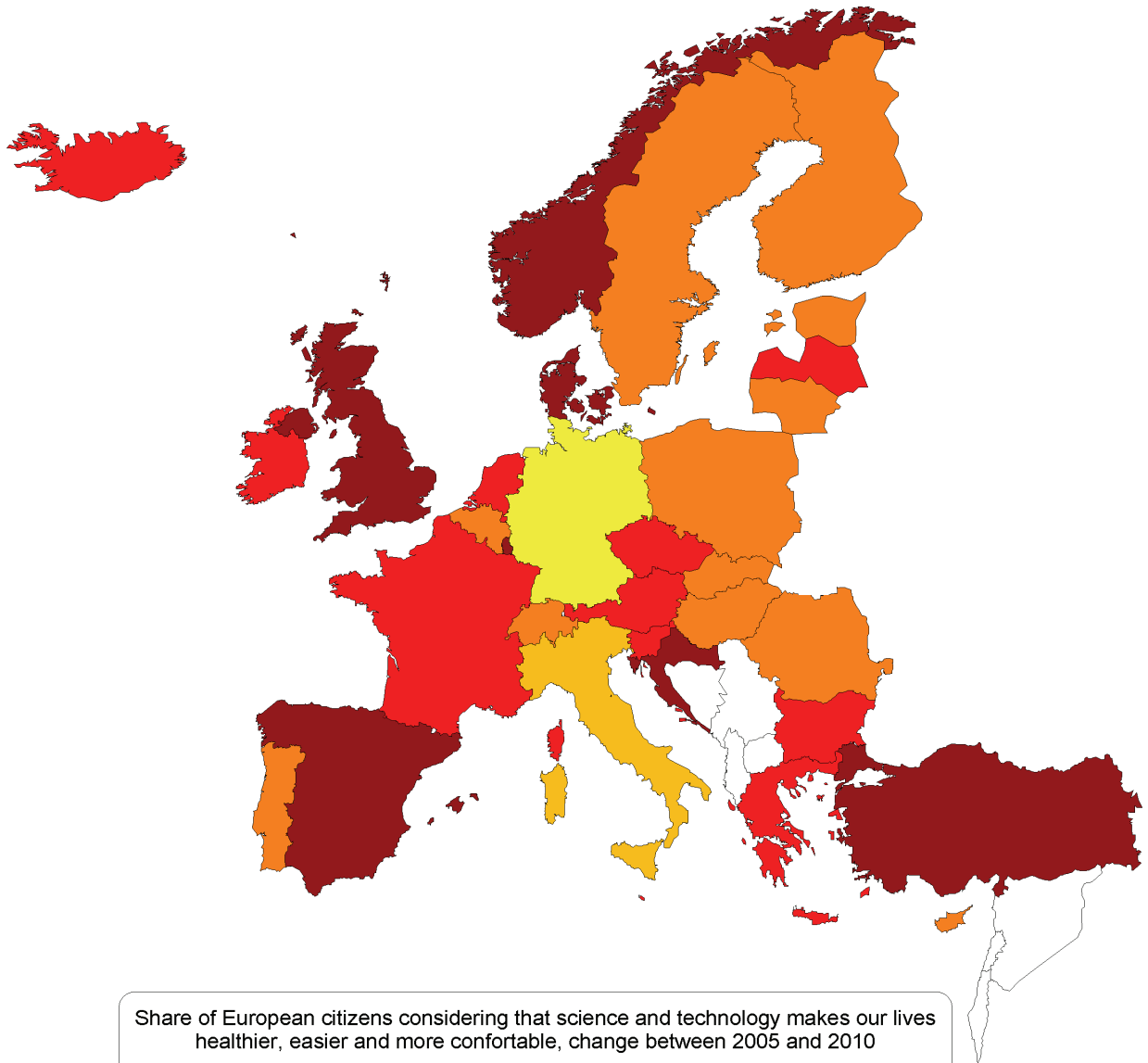
Health technology patents, under the PCT, per billion GDP, growth 2000-2007



Share of European citizens considering that science and technology makes our lives healthier, easier and more comfortable, 2010



Share of European citizens considering that science and technology makes our lives healthier, easier and more comfortable, change between 2005 and 2010



Share of European citizens considering that science and technology makes our lives healthier, easier and more comfortable, change between 2005 and 2010

- 3 - 3
- 10 - -3
- 16 - -10
- 23 - -16
- 29 - -23

Source: DG Research and Innovation
Data: Special Eurobarometer 340
"European, Science and Technology" (2010)
Innovation Union Competitiveness report

European Commission

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