

**ERAC - Standing Information Point  
Update on the 2017 European Semester**

32<sup>nd</sup> plenary meeting  
Agenda Point 5  
Brussels, 2 December 2016

*The [European Semester](#) is the EU annual cycle of economic policy co-ordination in which the Commission proposes integrated fiscal, economic, employment and social policy guidance to be endorsed by the Council and thereafter addressed to the Member States for policy decisions at national level.*

**I. Annual Growth Survey 2017**

*The Annual Growth Survey kick-starts the European Semester and sets the Commission's economic and social priorities for the year to come. It is published yearly in November.*

On 16 November 2016, the Commission adopted the European Semester Autumn Package, which is made up of the following documents:

- The [Annual Growth Survey 2017](#)
- The [Alert Mechanism Report 2017](#)
- The [Euro Area Recommendation](#) 2017
- The draft [Joint Employment Report 2017](#)
- An Assessment of [Draft Budgetary Plans](#)

This year's Annual Growth Survey (AGS) calls on Member States to redouble their efforts along the principles of the "virtuous triangle" of boosting investment, pursuing structural reforms and ensuring responsible fiscal policies. In doing so, the Commission asks them to put the focus on social fairness and inclusive growth.

The AGS 2017 includes R&I prominently in the "Boosting investment" as well as in the "Pursuing Structural Reform" sections. The following key highlights are worth being mentioned:

- The importance of investment in knowledge, innovation, education and ICT as drivers of growth is high on the agenda;
- The Capital Markets Union can provide the conditions for encouraging investment and innovation free from distortions;
- The Common Consolidated Corporate Tax Base (CCCTB) will support innovation in the EU by making sure that costs of R&D investment are tax deductible and addressing the bias in taxation towards debt financing instead of equity;
- Member States need to step up their efforts to implement the necessary reforms to tackle weak research and innovation frameworks ;

- Nurturing skills is essential to drive upward convergence and sustain the European social model, while fostering greater entrepreneurship and innovation capabilities;
- Adapting legislative environments to new business models is particularly important for economic dynamism. All together, these initiatives should contribute to stronger framework conditions for innovation.

Here are some extracts of salient issues referring to research and innovation from the AGS 2017:

### 1. Boosting Investment

- (page 8 – key reference) *"The importance of investment in knowledge, innovation, education and ICT as drivers of growth is also high on the agenda. In several Member States, the significant fall in investment in equipment and machinery partly explains the drop in productivity after the crisis. At the same time, higher investment in intangible assets such as R&D, ICT and training, will be needed to push up growth of total factor productivity and crowd-in investment. Member States need to ensure that capital is as efficiently allocated as possible. In the past, total factor productivity, which includes a number of factors such as innovation and a more efficient allocation of resources, contributed less to growth and productivity in the EU than in the United States. Structural issues affecting product, services, capital and labour markets are responsible for this subdued performance in Europe. Improving the interaction between university research and business development of products and services is crucial to boost competitiveness and growth. In the same vein, the creation of national platforms on digitising industry would help leverage the EU funds committed to this to deliver significant investments that will also strengthen the competitiveness of our economy."*
- (page 5 on Capital Markets Union): *"The Capital Markets Union can provide the conditions for equal access to finance for all firms across Member States, thus encouraging investment and innovation free from distortions. (...) Indeed, capital must flow to areas of higher productivity growth, highly productive activities and innovations."*
- (page 6 on the EFSI investment plan): *"The Investment Plan for Europe has proven a useful tool for delivering concrete results and encouraging a sustainable increase in investment in Member States. The European Fund for Strategic Investments (EFSI) has mobilised close to EUR 138 billion across 27 Member States in just over one year. (...) These projects are critical for the future of the EU economy and target key areas such as support to SMEs, innovation and R&D, renewable energy, energy efficiency, digital and transport infrastructure."*
- (Pages 7 and 8 on barriers to investment) *"Sustainable investments require a solid and predictable business environment. (...) In addition, work on the Energy Union, the Capital Markets Union, the Single Market Strategy, the Digital Single Market Strategy, the circular economy package and international trade and investment agreements covers specific measures that will help to remove barriers, promote innovation and improve the environment for investment, when fully implemented."*
- (Page 8 on the Common Consolidate Corporate Tax Base, CCCTB) *"It will also support innovation in Europe by making sure that costs of R&D investment are tax deductible and addressing the bias in taxation towards debt financing instead of equity."*

## 2. Pursuing structural reforms:

- (Page 11 on reforms/ jobs) *"Nurturing skills is essential to drive upward convergence and sustain the European social model, while fostering greater entrepreneurship and innovation capabilities."*
- (Page 11 on reforms/ jobs) Need for *"close partnerships with the business, higher education and research sectors"* in order to better match skills production to labour market needs.
- (Page 11 on reforms/ jobs) *"Developments in wages do not sufficiently follow productivity developments" and that "This may discourage productivity gains, R&D and innovation" and "distort incentives for resource reallocation towards sectors with higher value added and thus hinder further structural change of the EU economies to make them more competitive".*
- (Page 14 on deepening the single market) *"Adopting legislative environments to new business models is particularly important for economic dynamism, but must not come at the expense of fairness. (... list of activities ...) All together, these initiatives should contribute to stronger framework conditions for innovation, the reduction of existing market fragmentation and ultimately to job creation."*

## **II. 2017 European Semester - calendar**

*The European Semester is planned on the basis of a detailed calendar, prepared by the Secretariat-General of the European Commission, which covers the period from November 2016 to July 2017 and which contains the planning of Council committees and sectoral formations, the European Parliament's plenaries and deadlines for the key deliverables.*

The calendar of the 2017 European Semester cycle will be similar to the 2016 one, with as key next step the publication of the Semester Country Reports, expected on 22 February 2017.

The calendar will be as follows:

- **5-15 December 2016:** first round of bilateral meetings with Member States
- **22 February 2017:** Commission publishes the European Semester Country Reports
- **9-10 March 2017:** Spring European Council
- **20-31 March 2017:** second round of bilateral meetings with Member States
- **March - May 2017:** Council discussions
- **Mid-April 2017:** Member States present their National Reform Programmes
- **17 May 2017:** Commission proposes Country-Specific Recommendations (CSRs)
- **May - June 2017:** Council discusses the CSRs
- **22-23 June 2017:** the European Council endorses the CSRs
- **July 2017:** the Council adopts the CSRs

### **III. Research and Innovation in the 2017 European Semester**

While maintaining continuity with the previous cycle, the main features of the Commission's analytical framework for assessing R&I performance and policies will be further strengthened for the 2017 exercise around the productivity gap narrative developed in the report "[Science, Research and Innovation Performance of the EU](#)" issued by the Directorate-General for Research & Innovation.

The R&I policy analyses in the Semester Country Reports are based on a two-step approach:

- the identification for each Member State of the main R&I policy challenges, i.e. key bottlenecks impeding the full contribution of R&I to economic and productivity growth;
- the assessment of the adequacy of the policy response to the identified challenges

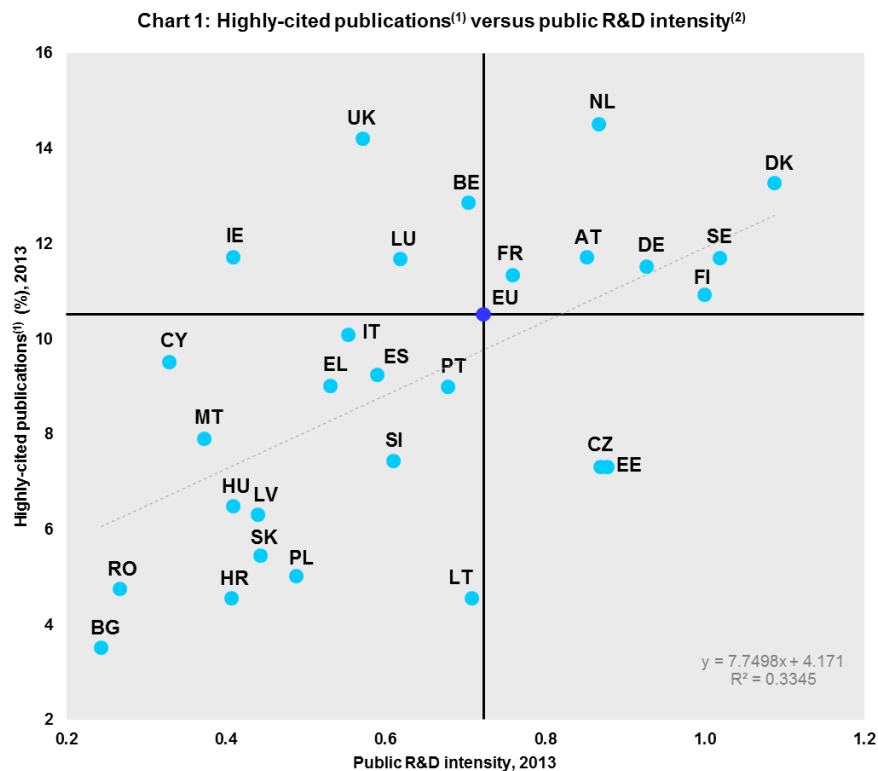
In this respect, the Commission's analysis focuses on three types of R&I policy challenges:

1. Low quality of the public R&I system;
2. Weak knowledge flows and science-business linkages;
3. Bottlenecks for investment in innovation.

In terms of identifying main national R&I policy challenges, the Commission's assessment draws on the analysis of an extensive set of indicators (around 50) that monitor the performance of different elements of these systems. The key indicators can be found in the report "[Science, Research and Innovation Performance of the EU](#)". They range from measures of public and private investment in R&I, human resources for R&I (e.g. tertiary students, new PhD graduates, graduates in STEMs), output and quality of public research (e.g. publications, top citations), innovation outputs (e.g. patenting, knowledge intensive exports, innovative enterprises), knowledge flows (e.g. linkages between the R&I activity of public and private sectors), framework conditions (e.g. regulation and market efficiency, finance for innovation), up to indicators of structural change (e.g. value added of high tech sectors in the economy) and R&I impact (e.g. employment in high growth firms). These indicators come from a variety of sources and are regularly updated in close cooperation with Eurostat to ensure quality and availability.

The identification of bottlenecks in the national R&I systems also involves benchmarking against the performance of other Member States. To this extent, the analyses make use of various tools including simple correlation graphs, in which two indicators, representing two dimensions of a particular performance phenomenon, are shown on the same graph. This permits to identify Member States with an average performance, those that are over performing and those that are underperforming in that specific aspect.

An illustrative example of such a benchmarking graph is presented below:



This chart displays:

- (i) on the vertical axis, a widely used bibliometrics-based indicator to proxy "scientific excellence" (the percentage of highly-cited scientific publications among all national scientific publications) – dimension 1; and,
- (ii) on the horizontal axis, the public R&D intensity level (the level of expenditure on R&D performed in the public research system as a % of GDP) – dimension 2.

Moreover, it also shows the EU average on both indicators as well as a correlation line aimed at helping quantify the relationship between these two variables and to allow for the identification of Member States that perform differently from what could be expected considering the correlation coefficient.

The analysis of this figure points towards three findings:

- Member States where the low quality of the public R&I system is a key issue to be addressed (i.e. Bulgaria, Romania, Croatia and Lithuania): for these countries, increasing investment needs to go hand in hand with far-reaching reforms to improve efficiency and quality;
- Member States with a strong science base (the Netherlands and Denmark, followed by the United Kingdom and Belgium): for these Member States, improving the efficiency and the quality of the public research system is not an issue;

- Member States, like Czech Republic and Estonia, which do not show a level of scientific performance in line with their level of public R&D expenditure: this highlights an issue in terms of investment efficiency.

At the same time, and to make its analysis comprehensive and country-specific, the Commission fully exploits a wide-ranging evidence-base in order to monitor national R&I performance and policy developments. That includes the Scoreboards led by the Directorate-General for Research & Innovation (the [European Innovation Scoreboard](#) in partnership with the Directorate-General for Growth, Internal Market, Entrepreneurship and SMEs; and the [Industrial R&D Investment Scoreboard](#), with the Joint Research Centre), as well as dedicated studies (e.g. on R&D tax credits, high-growth innovative firms, and bibliometrics and patenting at the national level).

The Commission's monitoring of policy evolutions in the Member States is performed drawing on a number of complementary data sources. This includes first of all day to day monitoring by the European Semester Country Desks in the Directorate-General for Research & Innovation of national policy developments using information available through national sources. This is complemented by the most recent information obtained during the European Semester country missions. The [Joint EC-OECD STI policy survey](#) provides a rich data source to look at evolutions in R&I policy developments across Member States. Finally, the [RIO Country Reports](#), issued yearly, provide useful input.

The Commission ensures continuous dialogue with Member States via the European Research Area Committee (ERAC), bilateral exchanges with Member States and country visits, as well as through the activities of the [Horizon 2020 Policy Support Facility](#) ("PSF"). The outcomes of the PSF exercises are duly taken into consideration in the overall assessment of Member States' R&I systems. The PSF has provided advice for smart operational reforms of national R&I policies in Bulgaria, Hungary, Malta, Slovakia and Romania and it sustained exchanges of good practice on R&D tax credits, business R&D support schemes, and public-private partnerships in R&I, that involved a very large number of Member States and countries associated to Horizon 2020. In total fourteen PSF activities are or have been spurring such reforms, and a relevant and sizeable pipeline of activities is planned for 2017 as a result of the Expressions of Interest launched to ERAC.

More detail on the analytical framework used by the Commission to assess the performance of national R&I systems can be found in the [R&I thematic fiche](#) published on 16 November 2016 at the European Semester website of the European Commission.

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