



Bio-based Industries Joint Undertaking (BBI JU)

ANNUAL ACTIVITY REPORT 2016

In accordance with Article 16 of the Statutes of the BBI JU annexed to Council Regulation (EU) No 560/2014 and with Article 20 of the Financial Rules of the BBI JU.

The annual activity report will be made publicly available after its approval by the Governing Board.

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FACTSHEET

Name	Bio-based Industries Joint Undertaking	
Objectives	<p>The objectives of BBI JU are:</p> <p>To contribute to the implementation of Regulation (EU) No 1291/2013 and in particular Part III of Decision 2013/743/EU;</p> <p>To contribute to the objectives of the BBI Initiative of a more resource efficient and sustainable low-carbon economy and increasing economic growth and employment, particularly in rural areas, by developing sustainable and competitive bio-based industries in Europe based on advanced biorefineries that source their biomass sustainably, and in particular to:</p> <ul style="list-style-type: none"> • demonstrate technologies that enable new chemical building blocks, new materials, and new consumer products from European biomass which replace the need for fossil-based inputs; • develop business models that integrate economic actors along the whole value chain from supply of biomass to biorefinery plants to consumers of bio-based materials, chemicals and fuels, including by means of creating new cross-sector interconnections and supporting cross-industry clusters; and • set up flagship biorefinery plants that deploy the technologies and business models for bio-based materials, chemicals and fuels and demonstrate cost and performance improvements to levels that are competitive with fossil-based alternatives. <p>The mission of BBI JU is to implement the Strategic Innovation and Research Agenda (SIRA) developed by the Bio-based Industry Consortium (so called BIC) and endorsed by the EC. BBI JU operates its programme as the catalyst to enable the EU and Industry to align their strategy and vision while respecting Horizon 2020 principles of openness, transparency and excellence for the Call for proposals organised each year.</p>	
Founding Legal Act	Council Regulation (EU) No 560/2014, of 6 May 2014	
Executive Director	Philippe Mengal	
Governing Board¹	EC (As designated by their post according to the Commission Decision 4255 (2014), of 27 June)	BIC members
	Ruxandra Draghia-Akli, Deputy	Marcel WUBBOLTS, Chief

¹ Composition in the last Governing Board meeting of 2016.

	<p>Director-General, DG RTD (Vice-chair)</p> <p>John BELL, Director Bioeconomy, DG RTD/F</p> <p>Carlos PETTINELLI, Director, Consumer, Environmental and Health, DG GROW/D</p> <p>Aldo LONGO, Director, General Aspects of Rural Development and Research, DG AGRI/H</p> <p>Peter DROELL, Director, Industrial Technologies, DG RTD/D</p>	<p>Technology Officer, DSM² (Chair)</p> <p>Mat QUAEDVLIEG, Director Manufacturing SFPE, Member of Sappi Global Technology Development Board, Sappi</p> <p>Christophe LUGUEL, Head of International Affairs, IAR Cluster</p> <p>Claus CRONE FUGLSANG, Senior Vice-President for Research and Innovation, Novozymes</p> <p>Agnes Van Ardenne (President - Dutch Biorefinery Cluster)</p>
Other bodies	<p>States Representative Group (SRG)</p> <p>Scientific Committee (SC)</p>	
Staff	20 staff members	
2016 Budget³	<p>Commitment appropriations: € 194 295 870⁴</p> <p>Payment appropriations: € 67 196 187⁵</p>	
Budget implementation	<p>Commitment appropriations: total consumption € 188 858 779 (97.2%)</p> <p>Title 1 - 1 807 295 € (53.8%)</p> <p>Title 2 – 1 448 618 € (74.5%)</p> <p>Title 3 – 185 602 866 € (98.2%)</p> <p>Payment appropriations: total consumption € 64 849 389 (96.5%)</p> <p>Title 1 – 1 747 743 € (51.35%)</p> <p>Title 2 – 1 309 625 (63.4%)</p> <p>Title 3 – 61 792 021 (100%)</p>	
Grants	36 signed grants for a total value of € 228 690 982	

² Until end October 2016.

³ Total budget includes operational budget (used for funding selected projects) & administrative (used for funding programme office activities).

⁴ Voted commitment appropriations were €165 341 467, subsequently amended to include €28 954 403 of unused appropriations from prior years.

⁵ Voted payment appropriations were €65 983 548 and the amendment added €1 212 639 of unused appropriations from the previous year.

Strategic Research Agenda	Works on the update of the Research Strategic Agenda started in 2016 and will be finalised in the course of 2017			
Call implementation	Calls launched/implemented in 2016:	2015.1 (Implemented)	2015.2 (Implemented)	2016 (Launched)
	Number of proposals submitted:	9	73	103
	Number of eligible proposals:	9	73	103
	Number of proposals funded or retained for funding:	3	23 (funded)	29 (retained)
	Global project portfolio (since the setting up):	13	36	65 ⁶
	Number and value of tenders (if any):	No Horizon 2020 tenders launched		
Participation, including SMEs	Total number of participations in projects funded and retained for funding: 729 of which % of SMEs: 36% % of private for profit: 61%			

⁶ Expected value once 29 projects stemming from Call 2016 will be signed.

FOREWORD

When in October 2015, I was appointed Executive Director of the Bio-based Industries Joint Undertaking (BBI JU), I felt truly honoured to be joining the most ambitious initiative ever launched in the EU to develop a competitive and sustainable bio-based industry.

The BBI JU was created with the ambition to increasing investments in the development of build a bio-based industry in the EU, and thus keeping the investments in Europe in order to create new jobs – most of them in the rural areas – and value to our citizens. Its vision for a Europe leading the transition towards a post-petroleum society is expected to replace by 2030, 30% of fossil-based chemicals and materials by bio-based ones and consequently reduce by 50% GHG emissions.

The BBI JU has been granted the responsibility of funding Research and Innovation (R&I) actions with a budget of €3.7 billion leveraging private investment through public funding. But while de-risking investment and reaching critical mass is crucial, at the same time it has a key role in connecting the actors of this fragmented sector by aligning public and private strategies towards the development of a European bio-based economy.

2016 was a significantly important year for the BBI JU as it was its first one as an independent EU body. Five main priorities were set and achieved during its course. Firstly, a number of recruitments took place in order to staff BBI JU as well as trainings while targeting operational excellence by implementing all key processes, procedures and management tools. Secondly, as new organisation becoming an autonomous body we face issues that need to be solved up-front. The third priority was about all the actions to be implemented to build trust between and commitment from the public and the private partners, with common goals and well aligned strategies but with very different constraints. What gets measured gets done was the fourth priority. We fine-tuned and established strong, clear, reliable and agreed monitoring systems based on KPIs, surveys and reporting. We monitor four levels: BBI JU efficiency, the leverage effect of the financial contribution, the outcome of the programme and the socio-economic and environmental impact. Lastly, communicating about BBI JU: the 2016 Call for proposals had to be efficiently promoted while kick-starting the visibility building of the initiative through the development of a communication and stakeholder management strategy.

The 2016 Annual Activity Report (AAR) explains to the reader the mission and vision of BBI JU, describes the challenges and actions taken by BBI JU in the context of its objectives as well as the steps taken for monitoring their implementation. 2016 has been a busy and challenging year and BBI JU delivered impressive results.

Finally, I would personally like to thank the BBI JU team for their work and dedication, our colleagues from European Commission (EC) and Bio-based Industries Consortium (BIC) as well as our two advisory bodies the States Representatives Group (SRG) and Scientific Committee (SC) for their productive collaboration and forward thinking.

Philippe Mengal

Executive Director BBI JU

About Bio-based Industries Joint Undertaking (BBI JU)

The **Bio-based Industries Joint Undertaking (BBI JU)** was established on 6 May 2014 by Council Regulation No 560/2014, which was published in the Official Journal (OJ) on 7 June 2014, and which entered into force on 27 June 2014. The BBI JU is the body entrusted with the implementation of the public-private partnership established between the European Union, represented by the European Commission (EC), and the Bio-based Industries Consortium (BIC). The joint undertaking combines a total contribution from both partners of at least €3.705 billion (of which the EU contribution amounts to maximum €0.975 billion), with almost 75% coming from industry.

BBI JU aims to bring together all relevant stakeholders to establish innovative bio-based industries as a competitive sector in Europe, ranging from primary production, large industry, small and medium-sized enterprises (SMEs), clusters, trade associations, academia, research and technology organisations (RTOs) to end-users.

BBI JU's **mission** is to implement the Strategic Innovation and Research Agenda (SIRA) developed by the Bio-based Industry Consortium (BIC) and endorsed by the European Commission on behalf of the European Union (EU). BBI JU operates its programme as the catalyst to enable the EU and industry to align their strategy and vision while respecting the principles of openness, transparency and excellence required for funding under the Horizon 2020 framework programme, through the annual Calls for proposals organised by BBI JU.

BBI JU's **objectives**, and that of its founding members, are:

To contribute to the implementation of Regulation (EU) No 1291/2013 and in particular Part III of Decision 2013/743/EU;

To contribute to the development of a sustainable and competitive bio-based industry in Europe based on advanced biorefineries that source their biomass sustainably; and in particular to:

- demonstrate technologies that enable new chemical building blocks, new materials, and new consumer products from European biomass and which replace the need for fossil-based inputs;
- develop business models that integrate economic actors along the whole value chain from supply of biomass to biorefinery plants to consumers of bio-based materials, chemicals and fuels, including by means of creating new cross-sector interconnections and supporting cross-industry clusters; and
- set up flagship biorefinery plants that deploy the technologies and business models for bio-based materials, chemicals and fuels and demonstrate cost and performance improvements to levels that are competitive with fossil based alternatives.

About the bio-based industry sector in the EU

The emerging bio-based industrial sector is organised around interconnected value chains. It aims to transform renewable biological feedstocks like agricultural and forest residues, bio-waste, aquatic biomass into bio-based products, materials and fuels, so replacing their fossil-based versions. According to BIC, in 2013 the bio-based industry sector accounted for 3.2 million jobs in the EU Member States and for a total turnover of € 600 billion, making it a cornerstone of the bioeconomy.

Bio-based industry is considered as an emerging sector which is extremely fragmented across geographical areas and organisations, therefore making it risky to invest in. It also faces specific challenges related to feedstock supply, and inadequate logistical infrastructure for moving feedstock from its original location to the biorefinery. The biorefineries require large, risky investment and the sector is faced with hurdles around regulation on several levels of the value chains.

In 2012, the EC conducted a public consultation as part of the impact assessment of the initiative. From the 638 answers received, 94.3 % recommended setting up a pan-EU initiative and the large majority requested that this should be set up as an institutional public-private partnership (PPP) between the EU and bio-based industry. The impact assessment concluded that a joint undertaking (JU) sharing the risks between public and private sectors was the way forward to:

- **de-risk investment** at all levels from research to full-scale deployment;
- **organise the sectors** by building bridges and collaborations between actors that were not collaborating in the past;
- **reach a critical mass** at European level where a single country or a small group of organisations are not big enough to address those strategic challenges.

EXECUTIVE SUMMARY

The priorities for the BBI JU in 2016 focused on building the organisation in terms of team, tools and processes, together with the promotion and the management of ongoing Calls. Grant agreements for projects from Calls 2015.1 and 2015.2 were concluded in time over the course of 2016, enabling the BBI JU portfolio to reach 36 projects.

The 29 retained proposals from Call 2016 were at the grant agreement preparation stage by the end of 2016. By early 2017, the BBI JU programme will have a portfolio of 65 ongoing projects with a total of 729 Participants from 30 countries for a total grant value so far of €414 million, from the total Call amount of €417 million for the three Calls published up to and including 2016.

The objectives for 2016 presented to the BBI JU Governing Board were organised around five priorities:

- building the organisation and target operational excellence;
- Addressing main key outstanding regulatory and procedural issues from the start-up phase;
- Implementing well aligned strategies set by the founding members;
- establishing strong, clear and reliable KPIs and reporting;
- building visibility and recognition for the initiative.

Building the organisation and target operational excellence

During 2016, the BBI JU Programme Office continued to build the organisation initiated in 2015 towards operational excellence. By the end of 2016, the Programme Office team was almost complete, with 20 staff members out of a possible 22 employed in posts allocated to the joint undertaking in the Staff Establishment Plan. In particular, the Head of Finance and Administration joined the organisation in June and the Head of Programme joined in September 2016.

Human Resources (HR) management continuously strengthened the legal framework for the programme team, with particular emphasis on how the implementing rules of the European Commission are implemented and respected by the joint undertaking including the management of risk of conflict of interest. BBI JU values the continuous development of its staff in order to ensure that staff members are competent in their roles and can respond to changing requirements.

A learning and development framework was devised in 2016 with an emphasis on improving competencies and the career development of individuals. By the end of 2016, the majority of the Programme Office staff was in place, and sharing common corporate values, clearly understanding their mission, and with their tasks, objectives and training plans formalised.

BBI JU shares an ICT infrastructure with other joint undertakings located in the same building. In 2016 BBI JU adopted the Common IT Strategy and participated in the implementation of the Common IT Work Program. BBI JU also started the process to adopt

two EC corporate IT tools: ARES for document and records management and Sysper for HR management.

The Programme Office has been responsible for managing the administrative budget since BBI's autonomy was granted at end October 2015. Its implementation still reflects some aspects inherited from the start-up phase of the organisation. In particular the surplus deriving from an over-budgeting of staff costs for 2015 and 2016 has distorted the percentage execution of the 2016 administrative budget, as the surplus was much too large to be absorbed in one year. This situation is currently under discussion with the founding members and will be addressed through budget adjustments in the coming years.

Execution of the operational budget made satisfactory progress in 2016. Three grants for the 2015.1 Call resulted in a consumption of 73.7% of commitment appropriations, while the unused operational commitment appropriations from 2015 (€26 million) were reactivated in 2016 to top up the 2016 Call. From the 2015.2 Call, 23 grants resulted in a 99.0% execution of commitment appropriations. The 2016 Call was committed for €188.9 million and was evaluated successfully by the end of 2016, resulting in a potential consumption of 98% of commitment appropriation if all grants are signed in 2017. Unused appropriations totalling €4.5 million (€1.4 million from 2015 and €3.1 million from 2016) will be reactivated in 2017 via a budgetary amendment.

In respect of payment appropriations, the Programme Office achieved 97% execution overall. For administrative expenditure execution was 57% because of the impact of the large surplus brought forward from 2015 (see comments above). For operational expenditure execution was 100% represented by pre-financing payments for the grants of Calls 2015.1 and 2015.2. These payments were executed within an average time to pay (TTP) of eight days and 25 out of 26 payments were on time, with one payment delayed by one day.

The key business processes were analysed, aligned and described through Standard Operating Procedures (SOPs) to complete tasks and achieve objectives while respecting rules and policies. Each business process implemented by the Programme Office (under Horizon 2020 activity) is led by a business process owner (BPO) and its deputy. The BPO, serving the whole R&I family (including the BBI), assumes overall responsibility for that specific business process.

The BBI JU has also delegated its staff members to the Key User Groups of the relevant services to be able to closely follow and provide feedback on the new features implemented in the Horizon 2020 Grant and Expert IT management systems. At the end of 2016, the wider organisational infrastructure is in place, following best practices and using project management and activity planning tools.

Addressing main key outstanding regulatory and procedural issues

Starting at the beginning of 2016, three key issues were identified which needed to be addressed in 2016:

- process, the legal framework and the efficiency of the financial (in-cash) contribution to operational costs in the form of financial transfers between partners in projects;
- lack of in-kind operational (IKOP) documented reporting procedure;
- lack of methodology for in-kind additional activities (IKAA) planning and reporting.

Since the current BBI JU Council Regulation only allows financial (in-cash) contributions to operational costs at programme level to be taken into account towards the target provided for in Article 12(4) of the BBI JU Statutes, the legal framework that would take into account in-cash (financial contributions) between beneficiaries still has to be established. A task force composed by BBI JU, BIC and the EC was set up in 2016 to propose a solution to the BBI JU Governing Board. In parallel, a procedure to amend the Council Regulation was launched in 2016 and is ongoing.

The amendment⁷, if swiftly approved by the Council in 2017, would allow financial contributions at project level and contribute to reaching the investment targets set for the BBI JU. The task force will continue working on how to organise future Calls for proposals with specific topics aimed at delivering financial contributions at project level.

The in-kind contribution to operational costs (IKOP) represents the costs incurred by members other than the Union or their constituent entities in the implementation of indirect actions, less the contribution of the BBI JU and any other Union contribution to those costs. The IKOP reporting procedure, aligned with those ones adopted by the other joint undertakings, will be finalised and is planned to be adopted by the BBI JU Governing Board in early 2017. The 2016 IKOP report, presented to the GB on 31 January 2017 in line with article 4.3 of the BBI JU Council Regulation, was based on the estimation of in-kind contributions to operational costs made by BIC members participating in BBI JU's projects for costs incurred during the implementation of the projects during the year 2016.

BBI JU founding members were finalising the methodology at the end of 2016 for the planning and reporting of the in-kind contribution to additional activities costs (IKAA). This methodology will clarify the working methods of the members to approve the content of the IKAA plan. The Governing Board endorsed the first IKAA report in December 2016. This report presents the amounts of IKAA that were delivered during the period 2014 to 2015 and the total amount of private investment corresponding to this is €291 million (certified by an independent auditor). Furthermore, BIC presented a draft IKAA plan for 2016 to the BBI JU GB in July 2016.

Implementing well aligned strategies set by the founding members

The implementation of well-aligned strategies and action plans agreed by building of trust and commitment between the BBI JU's founding members – the EU (represented by the EC) and BIC – is critical for a public private partnership (PPP) to reach its objectives. This was reached through three main achievements:

⁷ COM (2017) 68 final

The outcome of Calls 2015.2 and 2016, in combination with the outcome of previous Calls, demonstrated that the programme is delivering in line with its objectives and with the Strategic Innovation and Research Agenda (SIRA). With the inclusion of the proposals under grant agreement preparation from Call 2016, the BBI JU portfolio will reach 65 ongoing projects in Q2/2017 with a total of 729 participants from 30 countries for a total grant amount of €414 million. This portfolio of projects shows a good coverage of the value chains, whereas the distribution per type of action deviates slightly from the one announced in the SIRA.

In particular the mobilisation of bio-wastes from municipal waste and by-products from the agri-food chain is better covered by Call 2016 than before. There is still room for improvement regarding the geographic distribution of beneficiaries, but the statistics of Call 2016 show the positive impact of the widening participation strategy adopted by BBI JU. SME participation is also already at a good level, with 36% of BBI JU beneficiaries falling under the category of SME. Finally the first reporting of ongoing projects on the expected outcomes delivered at the end of 2016 showed that all key performance indicators are already being met at a higher than expected level after the first three years' Calls.

During 2016 BBI JU's objectives were aligned with its founding members towards a common goal and agendas were synchronised, while taking into account the specific legal and strategic constraints of each other.

The commitment of industry towards the initiative was confirmed in 2016 through an increased BIC membership, particularly of brand owners, companies that are critical for the initiative as they can promote bio-based products towards end consumers. The Call 2016 also showed an increased participation with 103 proposals, which is 25% more than for the two Calls of 2015. Taking into account that more topics were published for the 2016 Call, this represents a stabilisation of the number of proposals to around 3.8 proposals per topic compared to 2015 Calls. By 2017, BBI JU will have six ongoing flagship projects, compared to the SIRA objective of five flagship projects by 2020.

Considering the quality of the proposals received, with 53% of proposals above threshold, and the growing interest of industry to invest in Europe, we can state that the EU is becoming an attractive area encouraging investment in bio-based industries. The crucial indicator of the industry commitment in the initiative is the leverage effect of private sector financial contribution vs. EU funding. The programme expects industry contributions of €2.8 for every €1 of public contribution.

The projections based on the only investments announced by the private partners in BBI JU projects show a significantly higher ratio of more than €4 private investment for each €1 of public money, taking into account the outcome of the Calls by the end of 2016. There is already €291 million of certified additional activities for the period 2014-2015 and an estimated⁸ €533 million more of IKAA reported to have been incurred in the provisional 2016 report. The total contribution from the industry seems on the right track because IKAA results seem by far better than expected.

⁸ Estimation done by BIC and communicated to the GB in accordance with article 4.3 of the BBI JU Council Regulation

Establishing strong, clear and reliable KPIs and reporting

The Key performance Indicators (KPIs) dashboard and reporting procedure were finalised in 2016 by the two founding members, the EU (represented by the EC) and BIC, and its two advisory bodies, the Scientific Committee (SC) and the State Representatives Group (SRG). The progress of the programme is monitored at four levels:

- Programme Office efficiency monitored against Horizon 2020 KPIs common to JUs and cross-cutting KPIs;
- project portfolio outputs, through KPIs described in the SIRA, reported annually by project coordinators;
- yearly monitoring of the leverage effect of private investment through public funding;
- monitoring of expected socio-economic and environmental impacts through surveys to be performed as from 2017 and a process to be adjusted with founding members according with the reliability of available data.

The efficiency monitoring is based on Horizon 2020 KPIs common to all joint undertakings and on additional indicators linked to programme monitoring and cross-cutting issues, like gender dimension, widening participation, SME participation and private sector participation. They are fully developed in the AAR, showing a very high level of efficiency of the Programme Office with all indicators at the expected levels. In particular, Time to Inform (TTI), Time to Grant (TTG) and Time to Pay (TTP) all showed a significant improvement.

Project outcomes monitored through seven KPIs described in the SIRA are measured against yearly project reporting in terms of new cooperation, new cross-sector collaborations, new bio-based building blocks, new consumer products and new large-scale biorefineries. They were reported for the first time in 2016, and without any exception all KPIs already showed better results compared to agreed objectives.

BBI JU's ongoing projects from Calls 2014 and 2015 reported the following expected outputs:

- **146 cross-sector interconnections** by 2020 which is already higher than the target of **36 interconnections** announced in the SIRA for the seven Calls between 2014 and 2020, showing the impact of BBI JU in accelerating the cross-sectorial integration along and across value chain faster than expected.
- **82 new or optimised bio-based value chains** by 2020, which is already greater than the target of ten announced in the SIRA for the seven Calls between 2014 and 2020. It confirms the significant structuring effect of the BBI JU programme and the fact that the future of the sector is also about the creation of a network of more new interconnected value chains than initially estimated.

- **46 new bio-based building blocks** based on biomass from European origin by 2020, which is already much higher now than the target of five new building blocks announced in the SIRA for the seven Calls between 2014 and 2020.
- **106 new bio-based materials** by 2020, which is greater than the target of 50 announced in the SIRA for the seven Calls between 2014 and 2020.
- **47 new demonstrated consumer products** based on bio-based chemicals by 2020, which is already better than the target of 30 announced in the SIRA for the seven Calls between 2014 and 2020.

This first reporting also confirms the expected impact of the initiative in bridging the gap between the research and the market.

- As stated in the SIRA, by 2030 it is expected that the bio-based industrial sector will generate 700 000 skilled and non-skilled jobs (base figures taken from 2012), 80% of them being in rural areas. This will regenerate underdeveloped and/or abandoned regions and will grow and diversify farmers' income. It will enable the EU to reduce its dependency upon the import of raw materials like fossil-based raw materials and protein for animal feed. It is expected that 30% of fossil-based products will be replaced by bio-based ones with the consequence of reducing greenhouse gas emissions (GHG) by 50%. These expected socio-economic impacts will be assessed through socio-economic and environmental impacts surveys to be launched in 2017.

Building visibility and recognition for the initiative

The year 2016 was a critical year for structuring BBI JU's communication strategy. The communication objectives set at the beginning of 2016 were to increase the visibility and reputation of the organisation, by specifically focusing on the promotion of the 2016 Call for proposals, and explaining potential synergies with the wider EU funding environment to all potential participant groups. The communication policy, strategy and stakeholder mapping were all developed during 2016, in collaboration with the founding members (BIC and EU through DG RTD), and assisted by external communication experts. They provided the roadmap for setting out BBI JU's long-term communication goals.

BBI JU held its third Info Day on 21 April 2016 in Brussels. More than 530 participants registered for the event and 305 participants attended in person. More than 80 participants joined via the live web-streaming. This total attendance represented an increase of 25% compared with the 2015 BBI Info day. Participants came from more than 40 different member states and associated countries.

In addition, more than 600 face-to-face meetings were scheduled through the BBI JU Partnering Platform. Some 270 users of BBI JU's partnering platform actively updated their profiles for the event and 50 participants used the partnering platform on site for the first

time. Media Consultant handled media coverage of the event, which resulted in 11 articles or citations in the media/press.

The Programme Office staff also participated in 15 national Info Days across Member States and associated countries in 2016, compared with participation in four similar events in 2015. The BBI Initiative and programme were presented at 34 further events as guest speaker, session organiser, or as event co- or sole organiser.

Specific communication actions were organised in 2016 to support the widening participation strategy and the management of synergies with other programmes, for example the initiative taken by BBI JU to establish a joint working group between BBI JU and SPIRE. BBI JU also widened stakeholder engagement in the programme by targeting priority stakeholders like SMEs, regions and underrepresented areas and sectors using outreach activities with these groups. In order to improve the visibility and recognition of the value of the bio-based industries, BBI JU also informed key influencers about the programme to widen support amongst policy makers using specific tailored and targeted actions.

The website continued to provide access and an entry point to BBI activities for around 68 497 unique visitors during the year. This is similar to website traffic for 2015. There were peaks of activity around the Open Info Day and the key BBI JU events in September and October. The home page, the Call 2016 page and project pages saw the highest number of visits. The Programme Office made some significant developments on the website, including re-launching the SRG and SC 'Members' areas, new design and content for BBI project pages, and the addition of a project coordinators dedicated page.

The Programme Office embraced social media during 2016 to reach a wider audience. Activity on Twitter via the [@BBI2020](#) account was followed by more than 1 280 users by December 2016, increasing from 198 followers recorded by February 2016. @BBI2020 tweeted 175 messages and retweets which resulted in reaching 185 436 accounts, and saw active engagement by followers more than 2 500 times. A [Linked In group](#) and corporate page were launched in May. The Linked In group/page was one of the channels used to promote the 2016 Call and vacancies at the Programme Office in addition to the exposure given on the public website.

At the end of 2016, BBI JU is significantly more visible than ever before and receiving recognition from key stakeholders, as an efficient and successful example of a joint undertaking.

As a **conclusion**, BBI JU achieved the majority of its objectives in 2016, and in some cases surpassed them. For 2017, the Programme Office will be faced with different and new challenges linked mainly with the fact that the organisation will be running its operations at full speed. This is largely due to a project portfolio multiplied by four in one year and many activities to be performed for the first time in 2017.

Consequently the five priorities in 2017 will be to:

- Operate the Programme Office successfully at maximum operational capacity;
- Continue to build an effective and well-balanced project portfolio;
- Confirm the industry commitment to the overall initiative;

- Reinforce operational excellence thanks to successful reporting and audits;
- Move the BBI JU's corporate image from awareness to reputation and recognition.

1. IMPLEMENTATION OF THE ANNUAL WORK PLAN 2016

1.1. Key objectives 2016 and associated risks

1.1.1. Overall operational objectives from AWP 2016

The Call 2016 focused on the need to better integrate biomass feedstock suppliers on the front end of the chain to create a demand for biomass feedstock from biorefining processes. Similarly, the Call 2016 aimed to stimulate the formation of partnerships with end market actors to create a 'market pull' for bio-based products for identified applications.

Thus, the Call 2016 started to move away from a strict biomass feedstock 'push' based on the traditional value chains, towards a demand for biomass to enable processing to respond adequately to a 'pull' from the end markets.

The Call 2016 retained the four strategic orientations from 2015, but linked them in a matrix with three 'vertical' orientations and a 'horizontal' one, cutting across the three vertical ones. The strategic orientation 'Cross-sectorial integration along and across value chains' is the *base mode of operation* for the bio-based industry in Europe, cross-cutting the following 'vertical' orientations':

1. 'Sufficient and sustainable biomass feedstock supply' at affordable prices, incorporating the feedstock suppliers as partners in the value chains;
2. 'Development of biorefinery technologies' and processes to increase the competitive position of the bio-based industries in Europe;
3. 'Higher market demand and customer awareness' through the development of innovative products and applications in partnership with actors in the end consumer markets and setting the framework for successful market uptake.

To promote the strategic orientation 'Cross-sectorial integration along and across value chains' as the *base mode of operation* in the bio-based industry in Europe, the AWP 2016 numbered its topics without a direct link to a specific (existing) value chain mentioned in the Strategic Innovation and Research Agenda (SIRA). It was expected that this would entice actors in different sectors into seeking partnership for preparing project proposals.

The implementation and achievement of the strategic orientations developed in the AWP 2016 are developed in the sections 1.2 and 1.3 of the current report.

1.1.2. Management objectives 2016 and achievements

Each year the Executive Director presents his proposals of priorities for the coming year to the Governing Board. The priorities are translated into yearly objectives for the Programme Office, which are then cascaded into individual objectives for all staff members according to SMART principles (specific, measurable, accepted, realistic and time-related).

The priorities and objectives for 2016 were presented to the Governing Board on 11 April 2016. The priorities were mainly aimed at building the organisation: the team, its tools, processes and procedures while managing the two Calls for 2015. An important priority for

2016 was establishing the communication and stakeholder management strategy as well as performing communication activities to promote the BBI JU programme Call.

The objectives for 2016 were organised around five priorities summarised as follows:

- build the organisation and target operational excellence;
- solve main key issues from the start-up phase;
- build trust and commitment between founding members;
- establish strong, clear and reliable KPIs and reporting;
- build visibility and recognition for the initiative.

Achievements for 2016

Operational excellence is built into the day-to-day practices of the Programme Office team:

- The majority of the Programme Office staff is in place, with common values, clear missions, tasks, objectives and training plans all formalised.
- Key business processes are well aligned and described through Standard Operating Procedures (SOPs) to complete tasks and achieve objectives while respecting rules and policies.
- The wider organisational infrastructure is now in place, following best practices and using project management and activity planning tools.

Main key issues from the 'start-up' phase are now solved or on the way to be solved:

- Ensuring the legal framework for financial contributions at project level from industry partners needed addressing from the beginning of the programme BBI JU. A task force composed by BBI JU, BIC and the EC was set up in 2016 to find and propose a solution to the Governing Board. In parallel, a procedure to amend the Council Regulation was launched in 2016 and is ongoing. The amendment, expected to be approved in 2017, will allow 'in-cash' financial contributions to operational costs at project level to count towards the objective stated in the Council Regulation. The task force will continue exploring potential measures that would help and facilitate the delivery of financial contributions to operational costs, at project level.
- The in-kind contribution to operational costs (IKOP) reporting procedure, aligned with other joint undertakings will be finalised shortly and the Governing Board will endorse the procedure in early 2017.
- The BBI JU founding members have reached an agreement at working level on the methodology for in-kind contribution to additional activities costs (IKAA) planning and reporting. The methodology includes the procedure to assess the fulfilment of legal

criteria established in the Council Regulation. The Governing Board endorsed the first IKAA report in December 2016. This report presents the amounts of IKAA that were delivered during the period 2014 to 2015 and the total private investment amounts to €291 million. The Bio-based Industries Consortium presented a draft IKAA plan for 2016 to the BBI JU GB in July 2016. End 2016 the final IKAA plan was not yet approved but it anticipates a good confirmation of the mobilisation of private investments.

Alignment on priority setting between BBI JU founding members was smooth during 2016, enabling well-aligned strategies and action plans through:

- Delivering the expected portfolio of project from Calls 2015.2 and 2016 demonstrating the programme is delivering in line with the Strategic Innovation and Research Agenda (SIRA).
- Aligning objectives and synchronising agendas towards a common goal, while taking into account each other's specific legal and strategic constraints.
- Confirming the commitment of industry towards the initiative through an increased BIC membership, the increased participation in the Call, together with the high quality of proposals received and the attendance of C-level executives at key bio-economy events.

The key performance Indicators (KPIs) dashboard and reporting procedure is in place at four levels:

- Measurement of project portfolio outputs, through the review of KPIs at level 2 (as described in the SIRA), is reported annually by project coordinators. The Programme Office has completed the KPI report for 2016, as shown in section 1.3.1.
- The Programme Office established its efficiency monitoring against Horizon 2020 KPIs through quarterly reporting, as shown in section 1.3.1.
- The Programme Office is reporting in-kind contributions made to its projects (IKOP) and in-kind contributions made to additional activities (IKAA) by BIC members on an annual basis to monitor the leverage effect of private investment through public funding. The details of the reported IKOP and IKAA and the calculation of the leverage effect are described in section 1.7.
- The monitoring of expected socio-economic and environmental impacts will be performed through surveys to be performed as from 2017 and a process to be adjusted with founding members according with the reliability of available data.

The BBI JU programme is significantly more visible and is receiving recognition from key stakeholders, as an efficient and successful example of a joint undertaking through:

- a review of BBI JU's corporate identity, development of key messages and the development and implementation of a first set of high impact communication tools;
- the high priority given in 2016 to the participation of the Programme Office to a wide range and large number of relevant events to diffuse key messages about the programme's mission and objectives, and to promote participation in BBI JU's 2016 Call;
- the development of the communication and stakeholder management strategy, including priority stakeholder mapping, development of key communication tools and an ambitious communication action plan, included in the Annual Work Plan 2017;
- communication actions to support the widening participation strategy, the management of synergies with other programmes, for example the initiative taken by BBI JU to establish a joint working group between BBI JU & SPIRE.

1.1.3. Associated risks

The Programme Office conducted a risk assessment, including preventive and mitigating actions, to identify the main operational risks associated with its activities in 2016. None of the risks materialised and the experience gained during the assessment process proved valuable for developing the identification and management of risks in the risk management process, as detailed in section 4.6 below, and for further improving the effectiveness of the relevant internal control systems, as detailed in section 4.7 below.

1.2. Research & Innovation activities

The mission of BBI JU is to implement, under Horizon 2020 rules, the Strategic Innovation and Research Agenda (SIRA) developed by the industry, by organizing Calls for proposals to support research, demonstration and deployment activities enabling the collaboration between stakeholders along the entire value chains covering primary production of biomass, processing industry and final use.

The section below provides an overview of the status of BBI JU's achievements so far, with respect to the implementation of its Annual Work Plan and the management of its project portfolio, in addition to its contributions to the further development of the SIRA.

1.2.1. Strategic Innovation and Research Agenda (SIRA)

The BBI JU aims at realising the bio-based industry vision by focusing on the development of EU-based value chains while accelerating the transition to advanced biorefineries.

The overall strategic orientation of BBI JU is outlined in the Strategic Research and Innovation Agenda (SIRA), which has been developed by industry based on extensive consultation with public and private stakeholders. The current SIRA was finalised in March 2013 and endorsed by the European Commission. It sets out BBI JU's priority areas for

research and innovation, which reflect the ambitions and objectives of the members of the Bio-based Industries Consortium (BIC). These priority areas are formulated in the context of four main value chains (VC) as shown in Figure 1. However, over time, the activities of the BBI JU projects are extending beyond those value chains.

Value Chain 1: From **lignocellulosic feedstock** to advanced biofuels, bio-based chemicals & biomaterials: realising the feedstock and technology base for the next generation of fuels, chemicals and materials

Value Chain 2: Next generation **forest-based value chains**: utilisation of the full potential of forestry biomass by improved mobilisation of by-products and side streams from the forest-based chain and realisation of new added value products and markets

Value Chain 3: Next generation **agro-based value chains**: realising the highest sustainability and added value by improved agricultural production, mobilisation of by-products and side streams from the agro-food chain and new added value products and markets

Value Chain 4: New value chains **from organic waste** being biological fraction of municipal solid waste and waste water: from waste and problems to economic opportunities by realising sustainable technologies to convert waste into valuable products)

Figure 1: BBI JU Focus - 4 Bio-based Value Chains

As from Calls 2015.1 and 2015.2, topics were introduced which were not linked to one specific VC. In addition, a new category of feedstock, aquatic biomass from sea and aquaculture, was considered as a new VC as from Call 2016. As a result, the selected BBI JU projects are associated either to one of the four original VCs, 'Cross VC', or 'aquatic biomass'.

During 2016, the SIRA went through an up-dating process to take into account the new developments in bio-based industries, and amongst other aspects, to widen the scope for participation in bio-based industries and to better align its ambitions with societal expectations, expected impact and the political context. The adjusted SIRA is expected to be published early 2017.

In the course of 2016, BBI JU supported the process of the SIRA adjustment via the following activities:

- BIC, the European Commission (EC) and the BBI JU Programme Office prepared a roadmap to implement an adjustment of the SIRA and accommodate positions and perspectives of all relevant stakeholders.
- BBI JU coordinated two consultation processes among the BBI JU advisory bodies, the Scientific Committee (SC) and State Representatives Group (SRG).

Recommendations received from SC and SRG have been implemented in the revised SIRA.

- In February 2016, the Programme Office held a key performance indicators (KPIs) session during a project coordinators' meeting with the first ten ongoing projects (Call 2014). During the workshop, the coordinators provided feedback on possible improvements regarding the definition of KPIs in the SIRA. BBI JU forwarded the coordinators' recommendations to BIC and the input has been included in the revised SIRA and KPIs. The latter will form part of BBI's ongoing reporting and monitoring activities.
- In March 2016, BIC, together with the BBI JU Programme Office, held a SIRA workshop with external experts to collect recommendations for adjusting the SIRA (content and structure). Eight experts from industry, academia and governments reviewed the collected input from BIC's members, the SC, the SRG and other stakeholders. On this basis, and combined with their expert opinion, the participants formulated recommendations regarding the SIRA and its use. The recommendations influenced the final design of the revised SIRA.
- BBI JU supported BIC by drafting the section dealing with the KPIs in the revised SIRA.

BBI JU types of actions and scale of impact of projects (Technology Readiness Level)

The BBI JU programme is implemented via four types of actions as defined in the Annual Work Programmes:

- Research and Innovation Actions (RIAs);
- Innovation Actions, namely Demonstration Actions (DEMOS) and Flagship Actions (Flagships);
- Coordination and Support Actions (CSAs).

Each of these actions (except CSAs) corresponds to a different Technology Readiness Level (TRL) (Figure 2). The TRL scale is used as a tool for decision making on research, development and innovation investments at EU level. It was developed to enable the assessment of the maturity of a particular technology and the consistent comparison of maturity between different types of technologies.

RIAs cover various activities to develop (TRL 3) or validate (TRL 4-5) technologies to fill gaps in value chains and enable new bio-based chemical building blocks, new bio-based materials, and new bio-based 'consumer products' or applications.

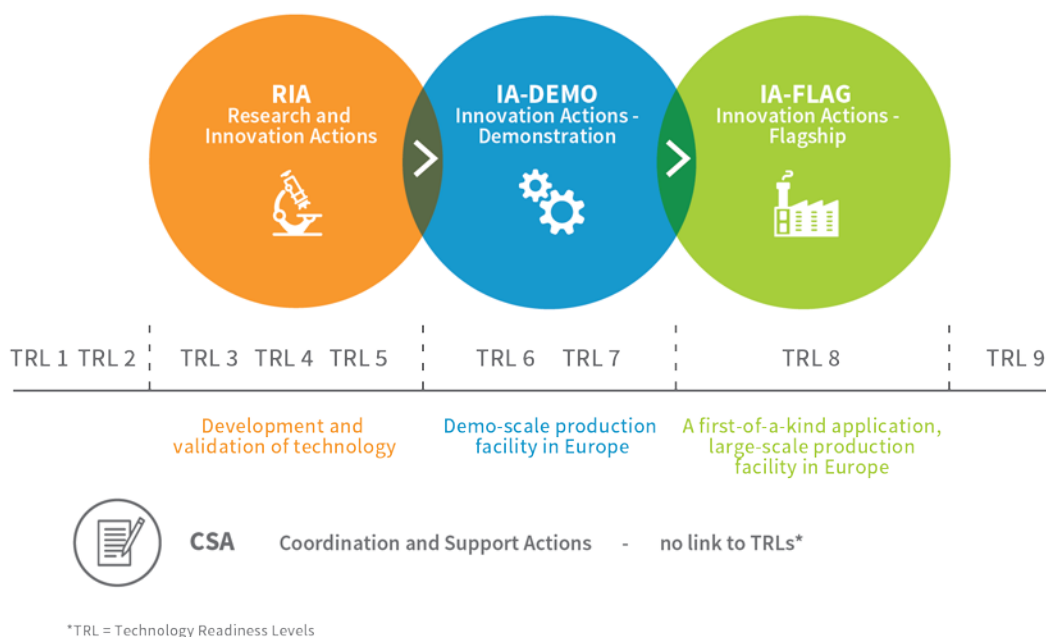


Figure 2: Technology Readiness Levels (TRLs) and connection to BBI JU types of actions

The DEMOs conduct activities to demonstrate the technical and economic viability of a new or improved technology (or a combination of linked technologies), process, or product in a relevant environment (TRL 6) or a system prototype in an operational environment (TRL 7). DEMOs at higher TRL perform a full value chain demonstration at pilot scale demonstrating also an optimised feedstock pre-treatment and downstream processing combination.

Flagships deal with the deployment of the demonstrated technologies and shall deliver at project end a system which is complete and qualified (TRL 8) for successful commercial operation ("first of a kind" large-scale production facility in Europe) and shows better environmental performance than competing fossil-based technologies (e.g. lower CO₂ footprint). Some flagships aim at a full-scale technology for delivering specific products or applications with new functionalities and subsequent development of the markets for those products.

Exact data regarding TRL levels achieved in BBI JU projects can only be provided at the end of the projects. However, the Programme Office is already now monitoring the progress and the expected scale of impact. During the annual monitoring of project outcome KPIs (see section 1.3.1.2), coordinators are asked to provide information on the expected 'TRL gain' between the project start and the project end (or by 2020).

Thus far, almost all projects have reported that they expect to increase the TRL of the main technologies/processes during the project by at least one level. The major TRL gains are expected from the RIAs (some of them targeting a TRL jump by two or three levels for a specific technology). The results of this survey indicate that the projects will cumulatively have a positive technological impact in the bio-based industries in Europe. Nevertheless, the actual impact can only be assessed at the end of the projects, or even several years after that.

1.2.2. Overview of BBI JU Calls and Project Portfolio

The Annual Work Plan defines the scope and details of the research and innovation activities that are prioritised in its yearly Calls. Thus far, BBI JU has successfully implemented three Calls⁹ out of a total of seven foreseen until the end of 2020 (Figure 3), thus consuming € 414 293 549 that represent about 99% of the budget of the three Calls (around € 419 million), and 36% of its overall budget foreseen for all Calls until 2020 (Table 1).

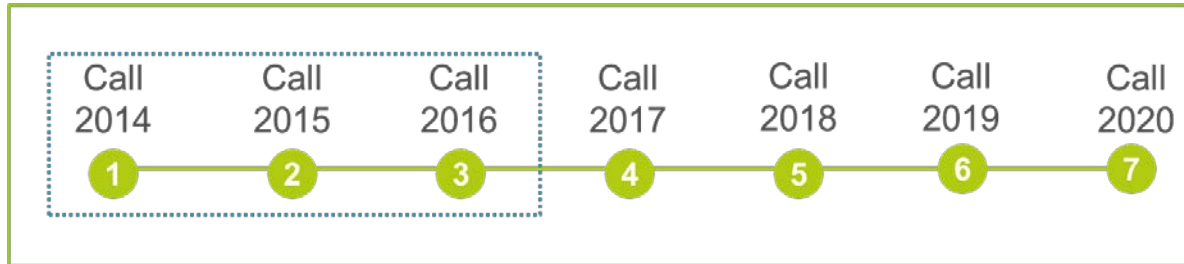


Figure 3: BBI JU calls Overview 2014-2020 (calls marked in orange have been implemented)

	Call 2014	Call 2015.1	Call 2015.2	Call 2016
budget	€ 51 500 000	€ 100 000 000	€ 106 390 407	188 995 048 ¹⁰
executed amount	€ 49 653 708	€ 73 741 235	€ 105 295 740	€ 185 602 866
executed %	96.4%	73.7%	99.0%	98.2%

Table 1: BBI JU budget execution in Calls 2014 - 2016

During 2016, the main activities included the completion of the implementation of the 2015 Calls, in particular Call 2015.2, and of Call 2016 (Figure 4). The evaluation for Call 2015.2 occurred in the first quarter of the year and the Grant Agreement Preparation (GAP) was finalised in August 2016 resulting in the signature and launch of 23 projects. The second half of the year was focused on Call 2016, which was published in April 2016. The evaluation took place in October 2016 and GAP was launched in December 2016. In parallel, BBI JU contributed to the finalisation of the AWP 2017 and preparations for the publication of the corresponding Call are underway.

⁹ The two Calls of 2015 – Call 2015.1 for flagships and Call 2015.2 for RIAs, DEMOs and CSAs – are counted as one single Call in this report.

¹⁰ This amount includes carry-overs from 2014 and 2015, net budget was 161 148 756 €.

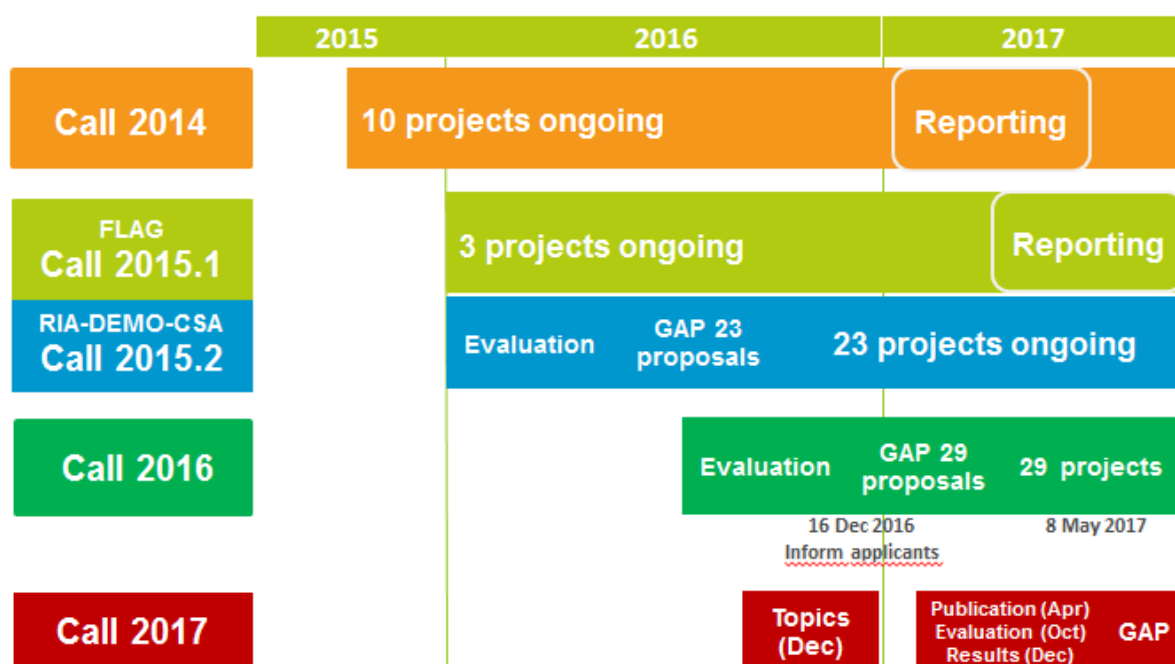


Figure 4: Calls Overview (as of 31 December 2016)

Table 2 summarises the main achievements in respect of the calls to the end of 2016, including the main outputs per call implemented so far.

Call 2014	10 projects: 1 Flagship, 2 DEMOs, 7 RIAs (first periodic reports will be submitted in March 2017)
Call 2015	26 projects: 11 RIA, 9 DEMOs, 3 CSA, 3 Flagship projects
Call 2016	29 projects invited to GAP: 15 RIAs, 9 DEMOs, 2 Flagships, 3 CSAs
Call 2017	BBI contributed to AWP drafting (non-topic part, coordination of consultation process with BBI JU advisory bodies) Call publication at the BBI JU website (mid Dec 2016) Call opening (expected April 2017)

Table 2: BBI JU summary of Calls: achievements by the end of 2016

The current portfolio consists of 36 ongoing projects (18 RIAs, 11 DEMOs, 4 Flagships and 3 CSAs, resulting from Calls 2014 and 2015). Considering the VCs, the distribution of the ongoing projects is as follows: VC1 (9), VC2 (9), VC3 (10), VC4 (1) and cross VC (7). An

additional 29 projects are currently in grant agreement preparation (GAP) as a result of Call 2016 (see table 2).

The 2016 AWP topics refocused on the need to integrate biomass feedstock suppliers on the front end of the chain better to create a demand for biomass feedstock from biorefining processes. Similarly, the AWP aimed at stimulating further the creation of partnerships with end market actors to create a 'market pull' for bio-based products for identified applications. The 'cross value chain' approach in the recent Calls increases the opportunities to convert and valorise new, suitable feedstock into value-added chemicals and materials and leads to a diversification of the research and innovation (and product) portfolio of the involved project beneficiaries. The new orientation is very well reflected in the resulting project portfolio, which has become more diversified and almost doubled following the finalisation of Call 2016.

As shown in Table 3, BBI JU projects continue to fill the gaps in the various bio-based value chains as set out in the SIRA and at different levels of TRL. A clear re-enforcement of the aquatic biomass sector is also observed and the enhancement of inter-sectorial connections is more visible as indicated by projects, which have a scope of operations across several value chains.

Notably, with the successful finalisation of Call 2016, the BBI JU portfolio has gained two new DEMOs in VC4 as well as two more Flagships, one of which in VC3. The total number of Flagships is now six, while the SIRA estimated target was for five by the end of 2020. Moreover, the number of CSAs has increased with three additional ones as a result of Call 2016. Finally, it is important to note that early indications of the outcome of the projects are already available through annual monitoring of specific KPIs, at project level, developed by BBI JU (further details are provided in section 1.3.1.2).

Value Chains	RIA	DEMO	Flagship
VC1 (lignocellulose)	US2GREENCHEM Zelcor LIBRE HYPERBIOCOAT ●	ValChem ● GreenSolRes ● BIOFOREVER ●	BIOSKOH ● LIGNOFLAG
VC2 (forest-based)	SmartLi Greenlight PROVIDES NeoCel TECH4EFFECT EFFORTE	PULPACKTION ● FRESH	EXILVA
VC3 (agro-based)	Carbosurf PROMINENT LIBBIO ●	Pulp2Value AgriMax Funguschain GreenProtein LIPES	FIRST2RUN ●
VC4 (organic waste)	NewFert ● ● ●	● ●	
across VCs	EnzOx2 InDIRECT BIOrescue ● ● ● ● ● ● ●	DEMETER ● ● ●	
Aquatic Biomass	MACROCASCADE ● ● ● ●		

	CSA
Across VCs	BioCannDo ● ● ● STAR4BBI BIOWAYS

(*) The table indicates project acronyms from Call 2014 (marked in black), Call 2015.1 (green) and Call 2015.2 (violet). Projects marked in red dots are from Call 2016 (currently in GAP)

Table 3: BBI JU ongoing projects and proposals in GAP at the end of 2016

With regard to the allocation of the operational budget per type of action, it appears that the current distribution is deviating from the targets proposed in the SIRA for DEMOS, CSAs and RIAs. Figure 5 shows the distribution of BBI JU funding allocated to the different types of actions for the projects from Calls 2014 to 2016, as compared to the distribution announced in the SIRA for the initiative as a whole. The targets set out in the SIRA can be expected to be reached by the last Call in 2020 and will be monitored accordingly.

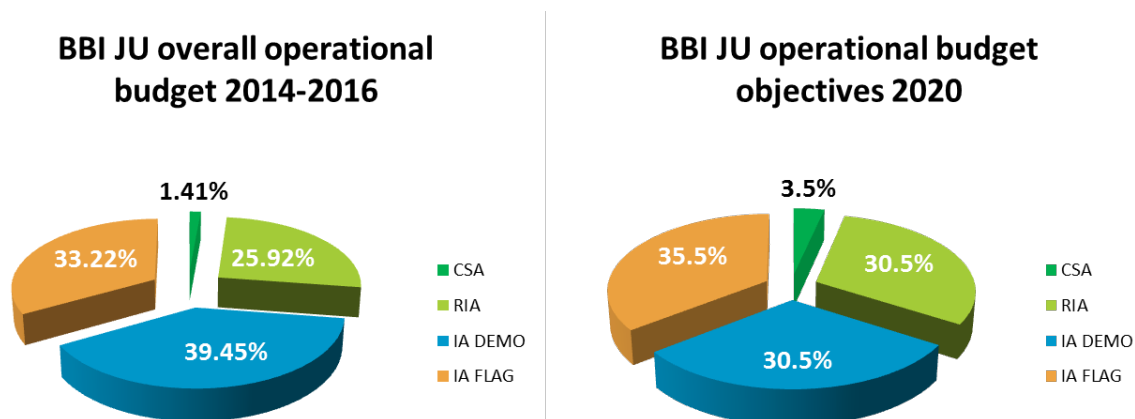


Figure 5: BBI JU overall operational budget: allocation of funding between types of actions. Cumulative figures for the period 2014-2016 as compared to the objectives at the end of 2020 (BBI SIRA)

1.2.3. Project Monitoring Activities

With respect to project monitoring, the activities carried out in 2016 focused on the following:

- Call 2014. Monitoring of project progress is ongoing including preparation for the first periodic reporting from these projects in 2017. Ten review meetings are scheduled for the period between March and April 2017. To support preparations for the successful execution of this process, BBI JU organised two events for project consortia: the Coordinators' Day in February 2016, and a webinar in November 2016.
- Call 2015. 18 Kick-off meetings took place between March and December 2016. Monitoring of project progress is ongoing.

As the oldest BBI JU projects (Call 2014) were only halfway through their lifecycle by 31 December 2016, deliverables were not available yet by this date. The situation is similar for Call 2015.1 and for Call 2015.2 projects, which started even later. Therefore, a first report on the respective Horizon 2020 KPIs (Annex 5) is expected in the annual activity report of 2017.

1.2.4. Bridging from discovery to market

BBI JU is an industry-driven research programme and one of its main objectives is to accelerate the innovation and market-uptake of bio-based products with the ultimate aim of positioning Europe as a world-leading, competitive bio-based economy.

One of the main instruments through which this can be accomplished, is via the funding of Innovations Actions (IAs), called DEMOs and Flagships. For these actions, the project proposals must show a clear business case and a business plan must be available (DEMOs) or already demonstrated (Flagships). Nevertheless, RIAs are also market-oriented actions,

as they aim at filling specific gaps in the value chains and a relevant market potential must be described.

The two 2015 Calls for proposals (2015.1 and 2015.2) delivered twelve Grant Agreements for IAs, which represents half of the BBI JU projects signed in 2016. Those IAs receive 76% (€ 136 408 239) of the total BBI JU financial contribution allocated to projects in the reporting year.

Within the IAs, BBI JU Calls 2015 delivered nine Demos and three Flagships. The share of the DEMOs in the total BBI JU financial contribution 2016 was 35% (€ 62 667 239), whereas the share of flagships in the total BBI JU financial contribution was 41% (€ 73 741 235).

In 2016, three flagship projects were approved and signed covering two different value chains (VC1 lignocellulosic and VC2 forest based) as defined in the current SIRA. They are complementary to the first flagship project from Call 2014, signed in 2015, covering VC3 (agro-based).

1.2.5. Synergies with other initiatives

The BBI JU has taken action to promote synergies with stakeholders regarding national and regional bioeconomy strategies, and other related EU programmes in areas such as education, environment, competitiveness and SMEs, and including the European Structural and Investment Fund (ESIF). The aim is to maximise the impact of the use of public funds, which can be used to help strengthen national and regional research and innovation capabilities in the context of smart specialisation strategies (S3). In 2016, BBI JU and BIC co-signed a letter of intent with eight Polish regions interested in developing their local bioeconomy capabilities, including Łódzkie Region, Małopolska Region, Mazowieckie Voivodeship, Pomeranian Voivodeship, Wielkopolska Region¹¹. Complementarities between the BBI JU funding programme and ESIF represent an important opportunity for these regions, which have identified, among their priorities in the S3, activities oriented to support the bio-based industries.

Other EU-supported programmes exist which could potentially overlap with the BBI JU programme. In order to avoid duplication, the Programme Office is working to promote synergies and avoid duplication with other public-private partnerships like SPIRE¹². SPIRE's activities cover the area of sustainable process industry through resource and energy efficiency. BBI JU initiated the creation of a joint working group between SPIRE and BBI JU, which plans to meet on a regular basis to coordinate topics under their respective Calls. A workshop organised by the European Commission to explore synergies with SPIRE took place in April 2016 and the official kick-off meeting of the Joint Working Group for BBI-SPIRE synergies, chaired by the BBI JU Executive Director, took place in September 2016. In this context, synergies, complementarities and ways to avoid unintended duplication of activities are sought, for example at the level of the preparation of the work plans to avoid

¹¹<http://www.bbi-europe.eu/news/bbi-ju-signs-letter-intent-develop-bioeconomy-partnerships-central-and-eastern-regions-0>

¹²<https://www.spire2030.eu/>

that similar topics are taken up in the AWP. Outreach activities to promote connections and networking between the SPIRE cPPP and BBI JU communities are also part of the tasks.

In 2016, BBI JU has also started to explore synergies with FACCE SURPLUS¹³ (Sustainable and Resilient agriculture for food and non-food systems). It is an ERA-NET Cofund, formed between the European Commission and a partnership of 15 countries. FACCE SURPLUS is committed to improving collaboration across the European Research Area in the range of diverse, but integrated food and non-food biomass production and transformation systems, including biorefining. Future synergies and complementarities will be explored with other EU programmes as they arise.

1.3. Calls for proposals and grant information

In the course of 2016, BBI JU operations have mainly focused on the implementation of AWP 2016 as well as the management of its growing project portfolio. The proposals from the Call 2015.2 were evaluated during the months of February and March 2016 and the resulting 23 grant agreements were signed between June and August 2016. Consequently, the portfolio of running projects grew from ten projects from Call 2014 to 36 running projects at the end of 2016.

The final ranking list was adopted by the BBI JU GB on 15 December 2016, the letter of information was sent to applicants on 16 December 2016, and the Grant Agreement Preparation process was initiated before the end of the year for 29 retained proposals, so that the portfolio of BBI JU is expected to reach 65 ongoing projects by May 2017.

The two sections below are structured as follows:

- Section 1.3.1 describes the current project portfolio, including the ongoing projects from Calls 2014, 2015.1&2 and projects invited to GAP as a result of Call 2016. The description covers the statistics and Key Performance Indicators (KPIs) which are common to all Horizon 2020 programmes as well as indicators specific to BBI JU.
- Section 1.3.2 describes the submission and evaluation statistics from Calls 2015.2 and 2016 together with some key lessons learned.

1.3.1. Progress against KPIs / Statistics

The data in this section compares the progress of BBI JU against KPIs and statistics. It covers the current project portfolio to the end of 2016, including the ongoing projects from Calls 2014, 2015.1&2 and projects of Call 2016 invited to GAP.

The progress of the BBI JU programme is monitored at four levels:

¹³ <http://facceturplus.org/about-facce-surplus/>

- Efficiency monitoring is based on Horizon 2020 KPIs common to all Joint Undertakings (JU)¹⁴ and further indicators linked to programme monitoring¹⁵ and cross-cutting issues, like gender dimension, widening participation, SME participation and private sector participation. More details are presented in section 1.3.1.1 below and in the tables in annexes 7.5 and 7.6.
- Project outcomes are monitored through level 2 KPIs described in the SIRA, measured against yearly project reporting and agreed objectives, in terms of new cooperation, new cross-sectors collaborations, new bio-based building blocks, new consumer products and new large scale biorefineries. More details in section 1.3.1.2 below.
- The leverage effect of private contribution versus public funding is monitored. For a public-private partnership the objective is to leverage private investment through public funding. For each € 1 of public money, it is expected that a minimum of € 2.7 of in-kind or financial contribution from BIC or its members will follow. The BBI JU reports in-kind contribution in projects (IKOP) and in-kind additional activities (IKAA) on a yearly basis, together with the calculation of the leverage effect. More details in section 1.3.1.3 below.
- Monitoring of expected socio-economic and environmental impact (first data expected in 2017).

1.3.1.1. Horizon 2020 KPIs and cross-cutting issues

Under Horizon 2020, the BBI JU has a legal obligation to monitor its programme implementation, to report annually and to disseminate the results of this monitoring. Table 4 provides the data on the performance of BBI JU against three main KPIs for Calls 2015.2 and 2016: Time to Inform (TTI), Time to Grant (TTG) and Time to Pay (TTP) pre-financing for Calls 2015.2 and 2016.

For Call 2015.2 BBI JU operated efficiently within the Horizon 2020 targets, with the applicants being informed about the evaluation outcome in 141 days, and GAP concluded in 239 days. Moreover, pre-financing was paid in 23 days for 100% of the projects.

For Call 2016, the TTI indicator was improved significantly, resulting in 99 days. The TTG and TTP indicators cannot be calculated yet as GAP 2016 is currently ongoing (target for all GA signatures is 8 May 2017). Notably, the overall 2016 performance achieved by BBI JU is better than the targets foreseen in Horizon 2020, which demonstrates a high level of efficiency of the organisation.

¹⁴ Based on Annex II (PERFORMANCE INDICATORS) and Annex III (MONITORING) of Council Decision 2013/743/EU.

¹⁵ Indicators linked to monitoring of programme implementation, e.g. evaluation (time to inform the applicants, time to grant, etc).

CALL	EVALUATION	GAP	PAYMENTS
	KPI: Time To inform (TTI) all applicants on the evaluation results	KPI: Time To Grant (TTG) measured (average) from Call deadline to signature of grants	Pre-financing (PF) KPI: Time to pay pre- financing (% made on time – target is <30 days)
2015.1	86 days (target 153 days)	227 days (target 243 days)	66% on time with an average of 16 days
2015.2	141 days (target 153 days)	239 days (target 243 days)	23 days (100%) (target 30 days)
2016	99 days (target 153 days)	GA signatures target: 8 May 2017 (target 243 days)	PF to be paid in 2017

Table 4: Horizon 2020 KPIs on the evaluation of proposals, grant preparation of the proposals retained for funding and payments related to pre-financing.

Indicators for monitoring Horizon 2020 cross-cutting issues can be partly extracted from the general statistics based on the submission and grant agreement stage. In the next section an overview of the main Horizon 2020 cross-cutting issues is provided for:

- widening participation
- SME participation
- gender dimension

Call-specific data for these issues are shown for Call 2015.2 and Call 2016 respectively in section 1.3.2.

Widening participation

A broad country participation in the BBI JU programme is desired in order to leverage the full European bio-based potential. As to be expected with a new programme initiative, take-up rates have been higher with some Member States and associated countries which were already in positions to take advantage of the programme's early Calls, as compared to certain others, in particular Member States from EU-13. Figures 6 and 7 respectively show the distribution of applicants and beneficiaries per country from EU-15 and EU-13, indicating the overall lower participation rates from certain EU-13 countries. A similar distribution is observed with respect to the financial contributions per country (Figure 8).

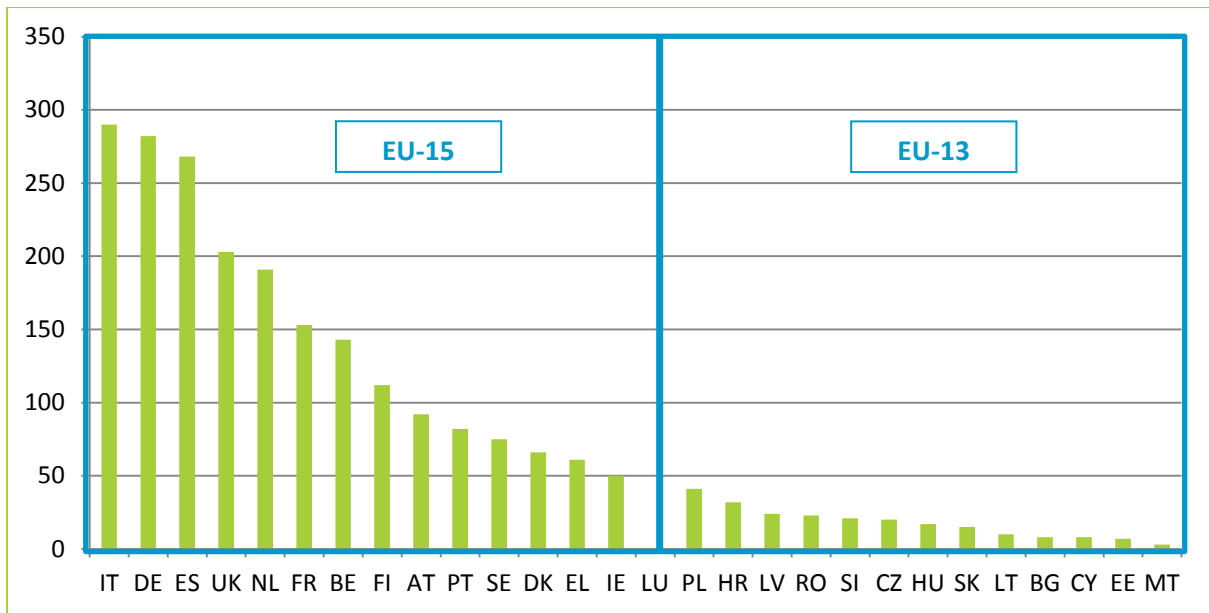


Figure 6: Distribution of applicants per country from EU-15 and EU-13 in Calls 2014-2016

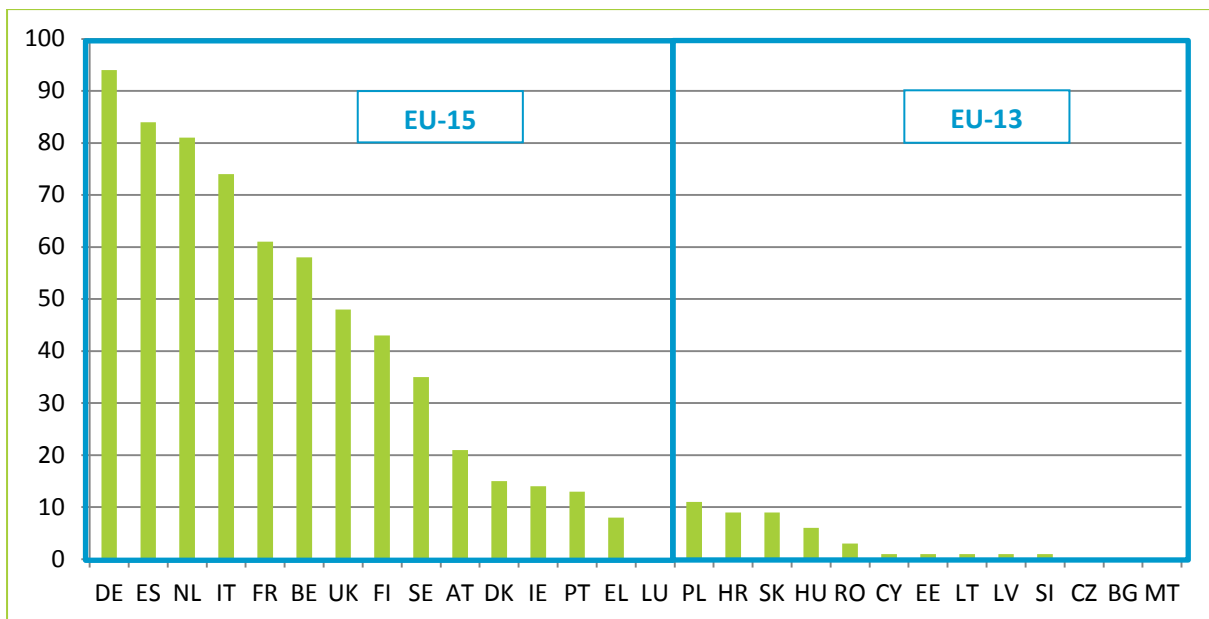


Figure 7: Distribution of beneficiaries per country from EU-15 and EU-13 in Calls 2014-2016

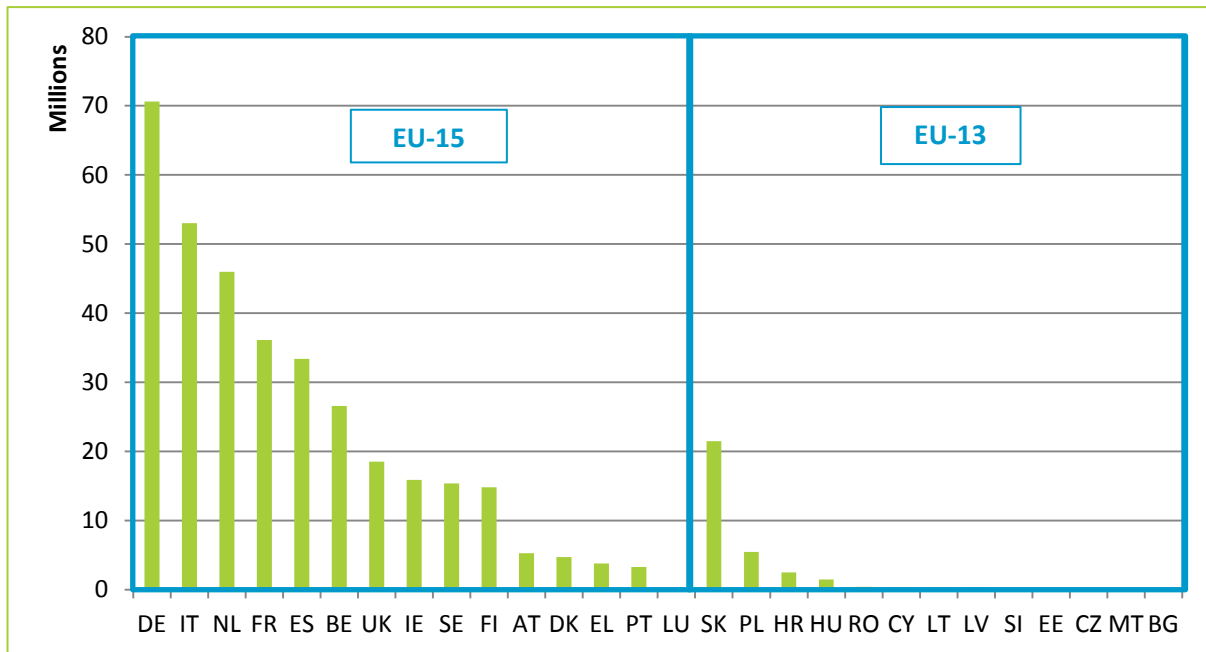


Figure 8: Grants (in € millions) per EU-15 and EU-13 Member States in Calls 2014-2016

The participation of associated and third countries indicates a mobilisation of potential participants in the three BBI JU Calls implemented thus far (Figure 9). However, at the level of the beneficiaries, only a smaller subset of associated countries is present in BBI JU projects (Figure 10), an observation that is still more pronounced with respect to financial contributions (Figure 11).

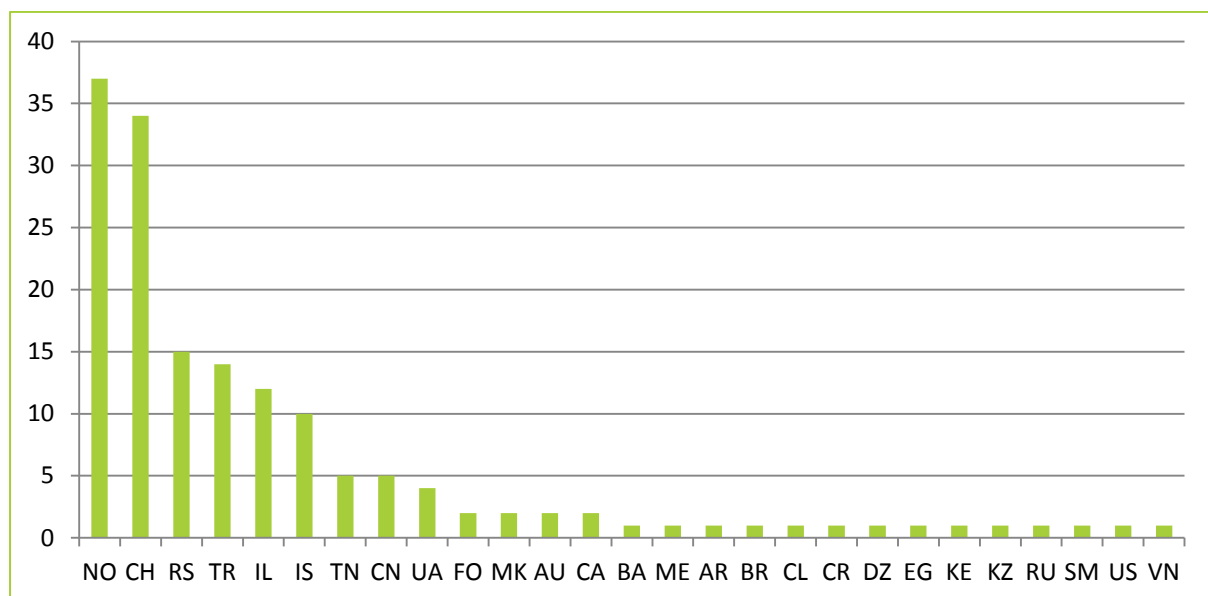


Figure 9: Distribution of applicants from associated and third countries (Industrialised countries and emerging economies and Developing countries) in Calls 2014-2016

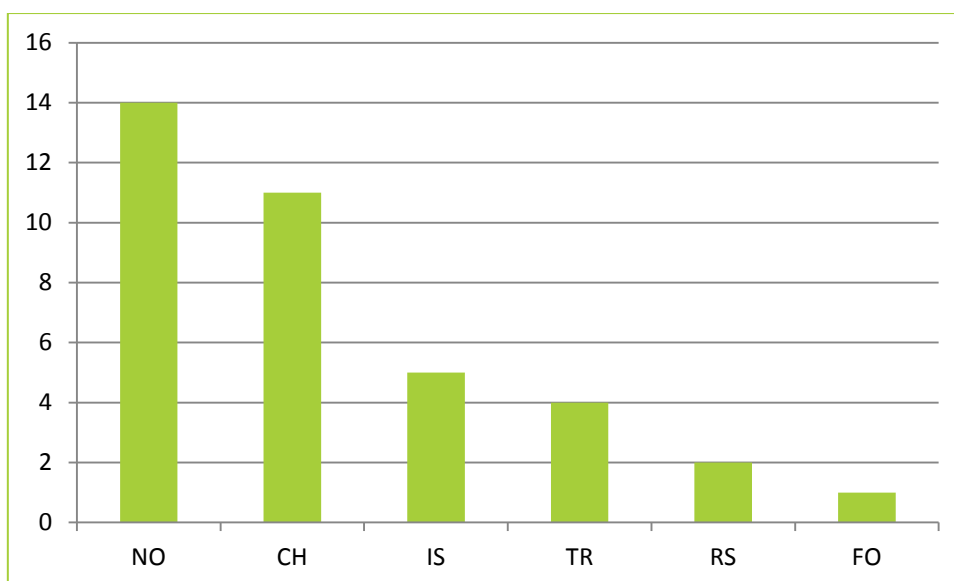


Figure 10: Distribution of beneficiaries from associated countries in Calls 2014-2016

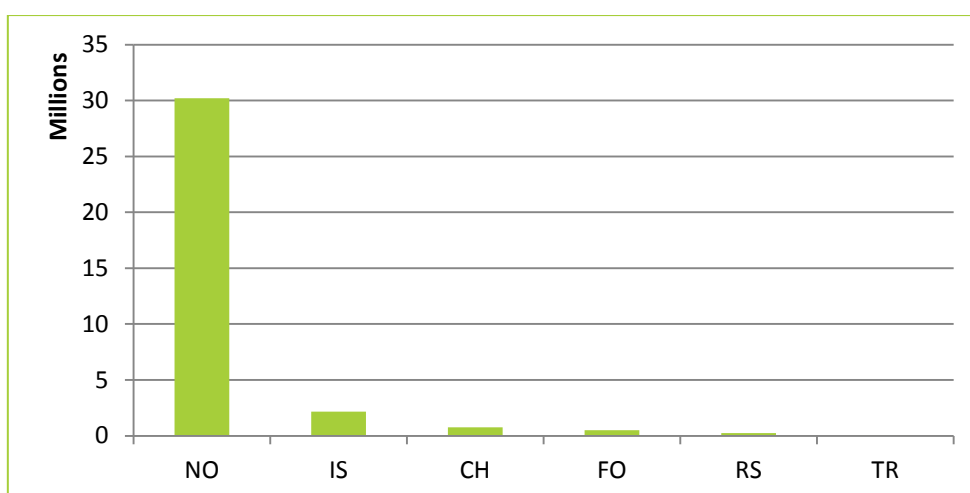


Figure 11: Grants (in € millions) per Associated Countries in Calls 2014-2016

The BBI JU instigated a joint strategy developed with the SRG, one of the two advisory bodies, to address the issue of widening participation. In September 2015, BBI JU launched the strategy with the objective of widening the participation of countries, regions and stakeholders in the BBI JU programme to leverage the full EU bio-based potential. The widening participation strategy will contribute to:

- supporting inclusive growth in Europe and the development of the European Bioeconomy;
- utilising the full biomass potential, research and innovation capacity of Europe;
- mainstreaming the bioeconomy concept and the BBI Initiative.

The strategy includes an action plan at European, national and regional levels to mobilise stakeholders in BBI JU related areas. Actions to be taken forward by BBI JU, BIC, the European Commission and the SRG are divided into the following four thematic blocks:

- promoting and raising awareness of the BBI JU programme at European and national levels;
- encouraging wider and inclusive participation in the Calls;
- developing knowledge, know-how and partnerships;
- supporting the market uptake of the results.

Two actions were taken forward in 2016 focusing on the first two themes:

1. promoting and raising awareness:
2. encouraging wider participation together with developing know-how.

Promoting and raising awareness

Implementation took place at the level of SRG and the SC in addition to some initiatives at regional level.

The SRG now has a platform to exchange good practices and information and to showcase business models shared with all Member States and associated countries. Moreover, the Programme Office organised a dedicated workshop for SRG members to help them promote the BBI Initiative and BIC membership at national level.

Within the SC, the geographical origin of the members has been included among the selection criteria for the appointment of its new members while maintaining expertise as the main criterion. The Governing Board approved this decision on 11 April 2016.

At regional level, the Programme Office actively participated in several important regional events or initiatives including the 14th Week of European Cities and Regions and the IV European Bioeconomy Congress.

In addition, BBI JU co-organised a conference to support the deployment of the BBI Initiative in the Mediterranean region in the framework of the activities performed by the BBI JU SRG. The conference 'Horizon 2020 and the Bio-based Industries initiative: Opportunities for jobs and growth in the Mediterranean region' was organised by the Italian Green Chemistry Cluster and the University of Bologna with the collaboration of the European Commission and BBI JU.

Mr Fabio Fava (SRG representative of Italy and Vice Chair) led the organisation of the event, which took place in November in Rimini (Italy). It represented the third largest European exhibition in the field of the green circular economy. The conference aimed at identifying common challenges and opportunities for the bioeconomy and the bio-based industries in the Mediterranean region, and also at analysing the research and innovation potential offered by Horizon 2020 and the BBI Initiative.

Encouraging wider participation together with developing know-how

The widening participation strategy was incorporated into the revision of the SIRA, where the topics have been broadened to allow a better distribution of future participation in the Calls. Moreover, the widening participation strategy was explicitly mentioned for the first time in AWP 2016 as one of two important aspects for its implementation, together with fostering synergies between BBI JU actions and other funding opportunities.

Finally, in order to promote Calls and the know-how in terms of proposal preparation, BBI JU has invested considerable efforts in supporting national Info Days in 2016 to promote the initiative and organising dedicated workshops when needed.

The first results of this strategy are reflected in the evolution of the participation of Member States and associated countries in Call 2016 as compared with the 2014 and 2015 Calls. Figure 12 shows the number of applicants in submitted proposals per country for Calls 2014, 2015 and 2016. As indicated, significant improvements have been made over time by EU-13 Member States such as Poland, Romania and Slovakia, as well as by associated countries like Norway, Switzerland, Israel and Iceland at the level of participation in proposals submitted to the Calls.

However, the observed level of participation in submissions is not sustained at the level of the beneficiaries in retained proposals as indicated in Figure 13 except for Poland. This demonstrates that the success rate of those countries is still lower than that of the EU-15, pointing out the need for further improvements in the quality of the proposals submitted and/or of the composition of the respective consortia. As a consequence, in 2017 BBI will dedicate particular attention to the actions (i.e. NCP trainings, participation to national events in EU-13 countries etc.) to improve the knowledge on Call conditions and proposal writing of potential participants with the final objective to increase not only the participation level but also the success rate.

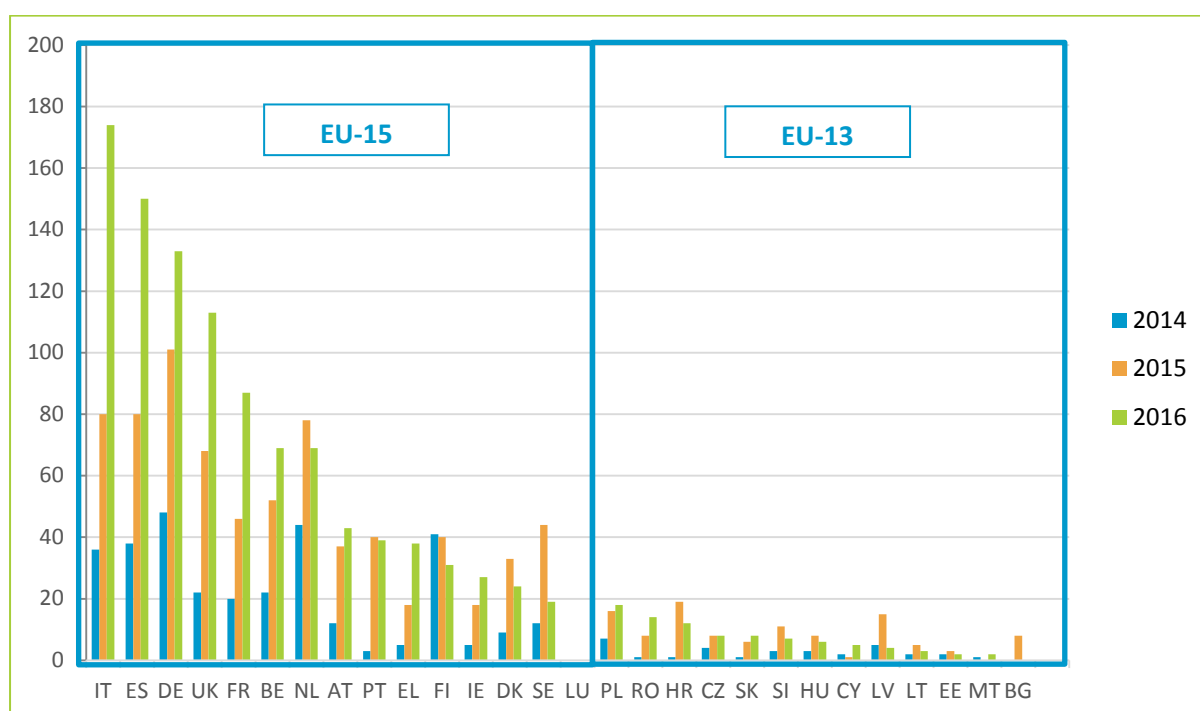


Figure 12: Distribution of applicants per country from EU-15 and EU-13 in Calls 2014-2016

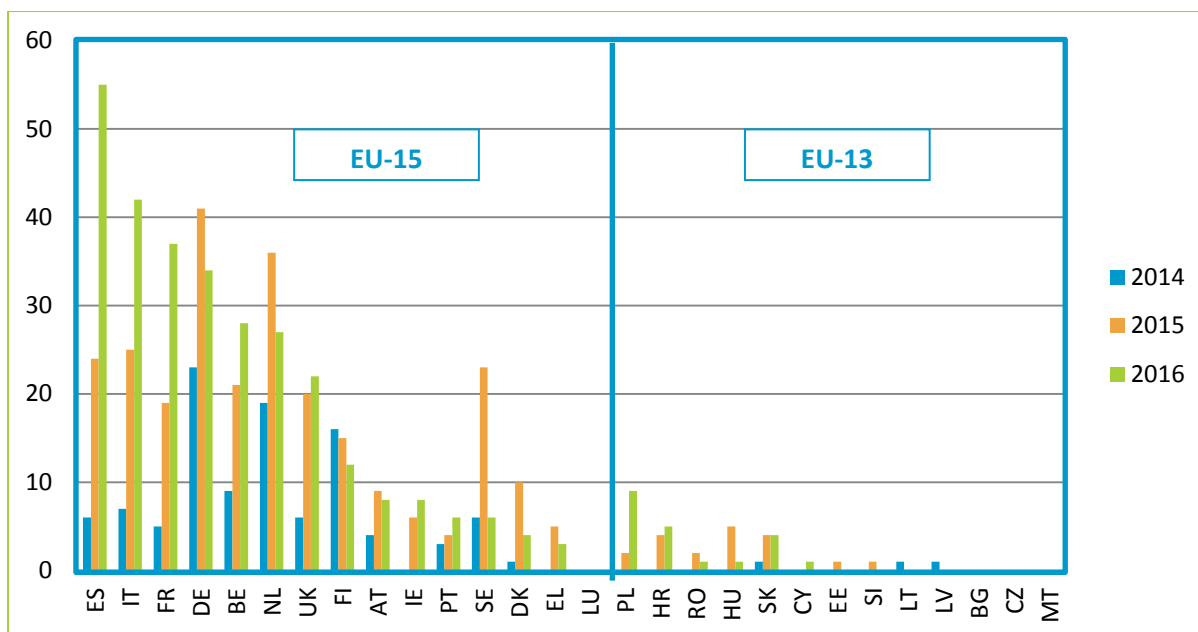


Figure 13: Distribution of beneficiaries per country from EU-15 and EU-13 in Calls 2014-2016

SMEs participating in BBI JU Calls and projects

SMEs are expected to play an important role in the consolidation and further expansion of the European bio-based industries, and the BBI JU programme aims to actively engage them. The updated SIRA and the AWP 2016 set the participation target in projects for SMEs at 20% of beneficiaries, in line with Horizon 2020 objectives.

Looking at the current levels of participation so far of SMEs in all applications and retained proposals from Calls 2014, 2015 and 2016, these targets have been largely surpassed, with 31% SME applicants and 36% SME beneficiaries (Figure 14). This level of participation corresponds to an overall allocated funding of 29% for SMEs in the current BBI project portfolio (Figure 15).

This shows that the BBI JU programme is clearly contributing to the development of the bio-based SMEs' landscape in Europe. The monitoring of SMEs in BBI JU will continue for all future Calls. In addition, a more detailed analysis of the specific characteristics of this participation will be carried out, in the course of 2017, together with an investigation on actions to be potentially taken for further improvements if possible.

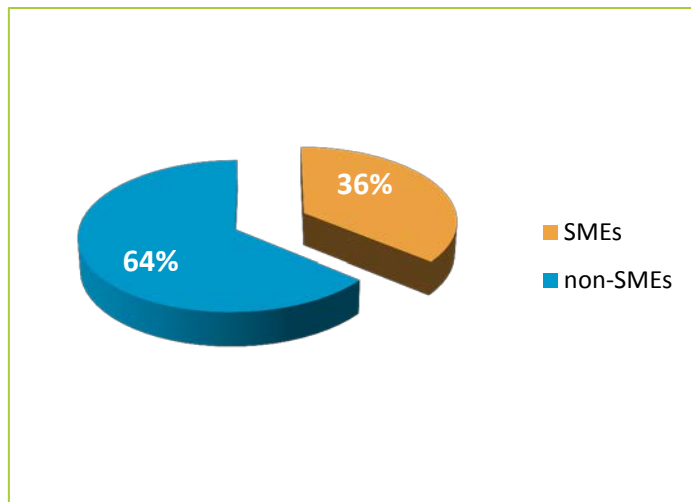
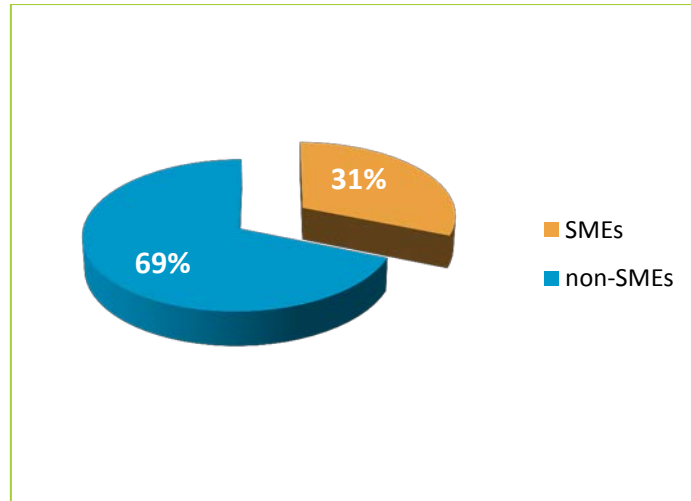


Figure 14 shows SME share in Call applications (top panel) and retained proposals (bottom panel) in Calls 2014-2016

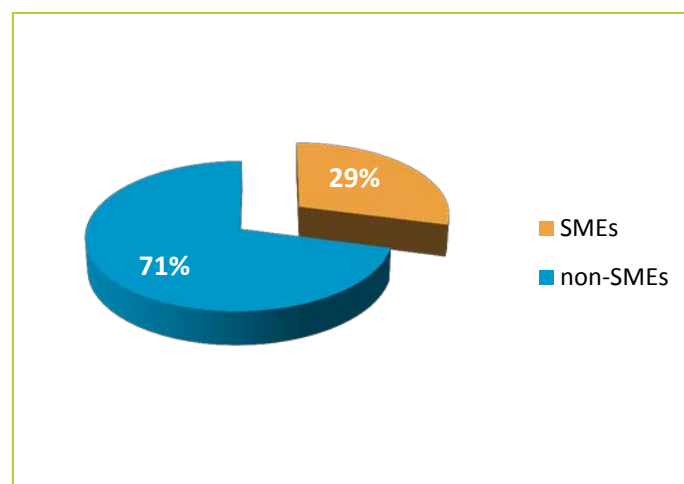


Figure 15: Share of funding to SMEs vs total in all BBI projects from Calls 2014-2016 (includes projects which are currently ongoing as well as in GAP)

Gender dimension

In Horizon 2020, gender is a cross-cutting issue and is mainstreamed in each of the different parts of the programme, ensuring a more gender-balanced approach to research and innovation. Three objectives underpin the strategy on gender equality in Horizon 2020¹⁶:

- fostering gender balance in research teams, in order to close the gaps in the participation of women;
- ensuring gender balance in decision-making, in order to reach the target of 40% of the under-represented sex in panels and groups and of 50% in advisory groups;
- integrating the gender dimension in research and innovation (R&I) content helps improve the scientific quality and societal relevance of the produced knowledge, technology and/or innovation.

Table 5 shows data on the distribution of women and men in the different groups comprising BBI JU advisory bodies, expert evaluators (Calls 2015.2 and 2016) and project coordinators from all ongoing projects. The data demonstrates that gender balance is at the expected levels with respect to all BBI JU groups, with the exception of its Governing Board. Some improvement of the participation of females in the Scientific Committee may also be required. In the process of the renewal of the membership of the SC, launched in late 2016, this aspect has been a factor for selection.

Name of group	Total number	Percentage of women	Percentage of men
BBI JU Governing Board	10	20%	80%
Scientific Committee	10	40%	60%
States Representatives Group	32	56%	44%
Expert-Evaluators Call 2015.2	60	48%	52%
Expert-Evaluators Call 2016	80	41%	59%
Project Coordinators	36	41%	59%

Table 5: Percentage of women/men in BBI JU advisory groups, expert groups and project coordinators

¹⁶ <https://ec.europa.eu/programmes/horizon2020/en/h2020-section/promoting-gender-equality-research-and-innovation>

Private sector participation

The participation of the private sector in all BBI JU actions is one of the cornerstones of the programme. Within the 36 ongoing projects from BBI JU Calls 2014 and 2015, as well as the 29 projects currently in GAP from Call 2016, 447 beneficiaries represent the private-for-profit sector, which corresponds to about 71% of all BBI JU beneficiaries. The BBI JU contribution to the private-for-profit sector in those projects accounts for €292 605 957, equivalent to 61% of the total BBI JU funding allocated (Table 6). Notably though, the beneficiaries of BBI JU projects also include an important share of research organisations, representing about 20% of the total including higher education establishments accounting for just over 12%.

Similar levels of participation were noted at the level of submission. The private-for-profit organisations represent about 54% of the total participation requesting 58.5% of the total budget (Table 7).

Type of participants	Number of participants	Number of participants vs total participation (%)	Received grant* EUR	Funding received vs total funding (%)
Private-for-profit organisations	447	61.32%	292 605 957	70.63%
Research organisations	144	19.75%	66 653 143	16.09%
Higher education establishments	92	12.62%	44 398 068	10.72%
Others	40	5.49%	9 958 547	2.4%
Public body	6	0.82%	677 832	0.16%
Total	729	100%	414 293 548	100%

* For Call 2016 the BBI JU grant will be allocated to beneficiaries upon the finalisation of the GAP process

Table 6: Calls 2014-2016 number/type of participants and attribution of BBI JU funding in selected proposals

Type of participants	Number of participants	Number of participants vs total participation (%)	Requested grant EUR	Funding requested vs total funding (%)
Private-for-profit organisations	1319	53.71%	840 934 263	58.52%
Research organisations	462	18.80%	230 195 910	16.02%
Higher education establishments	539	21.95%	292 790 960	20.38%
Others	107	4.36%	53 628 227	3.73%
Public body	29	1.18%	19 459 851	1.35%
Total	2456	100%	1 437 009 211	100%

Table 7: Calls 2014-2016 number/type of participants and attribution of BBI JU funding in submitted proposals

1.3.1.1 BBI JU projects outcome KPIs

KPIs specific for BBI JU

The SIRA¹⁷ includes seven KPIs to monitor the BBI JU programme outcome against. Table 8 presents these KPIs with the targets expected by 2020.

In 2016 BBI JU contributed to a revision of those KPIs in the context of the SIRA adjustment. This process involved the European Commission, BIC, the Programme Office, project coordinators and KPI development and monitoring external experts. The SC and SRG as BBI JU's advisory bodies were also consulted. As part of the process, a questionnaire has been developed to monitor the contribution of all projects to these seven KPIs on a yearly basis, and to record progress towards the expected impacts like socio-economic, environmental, and others.

KPI number and definition	KPI target by 2020
KPI 1: New cross-sector interconnections in BBI JU projects by 2020 New cooperation between companies and other actors from different sectors, which interconnect/cooperate thanks to BBI JU projects to build new value chains	36
KPI 2: New (or optimised) bio-based value chains created by 2020 New value chains (from raw material to product application) realised with BBI JU projects. A value chain is considered new when at least one of its segments is new: either the feedstock, the processing, the end product or its application	10
KPI 3: Cooperation projects through cross-industry clusters Number of grants signed between the BBI JU and project consortia, which are collaborative projects that include partners from industry (large, SMEs), academia, and/or other BBI JU stakeholders who are based in at least three different MS or ACs.	200
KPI 4: New bio-based building blocks based on biomass of European origin by 2020 Amount of new bio-chemical building blocks developed thanks to BBI JU	5

¹⁷ The KPI (1-7) are defined in the Table 7 'BBI Key Objectives' in the current SIRA, page 28 (see: www.bbi-europe.eu/sites/default/files/documents/BBI_SIRA_web_0.pdf). Please note that the current SIRA is under revision, and the KPIs definitions provided in Table 8 present the modified descriptions as indicated in the draft version of the revised SIRA (see section 1.3 of this report).

<p>projects that are:</p> <ul style="list-style-type: none"> • either identical to non-renewable building blocks and have not (successfully) been made on (pre)commercial scale yet; • or are new building blocks that have better performance than fossil-based counterparts in comparable applications; • or are novel molecule, breakthrough building blocks that have no fossil-based counterparts. 	
<p>KPI 5: New bio-based materials by 2020</p> <p>Amount of new bio-based materials developed thanks to BBI JU projects that replace fossil-based materials that have proven to have an equal or overall better sustainability by Life Cycle Assessment (LCA), improved material efficiency, reduced GHG emission, biodegradability, recyclability or other improved functionalities during use or reuse.</p>	50
<p>KPI 6: New demonstrated ‘consumer’ products based on bio-based chemicals by 2020</p> <p>Amount of new bio-based ‘consumer product’ that meet a clear market demand and they fulfil all technical requirements, are economically viable and will have an overall better sustainability score than its current alternative (by LCA, improved material efficiency, reduced GHG emission, biodegradability, recyclability and/or other improved effects during use or reuse)</p>	30
<p>KPI 7: Flagships resulting from the BBI</p> <p>Number of flagship grant agreements signed by the BBI JU with project consortia. Flagships are first of the kind bio-refineries operating at a commercial stage built in Europe.</p>	5

Table 8: BBI JU specific KPIs for monitoring and assessing BBI progress by 2020

BBI JU projects expected outcome – contribution to KPIs specific to BBI JU

Results summarised in this section are based on data reported by 34 project coordinators in response to the Programme Office questionnaire sent in November 2016. Coordinators provided their estimations on the contributions of the project to the achievement of the BBI JU KPIs by the end of the project or by 2020 (in line with specific programme targets set for this year). Figure 16 shows the results as a picture of overall progress reported at the end of 2016 (projects selected in Calls 2014 and 2015), with respect to the targets set for 2020 for a total of seven Calls.

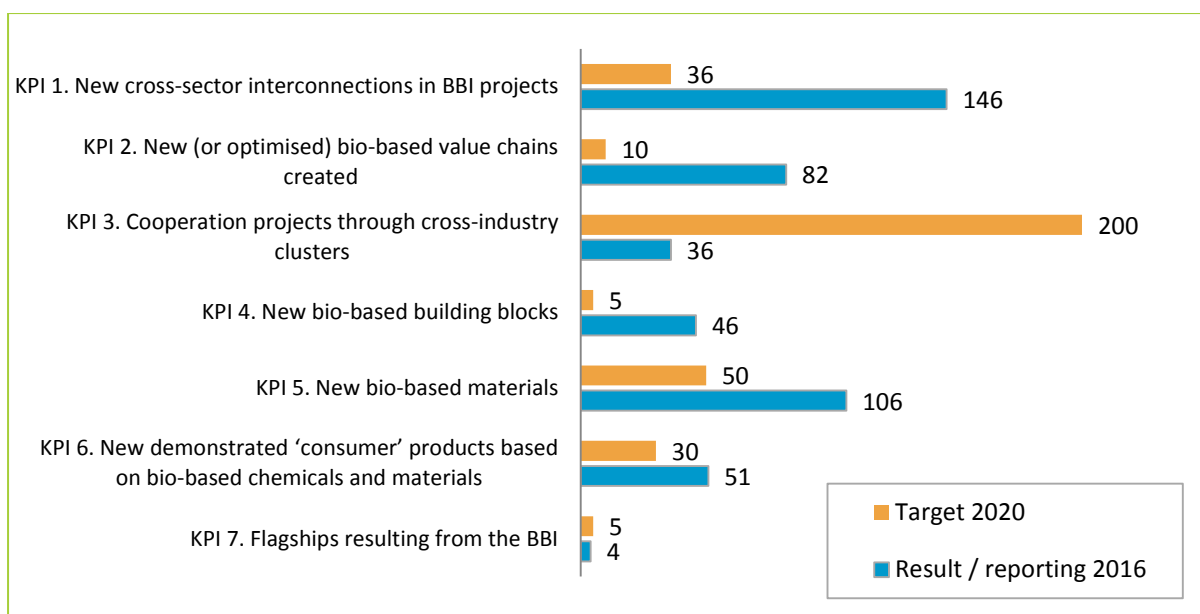


Figure 16: Progress reported on BBI JU specific KPIs by end 2016 as compared to 2020 targets

More details on the reported results are provided in tables 9 and 10, showing the breakdown by type of action and VC and a split per type of VC covered.

A detailed definition of each KPI was provided to the coordinators together with the questionnaire, to ensure a common understanding of the expected outcome. Nevertheless, reported results demonstrate the progress only at end of 2016, and may vary from project to project, depending on the respective specific activities, the different types of industrial sectors, and the maturity of the involved technologies for example. This reflects the diversity of the BBI JU portfolio as well as the current characteristics of the overall bio-based industries.

KPI Number & Title	Target by 2020	Total reported in 2016	Type of Actions (projects)			
			RIAs	Demos	Flagships	CSAs
KPI 1. New cross-sector interconnections in BBI projects by 2020	36	146	47	84	15	0
KPI 2. New (or optimised) bio-based value chains created by 2020	10	82	16	52	14	0

KPI 3. Cooperation projects through cross-industry clusters	200	36	18	11	4	3
KPI 4. New bio-based building blocks based on biomass of European origin by 2020	5	46	21	14	11	0
KPI 5. New bio-based materials by 2020	50	106	21	20	65	0
KPI 6. New demonstrated 'consumer' products based on bio-based chemicals by 2020	30	51	5	17	29	0
KPI 7. Flagships resulting from the BBI	5	4	NA	NA	4	NA

Table 9: Progress of the KPIs outcome by end 2016 vs targets by 2020 and distribution per Type of Action

KPI name	Target by 2020	Total reported in 2016	Value Chains				
			VC1 Ligno-cellulosic	VC2 Forest	VC3 Agro	VC4 Bio-Waste	Cross VC
KPI 1. New cross-sector interconnections in BBI projects by 2020	36	146	22	50	59	1	14
KPI 2. New (or optimised) bio-based value chains created by 2020	10	82	10	15	51	1	5
KPI 3. Cooperation projects through cross-industry clusters	200	36	9	9	10	1	7
KPI 4. New bio-based building blocks based on biomass of European origin by 2020	5	46	13	19	8	2	4
KPI 5. New bio-based materials by 2020	50	106	16	67	17	4	2
KPI 6. New demonstrated 'consumer' products based on	30	51	5	25	18	2	1

bio-based chemicals by 2020							
KPI 7. Flagships resulting from the BBI	5	4	2	1	1	0	0

Table 10: Progress of the KPIs outcome by end 2016 vs. targets by 2020 and distribution per Value Chain

Interpretation of the reported KPI results (status of the report: end of 2016)

KPI 1: New cross-sector interconnections in projects by 2020.

End 2016, the ongoing projects from the Calls of the two years 2014 and 2015, reported that they would **enable the establishment of 146 cross sector interconnections by 2020** which is already much better than the target of 36 interconnections announced in SIRA for the seven Calls between 2014 and 2020 showing the impact of BBI JU in **accelerating the cross-sectorial integration along and across value chain faster than expected.**

Definition: KPI 1 refers to cooperation between companies and other actors from different sectors, which interconnect/cooperate to build new value chains. These interconnections are new in the sense that the actors have not previously engaged with each other in cooperation or business in a value chain (even if they have worked together in a very different field). The new interconnection/cooperation can be about feedstock, technology, product markets, and regions and business models.

Results: The total number of cross-sector interconnections reported by all projects amounts to 146. This means that in each project there is more than one sector involved and on average each BBI project enables the establishment of 4-5 cross sector interconnections. The reported results for the 34 projects show that the expected contribution of the BBI projects by the end of 2016 already exceeds the 2020 target of 36 interconnections. This indicates that the BBI JU funding has accelerated the cross-sectorial integration along and across value chains by far more than initially anticipated. The results also reveal the existence of other dimensions of cross-sectorial integration, i.e. related to new or innovative regional interconnections or co-operations.

Figure 17 shows the industry sectors involved in the new cross-sector interconnections in the projects at the end of 2016. The main sectors involved are agriculture (reported by 14 projects), forestry (13), food and feed additives (15), packaging (13), paper and pulp (10), medical, healthcare, home and personal care (10) and automotive industry (8). In addition to traditional sectors, new areas have been mentioned such as chemical sector, adhesives industry, process equipment producers & designers, analytical services companies, waste

collection and separation industry, metallurgy industry, electronics (polyols & dimers). These new areas are represented by the field 'other sectors' in Figure 17.

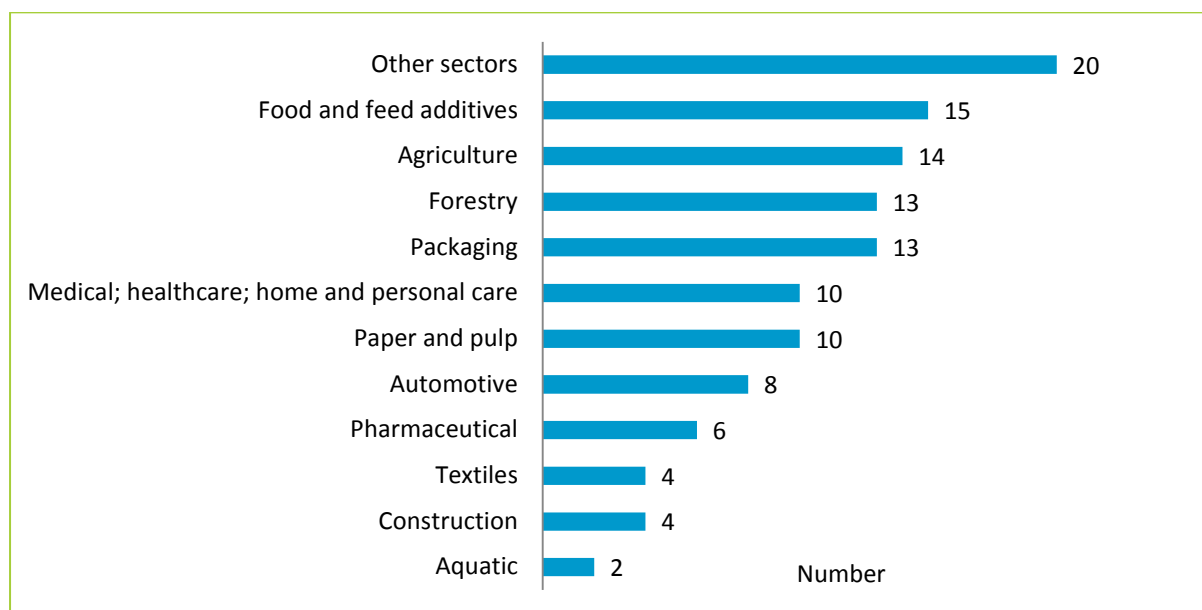


Figure 17: Industry sectors involved in the new cross-sector interconnections. Number of projects reporting new interconnections in those industry sectors

KPI 2: New (or optimised) bio-based value chains created by 2020.

The ongoing BBI projects from the Calls of the two years 2014 and 2015 reported that they would generate **82 new or optimised bio-based value chains by 2020**, which is already far greater than the target of ten announced in SIRA for the seven Calls between 2014 and 2020. It **confirms the significant structuring effect of the BBI JU** programme and the fact that the **future of the sector is also about the creation of a network of more new interconnected value chains than initially estimated.**

Definition: New value chains (from raw material to product application) realised within projects. A new value chain is a set of elements and activities in which at least one part is new, i.e. the feedstock, the technology, the end product or its application, the business model or any other part of supply chain management. A value chain is considered to be established when its resultant product or service has been tested and validated to be ready for a specified and accepted market application. The new value chains are economically viable and fulfil all relevant sustainability criteria. Each of the value chains has elaborated business cases and/or business plans for commercialisation.

Results: The number of new value chains reported by the ongoing projects is 82. This means that on average each BBI project enables the establishment of 3-4 new or optimised value chains. The range varies from 0 (usually for some RIAs) to 25 (for a DEMO). Regarding

new elements usually more than one element is mentioned and the number of new elements is relatively higher by Innovation Actions as compared to the RIAs. The results reveal that also in this case the expected contribution from the ongoing BBI JU projects is higher than the 2020 targets set for this KPI.

Figure 18 below shows the main aspects of novelty in the new value chains as reported by BBI projects in 2016. The most relevant aspects of novelty in these value chains are:

- new combinations of existing technologies (mentioned by 61% of the projects); such as combining chemical and enzymatic lignin conversion process, flavour/juice extraction combined with fibre extraction; new combination of mechanical, physical and chemical (pre) treatment of biomass.
- new technologies (58%), such as insect-based biorefinery; heating technologies to produce carbon fibre; technologies reducing the sulphur and odour problems in lignin
- new markets or products (58%), such as speciality polymers, carbon fibre for different applications in automotive, cosmetic industry, medical and pharmaceutical market, new food ingredients, etc.;
- new biomass sources (44%) such as seaweed biomass, humin; agro-food residues (e.g. raspberry and apple residues, spent mushroom substrate),

The projects also reported various novel elements of supply chain management, such as new cascading approaches (36%), vertical integration along the value chain with suppliers and end users (33%) and new eco design/circularity (31%).

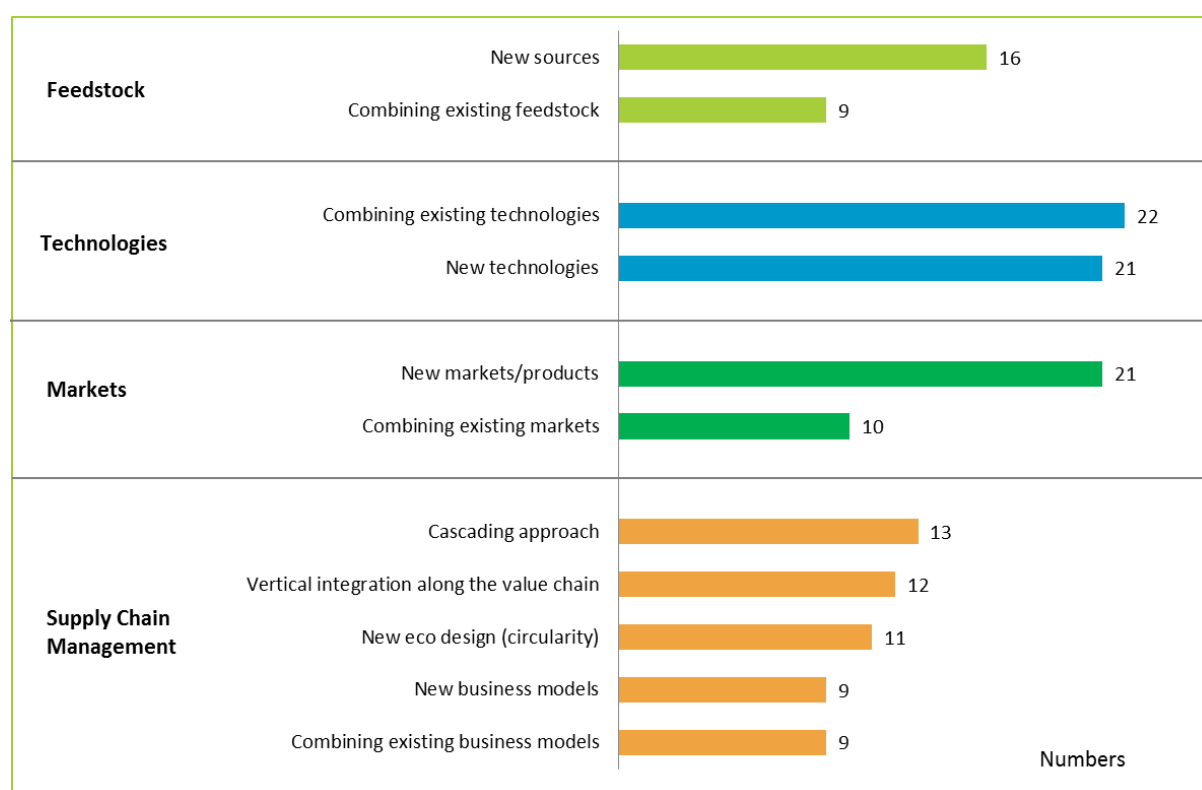


Figure 18: Main aspects of novelty in the new value chains as reported by projects in 2016: Number of projects addressing a specific novelty

Moreover, 50% of the projects reported that the model of their new value chains is applicable in other regions. The findings reveal the variety of possible combinations of elements to create new value chains and may explain the high number related to this KPI.

KPI 3: New cooperation projects through cross-industry clusters.

The current portfolio of projects from the Calls of the two years 2014 and 2015 is comprised of 36 ongoing projects with ten from 2014 and 26 from 2015 Calls. Considering the 29 proposals retained for funding for the Call 2016, **the trend is in line with the objective of 2020** for the seven Calls between 2014 and 2020.

Definition: KPI3 refers to the number of BBI JU projects started since the launch of the programme. The number refers to projects with signed grant agreements which have delivered the expected outcomes.

Results: Calls 2014 and 2015 have delivered 36 cooperation projects, covering all value chains mentioned above: VC1 (9 projects), VC2 (9), VC3 (10), VC4 (1) and cross-VC (7). As only projects from Calls 2014 and 2015 are considered in this report, the result aligns well with the expected total number of 200 projects by the end of 2020.

KPI 4: New bio-based building blocks based on biomass of European origin by 2020.

The ongoing BBI projects from the Calls of the two years 2014 and 2015 reported that by 2020 they **would deliver 46 new bio-based building blocks based on biomass from European origin**. This is already much higher than the target of five new building blocks announced in the SIRA for the seven Calls between 2014 and 2020, **confirming the impact of BBI JU in bridging the gap between the research and the market**.

Definition: New building blocks developed, validated or demonstrated at a scale enabling its technical and economic viability through BBI projects. New bio-based building blocks are:

- chemical building blocks that are identical to fossil-based building blocks and have not (successfully) been made on (pre)commercial scale yet, or
- new building blocks that demonstrate a better performance than their fossil-based counterparts in comparable applications, or
- novel, breakthrough building blocks that have no fossil-based counterparts.

The new building blocks should meet a clear B2B market demand and fulfil all technical requirements. They are economically viable and match all relevant sustainability criteria.

As an example, one of the demonstration projects will obtain galactaric acid and galactaric acid derivatives from sugar beet side-streams. These chemical building blocks have no fossil-based counterparts and the mild processing routes lead to a reduced energy consumption. The galactaric acid derivatives will be used to produce bio-based products in different applications, such as painting, coatings and detergents, which are also expected to have improved functionalities (easier to use, taste, durability colour, transparency)

Results: The total number of new building blocks reported by the projects is 46, corresponding to approximately 1-3 new building blocks per project.

The mentioned new bio-based building blocks include the following examples:

- lignin-derived phenols from agricultural residues to produce several types of bio-polymers,
- branched saccharides from food-processing residues to substitute petrol-based polymers,
- ammonium from organic waste as building block for the production of nitrogen and NPK fertilisers,
- lignin-based resins and composites, chitin derivatives, functional peptides, starch-based polymers,
- different varieties of micro-fibrillated cellulose (MFC) for multiple application in home and personal care products, adhesives or paintings, among others.

Figure 19 shows the aspects of novelty in the new bio-based building blocks as reported by the projects in 2016. The most reported aspects of novelty are:

- feedstock with a reduced share of fossil-based counterparts (36% of the projects) or zero fossil-based counterparts (31%).
- environmental performance, thanks to CO₂ emission reduction (47% of the projects), reduced energy consumption (33%), reduced emission of other greenhouse gas (25%) and improved land use (28%).
- economic performance due to better resource/material efficiency (42%) or better processing yields efficiency (39%).
- product performance, covering health and safety benefits (33%), biodegradability (28%), recyclability (25%), lighter structural and semi-structural materials (14%)

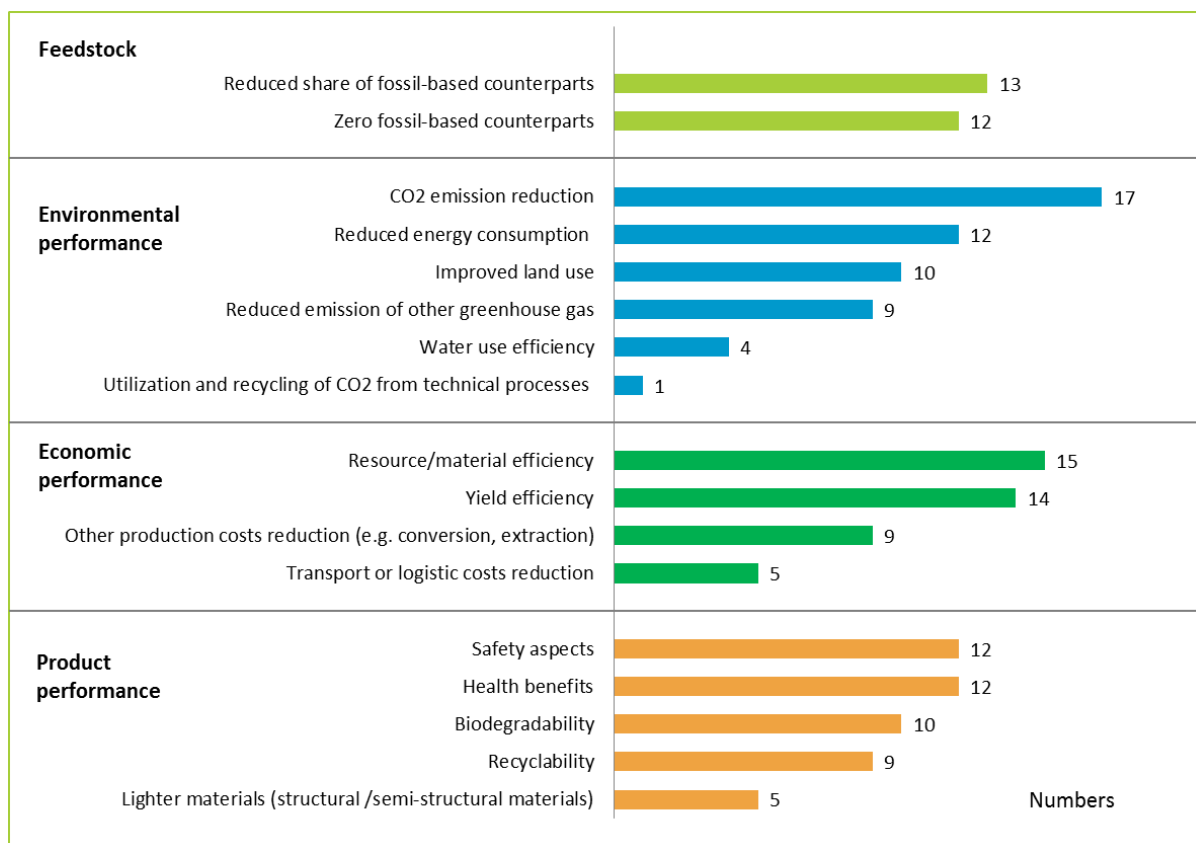


Figure 19: Main aspects of novelty in the new bio-based building blocks as reported by projects in 2016: Number of projects addressing a specific novelty

KPI 5: New bio-based materials by 2020.

The ongoing projects from the Calls of the two years 2014 and 2015 reported that they would **generate 106 new bio-based materials by 2020**, which is greater than the target of 50 announced in the SIRA for the seven Calls between 2014 and 2020. It confirms **the impact of the BBI JU programme in bridging the gap between the research and the market.**

Definition: New bio-based materials developed, validated or demonstrated at a scale enabling technical and economic viability through BBI JU projects. Examples of new bio-based materials are ingredients, specialty fibres, plastics, composites and packaging solutions. The bio-based materials that replace fossil-based materials have proven to have an equal or overall better sustainability (by LCA, improved material efficiency, reduced GHG emission, biodegradability, recyclability or other improved functionalities during use or reuse). The new bio-based materials meet a clear market demand and they fulfil all technical requirements, are economically viable and match all relevant sustainability criteria.

An illustrative example is provided by one of demo projects, which will produce different bio-based materials, such as barrier films, trays or printing inks from cellulosic origin that will be part of different packaging solutions for the food and electronic industry. These bio-based materials will improve the final performance of the products as they will be 100% biodegradable or recyclable and reduce the weight, thereby reducing CO₂ emissions related to transportation.

Results: The total number of new bio-based materials reported by the projects amounts to 106. There is a high variety of the above-mentioned new bio-based materials. Some examples are: antioxidants, composites, cosmetics, ingredients, biopolymers, packaging films and trays, fibres for papermaking, renewable polyesters, Nano carriers, specialty fibres, copolyesters for automotive & electronics.

Figure 20 shows the main aspects of novelty in the new bio-based materials as reported by the BBI projects in 2016. The most reported aspects of novelty are the following:

- feedstock with a reduced share of fossil-based counterparts (33%) or zero fossil-based counterparts (33%).
- environmental performance through CO₂ emission reduction (47% of the projects), reduced energy consumption (31%), reduced emission of other greenhouse gas (22%) and improved land use (22%).
- economic performance due to lower input costs (resource/material efficiency, 42%), better process yields efficiency (31%) or other reduced production costs (incl. conversion, extraction, industrial processes) (31%), as well as transport or logistic costs (22%).
- product performance including health benefits (42%), biodegradability (36%), improved safety (31%) or recyclability (28%).

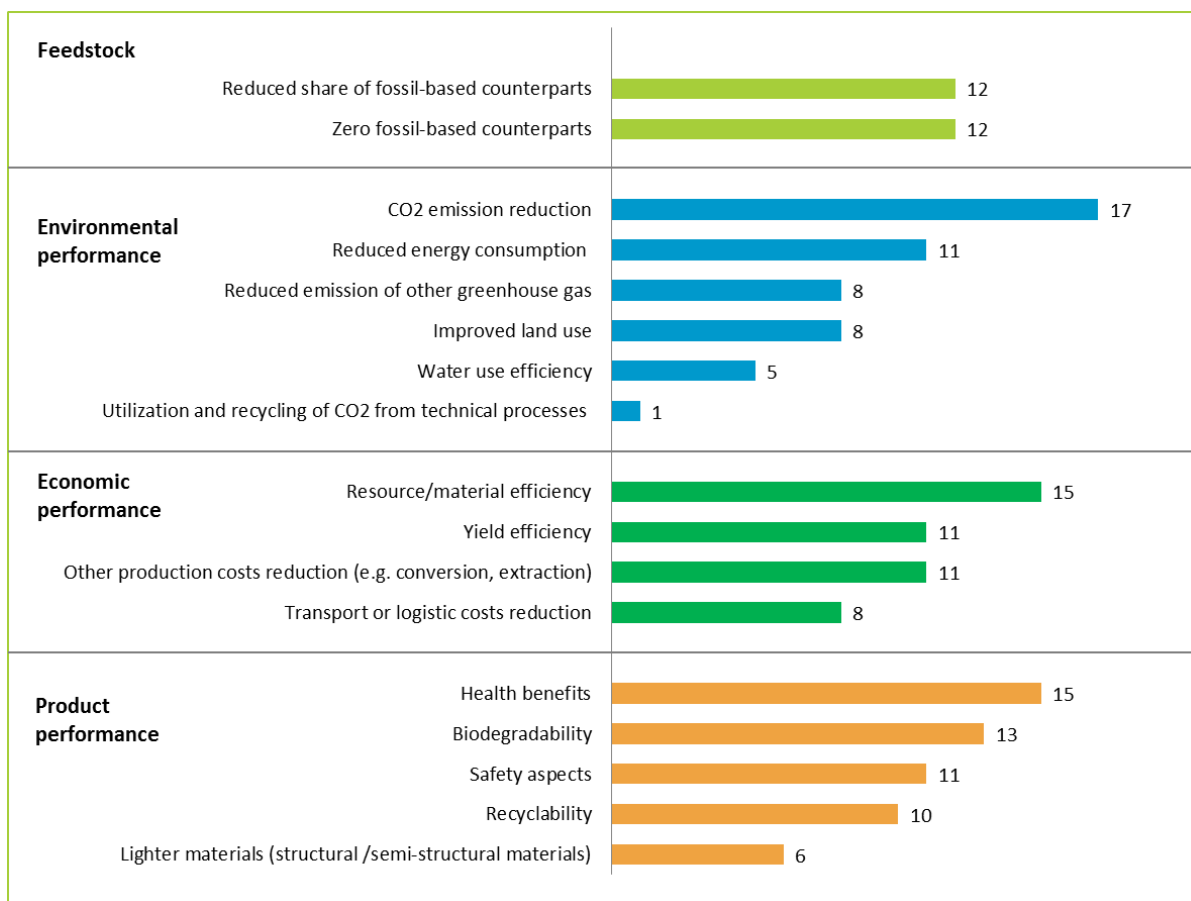


Figure 20: Main aspects of novelty in the new bio-based materials as reported by projects in 2016. Number of projects addressing a specific novelty

KPI 6: New demonstrated 'consumer' products based on bio-based chemicals and materials by 2020.

The ongoing projects from the Calls of the two years 2014 and 2015 reported that they **would deliver 51 new demonstrated consumer products based on bio-based chemicals by 2020**, which is already better than the target of 30 announced in the SIRA for the seven Calls between 2014 and 2020. **More than 90% of those new consumer products come from Flagship and Demo projects, showing the impact of those actions in bridging the gap between the research and the market.**

Definition: Developed, validated or demonstrated at a scale enabling technical and economic viability through BBI JU projects The bio-based intermediate products (materials, building blocks, chemicals) successfully converted into 'consumer' products (such as cosmetics, food applications, automotive, fertilisers, adhesives, etc.). The 'consumer product' will have an overall better sustainability score than its current alternative (by LCA, improved material efficiency, reduced GHG emission, biodegradability, recyclability or other

improved effects during use or reuse). The bio-based 'consumer products' meet a clear market demand and they fulfil all technical requirements, are economically viable and match all relevant sustainability criteria.

A representative example of the variety and multiplicity of products with bio-based origin are the bio-based products developed by one the flagship projects with the use of Microfibrils of cellulose (MFC) as a replacement for fossil-based elements. MFC will be used to produce bio-based products in the areas of personal and home care, adhesives, coatings, paintings, chemicals for agriculture or construction. Apart from improving the functionalities of the products (e.g. rheological properties), the substitution of fossil-based chemicals by MFC is expected to result into significant CO₂ reduction (70-90% CO₂ savings depending on the final product).

Results: The total number of new bio-based consumer products reported by the projects is 51. With respect to the value chains, 25 of the new products come from VC2, 17 from VC3, two from VC1, two from VC4 and one from cross VC.

The new bio-based products include: fertilizers, cosmetics, proteins, aromas, enzymes, paints, coatings, adhesives, personal care products, cleaning products, packaging solutions, lubricants and different types of bioplastics.

Figure 21 shows the aspects of novelty in the new bio-based products as reported by the BBI projects in 2016. The most reported aspects of novelty are:

- environmental performance through reduced CO₂ emission (28% of the projects), reduced energy consumption (25%) and water use efficiency (17%);
- economic performance: reduced input costs due to resource/ material efficiency (33%) and other production costs reduction, including conversion, extraction, industrial processes (22%) and improved process yields (19%);
- product performance, including biodegradability (25%), health aspects (25%) and safety aspects (17%).
- feedstock with a reduced share of fossil-based counterparts (25%) or zero fossil-based counterparts (17%)

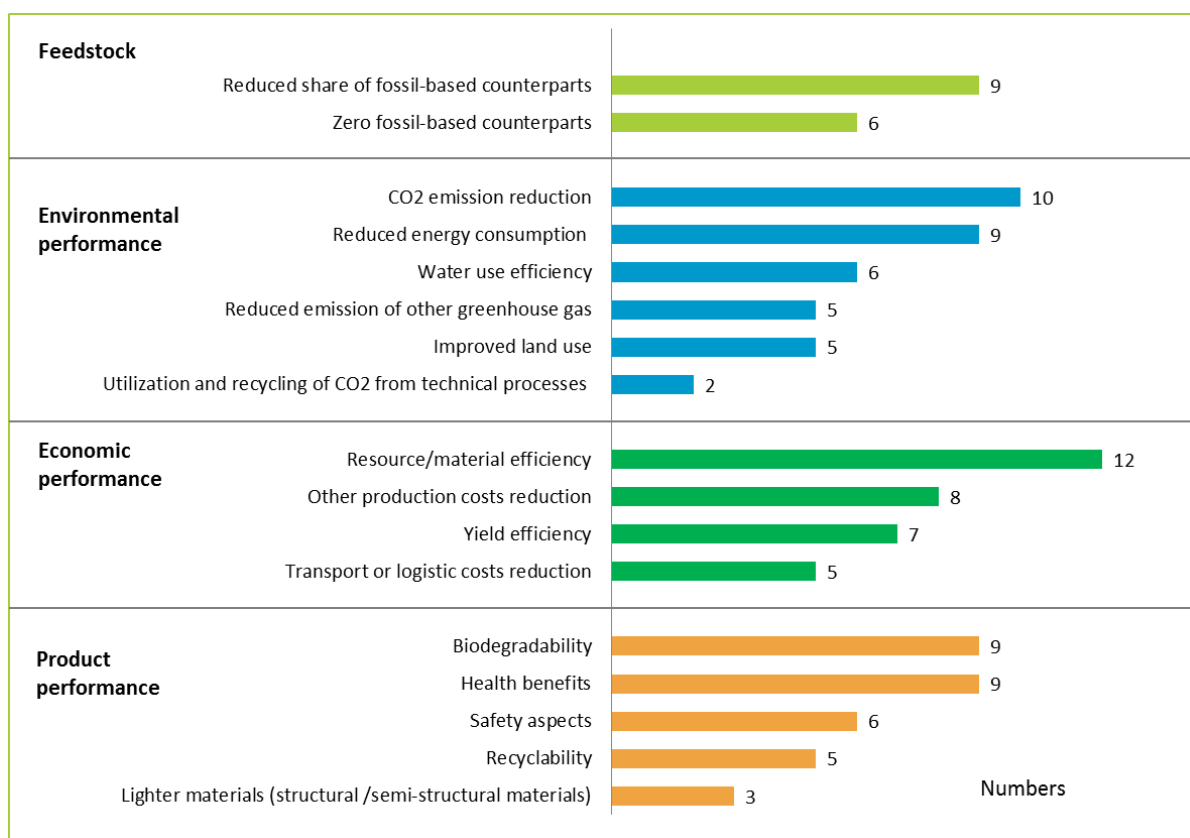


Figure 21: Main aspects of novelty in the new bio-based products as reported by BBI projects in 2016: Number of projects addressing a specific novelty

KPI 7: Flagships resulting from the BBI JU programme. The current portfolio of projects from the Calls of the two years 2014 and 2015 counts **four ongoing flagship projects**. Considering the three new flagship proposals retained for funding from Call 2016, the portfolio is already better than the target of five flagships announced in the SIRA for the seven Calls between 2014 and 2020, showing **Europe is back on the map of the attractive areas to invest in the bio-based industry**.

Definition: Number of flagship projects started since the launch of BBI JU based on BBI demonstration projects and other demonstration projects. The number refers to selected projects with signed grant agreements and that have delivered the expected outcomes. It is measured at programme level for each Call and after signature of the GAs (yearly by the end of May). The quantitative information relates only to the flagship GAs signed between the BBI JU and consortia.

Results: Flagship projects target activities at a high Technology Readiness Level (TRL 8, see also section 1.2.) and include concrete business plans for bringing the project results to the market. In 2015 and 2016 four flagships have been signed, covering three different value chains: (VC1 lignocellulosic VC), (VC2 forest-based VC) and (agro-food VC).

FIRST2RUN (Started 2016 for five years): The project will demonstrate the techno-economic and environmental sustainability at industrial scale of an integrated biorefinery, in which underutilised oil crops, like cardoon, grown on arid and marginal lands are exploited for the extraction of vegetable oils to be further converted into bio-products, such as bioplastics, cosmetics and lubricants. By- and co-products from the process will be valorised and used for the production of energy, animal feed and added-value chemicals.

The project implements new business models aimed at implementing optimal value chains for each identified cluster of products. It is targeting at a development of three new (or optimised) bio-based value chains by 2020, delivering three new bio-based building blocks (azelaic acid, pelargonic acid and glycerine), three new bio-based materials (biopolymers based on the three building blocks) and four new consumer products.

BIOSKOH (Started 2016 for five years): The project utilises agricultural residues (e.g. wheat, rye, soya straw, rapeseed straw, sorghum bicolor) and formerly unused woody biomass for the industrial production of biofuels, and will develop new business models based on using agricultural residues and energy crops. Through developing or combining new technologies, the project will deliver at least two new bio-based building blocks (bioethanol and lignin) and three bio-based materials (formaldehyde, bioethylene, carbon fibres).

LIGNOFLAG (Started 2016 for five years): Commercial flagship plant for bio-ethanol production involving a bio-based value chain built on lignocellulosic feedstock. The project is expected to build and operate a commercial flagship to convert biochemical lignocellulose into cellulosic bioethanol to be used as sustainable transport fuel or chemical building block. The project involves the collaboration of all relevant actors along the whole value chain, from feedstock (straw) supply and logistics via process co-products (lignin as biochar, sludge as fertilizer) utilisation and valorisation to advanced bio-ethanol production and product distribution.

EXILVA (Started 2016 for three years): Flagship of an integrated plant towards large-scale supply and market assessment of Microfibrillated Cellulose (MFC), which will be used for application in a wide range of market segments, such as home and care products, adhesives, paints and coatings. The project is targeting the development of ten new (or optimised) bio-based value chains by 2020, while combining various sectors and delivering MFC with lower CO₂ and energy footprint.

1.3.1.2 Monitoring the leverage effect

The leverage effect aims to measure the ability of the BBI JU in attracting additional financing and multiplying Horizon 2020 budget resources, including additional activities. The BBI JU regulation sets out that for the period from 2014 until the end of the initiative in 2024, the total private contribution of BIC and/or its constituent entities shall be at least €2.73 billion and that the EU contribution shall be up to €975 million. So by 2024 a minimum of €2.8 of private in-kind and/or financial contribution shall be leveraged for each euro of EU funding.

In order to measure the private contribution per each euro of EU funding at the end of the programme, the leverage effect can be calculated by dividing the amount of private funds leveraged through the BBI Initiative (IKOP, IKAA and financial contribution to the operational costs) by the EU contribution committed to the operational costs of the initiative.

As each element of this calculation has its own financial and certification processes with significant differences over the time, it is only at the end of the programme that the ratio reaches the appropriate level of reliability with comparable period of time. Reliable meaning that EU funding will have been paid and private contribution certified by independent auditors. Comparable period of time meaning it will be the same for all figures used in the calculations. At the end of 2016, the known EU contribution is the committed funding in the signed grant agreements belonging to the first three Calls of 2014 and 2015 (with projects running up to 2019-2020), while the IKAA certification is limited to the first year and a half of the initiative (while these investment will continue until 2024).

Different formulas were discussed in order to calculate the leverage effect achieved at the end of 2016. Some formulas cover the overall duration, others try to have a “prorata temporis” approach¹⁸, but all of them introduce a significant bias.

Up to 31 December 2016, the data available to follow the leverage effects is presented in table 11 below:

Total EU Contribution committed in Signed Grant Agreements	€ 228 690 682
Total Private Contribution committed in Signed Grant Agreements	€ 114 621 657
Total Private Financial Contribution committed	€ 750 000
Total Certified IKAA for 2014-2015	€ 291 482 000

Table 11: EU and private contributions to BBI JU initiative up to 31 December 2016

In addition, according to the draft IKAA Plan 2016, it is expected that in 2016, an amount of € 339 million of IKAA has been delivered.

Finally, another way of showing how the BBI JU initiative is mobilising private investments is to measure the amount of certified IKAA for 2014-2015 (€ 291 m) in comparison to the target of € 1 755 million total IKAA by 2024. Considering that the initiative only started by the end of May 2014, and the first grant agreements for the first projects financed by BBI JU were signed at the second half of 2015, the amount of certified IKAA over these months shows already a level of investments of over 17% compared to the target set for 2024.

¹⁸ An estimation of how much EU and in-kind contributions were incurred per year can be done by dividing the total projects values by their implementation time.

1.3.1.3 Monitoring the expected socio-economic impact

As stated in the SIRA, by 2030 it is expected that the bio-based industrial sector will generate 700.000 skilled and non-skilled jobs compared to 2012, 80% of them being in rural areas. This will contribute to regenerating underdeveloped and/or abandoned regions and growing and diversifying farmers' income. It will enable the EU to reduce its dependency upon the import of strategic raw material like fossil-based raw materials and also protein for animal feed. It is expected that 30% of fossil-based products will be replaced by bio-based ones, with a consequential 50% reduction of GHG emissions.

These expected socio-economic and environmental impacts will be monitored through surveys to be performed as from 2017 and a process to be adjusted with founding members according with the reliability of available data.

1.3.2. Evaluation: procedures and global evaluation outcome, redress, statistics

In 2016 the evaluation of Calls 2015.2 and 2016 was completed. The resulting ranking lists were adopted by the BBI JU Governing Board on 18 April 2016 and 14 December 2016, respectively. The grant agreement preparation (GAP) for the projects selected from Call 2015.2 was concluded at the beginning of August 2016, whereas the launch of the 2016 GAP occurred on 16 December, immediately after the adoption of the final results. The 2016 GAP is expected to be finalised by 8 May 2017.

Figure 22 shows the evolution of the mobilisation of the bio-based community through the Calls over the years 2014, 2015 and 2016. Between 2015 and 2016, the number of topics grew from 22 to 27. The number and the amount of proposals grew by more than 20% reaching 103 proposals, enabling 3.8 proposals per topic to be retained in 2016. This clearly demonstrates the mobilisation of the bio-based industries community and points to the fact that the BBI JU programme is addressing the concrete needs of the bio-based industries sector.

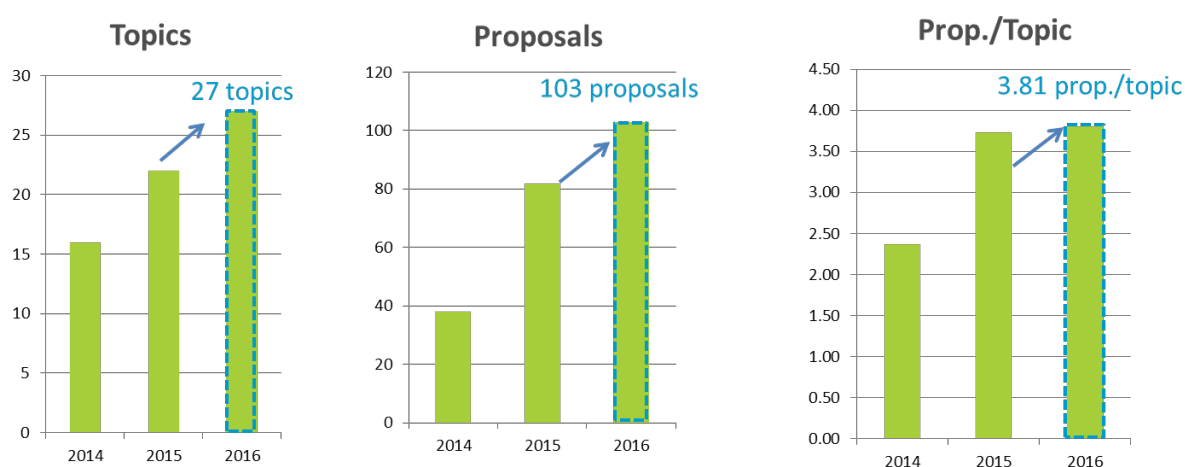


Figure 22: Overview of the evolution of submissions in BBI JU Calls (2014-2016)

In the sections below, more detailed information is provided on the submissions as well as on the proposals retained for funding, specifically in Calls 2015.2 and 2016. In particular, the following information is included:

- number of proposals submitted per topic and success rates;
- types of participants (submissions and retained for funding);
- country distribution in proposals submitted and retained for funding;
- share of SMEs in submitted and retained proposals;
- share of SME funding in retained proposals

Call 2015.2 Evaluation: key statistics and information on topics

Summary

The 2015.2 Call for Proposals covered Research and Innovation Actions (RIA), Innovation Actions (IA) – only Demonstration Actions (DEMO) –, and Coordination and Support Actions (CSA). The total indicative budget for the Call was € 106 million (the breakdown per type of action is shown in table 12). The Call contained 19 topics (7 DEMO, 10 RIA, 2 CSA). Seventy-three eligible proposals were submitted and evaluated and 23 proposals were retained for funding.

Evaluation process

The evaluation took place from mid-February until beginning of March 2016, with the assistance of 58 independent experts and two independent observers, in accordance with the procedures laid down in the Horizon 2020 Guide for proposal submission and evaluation. In addition, one expert assisted the Programme Office as Quality Controller. Two independent experts selected and appointed by the Programme Office conducted an ethical screening uniquely for proposals above the thresholds (main and reserve list). The ethical screening was finalised before the signature of the Grant Agreements (GAs).

In selecting experts, the primary objective was to ensure a high level of expertise in the areas of the topics in the Call as well as experience in Horizon 2020 evaluations. In addition, there was consideration given to achieving an appropriate gender balance and geographical diversity as well as participation of experts from the industry in the overall composition of the evaluation panels.

These considerations were reflected across the selection of 60 experts giving a gender balance of 32 men (53%) and 28 women (47%) and a healthy regional balance where 25 different countries were represented.

Applicants were informed on the evaluation outcome on 22 April 2016, meeting the requirements for this process to notify applicants no later than five months after the proposal

submission deadline, achieving a TTI result of 141 days (against the Horizon 2020 target of 153 days). The grant agreements were signed by 3 August 2016, meeting the requirements for this process to be completed no later than eight months after the proposal submission deadline, achieving a TTG result of 239 days, while the Horizon 2020 target is set to 243.

No redresses were submitted for this Call.

Outcome

All topics received at least one proposal. Table 12 provides a breakdown of the proposals submitted and retained per topic as well as the success rate and budget allocated per action. In total 23 proposals were retained from a total of 73 submitted resulting in an overall success rate for the Call of 32%.

	Topic	Total number proposals received	Retained proposals	Success rate (%)	Topic Title	Indicative budget EUR
DEMO	D1	7	2	38%	Lignocellulosic feedstock into building blocks and high added value products	64 million
	D2	4	2		Innovative cellulose-based composite packaging solutions	
	D3	1	0		Production of bio-based elastomers from Europe-grown feedstock	
	D4	2	1		High purity bio-based intermediates and end products from vegetable oils and fats	
	D5	7	3		Valorisation of agricultural residues and side streams from the agrofood industry	
	D6	2	0		Organic acids from Municipal Solid Waste	
	D7	1	1		Overcoming low product yields from fermentation processes	
	R1	5	2	26%	Conversion of lignin rich-reach streams from	28 million

	Topic	Total number proposals received	Retained proposals	Success rate (%)	Topic Title	Indicative budget EUR
RIA					biorefineries	
	R2	3	0		Pre-treatment of lignocellulose with simultaneous removal of contaminants and separation of lignin and cellulosic fractions	
	R3	3	1		Bio-based functional molecules for coating and surface treatment	
	R4	3	0		Separation and extraction technologies for added value compounds from wood and forest-based residues	
	R5	8	2		Practices increasing effectiveness of forest management	
	R6	1	1		Sustainable cellulose based materials	
	R7	1	0		Tailoring tree species to produce wood designed for industrial processes and bio-refining purposes	
	R8	3	1		Increasing productivity of industrial multi-purpose agricultural crops	
	R9	9	1		Valorisation of aquatic biomass	
	R10	7	3		Innovative efficient biorefinery technologies	12 million
CSA	S1	2	1	50%	Standards and regulations	2 million
	S2	4	2		Communication and awareness	
TOTAL		73	23	32%		106

	Topic	Total number proposals received	Retained proposals	Success rate (%)	Topic Title	Indicative budget EUR
						million

Table 12: Call 2015.2 Number of proposals submitted and retained per AWP topic

Figures 23, 24 and 25 show the type of participants in submitted and retained proposals respectively. These fall under the five following categories:

- Private for Profit (PRC);
- Research Organisation (REC);
- Higher or Secondary Education (HES);
- Public Body (excluding research and education) (PUB);
- Other types of organisations (OTH).

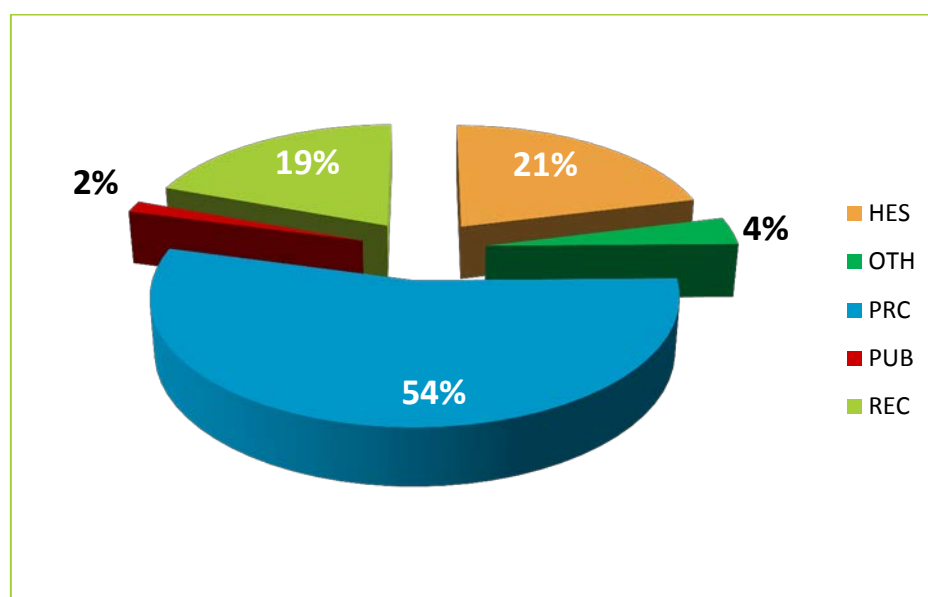


Figure 23: Types of participants in submitted proposals in Call 2015.2

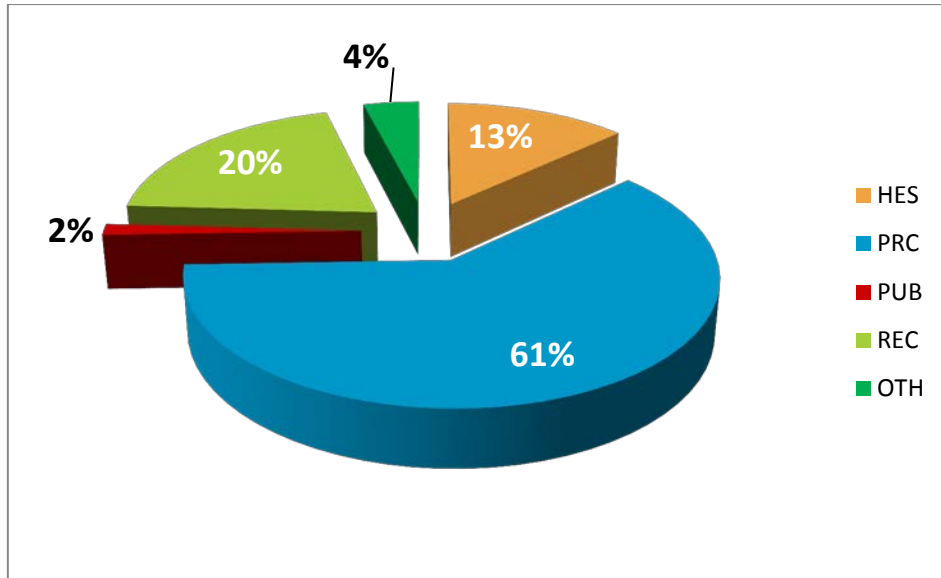


Figure 24: Types of participants proposals retained for funding in Call 2015.2

Figure 25 shows the distribution of applicants and beneficiaries per country, indicating a stronger presence from countries in the EU-15 as compared to the EU-13.

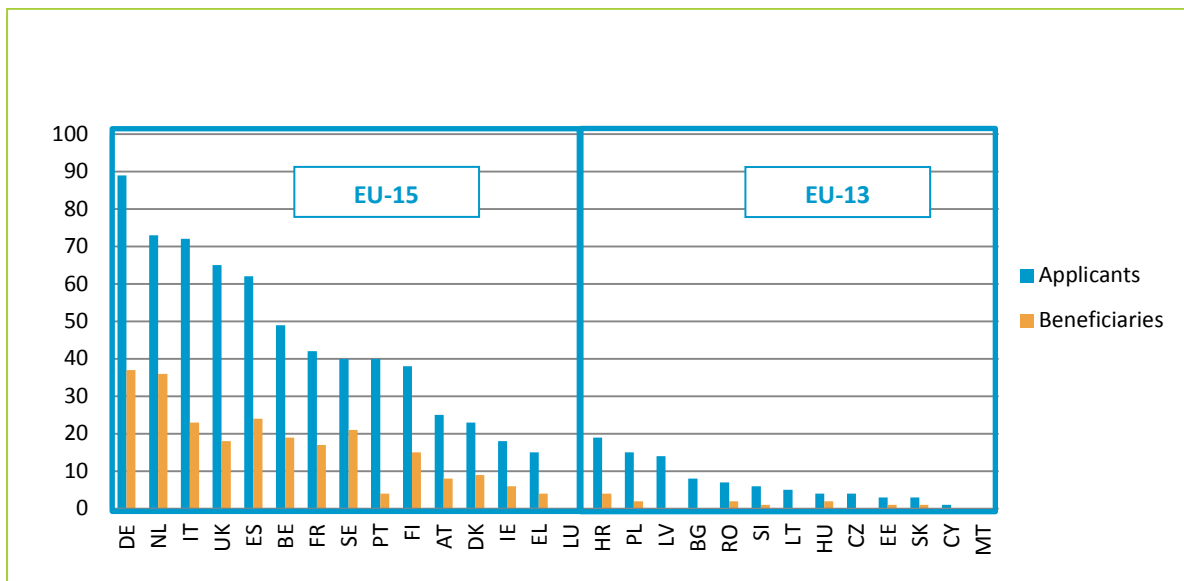


Figure 25: Distribution of applicants and beneficiaries per country from EU-15 and EU-13 in Call 2015.2

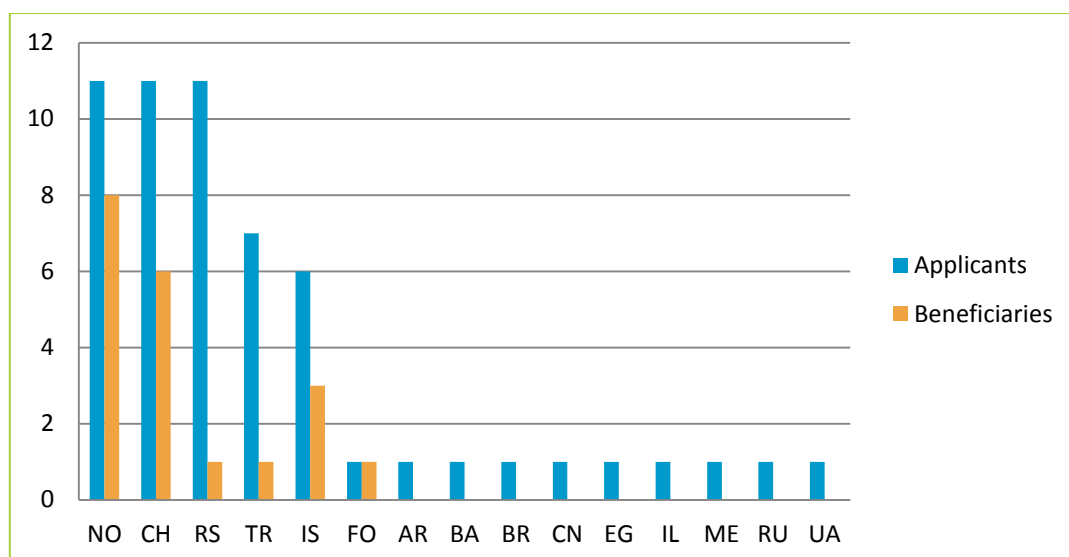


Figure 26: Distribution of applicants and beneficiaries per country from associated countries in Call 2015.2

With respect to SMEs, in Call 2015.2, 270 participants out of 796 were self-declared as SMEs, thus representing 34% of the total number of participants (Figure 27, top panel). In retained proposals, SMEs represented 40.1% of all participants, (Figure 27, bottom panel) corresponding to 37.3% of the total funding (€39 363 529) (Figure 28).

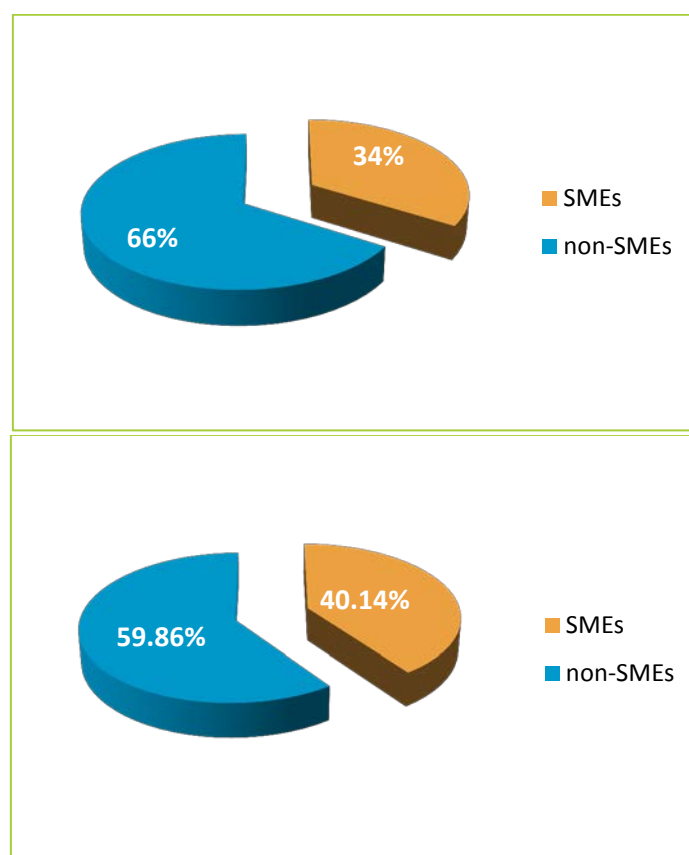


Figure 27: SMEs share in applications (top panel) and retained proposals (bottom panel) in Call 2015.2

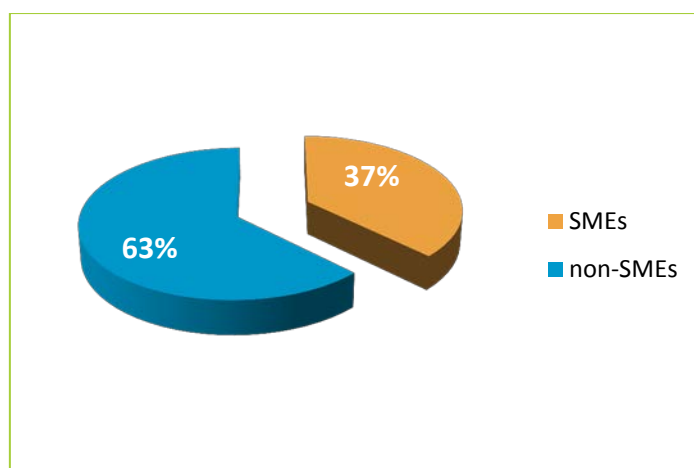


Figure 28: SMEs funding in 2015.2 projects

Call 2016 Evaluation: key statistics and information on topics

Summary

The 2016 Call for Proposals covered Research and Innovation Actions (RIA), Innovation Actions (IA) – both Demonstration Actions (DEMO) and Flagships (FLAG) –, and Coordination and Support Actions (CSA). The Call contained 27 Topics (9 DEMO, 12 RIA, 4 CSA, 2 FLAG). It was published in the participant portal and Official Journal on 19 April 2016 with a submission deadline of 8 September 2016. The total indicative budget for the Call was €188.65 million, including unused appropriations carried over from 2015 (the breakdown per type of action is shown in Table 13). Out of the 103 proposals submitted and evaluated, 29 were retained for funding. One of the proposals, submitted to topic R4 was found to be out of scope during the evaluation and was therefore declared ineligible. An amount of €185.6 million was committed for selected proposals, and €3.1 million was retained to be carried over to 2017. An additional unused amount of €293 865 will be de-committed in 2017 and carried over to 2018.

Evaluation process

The evaluation was carried out with the assistance of 80 independent experts and one independent observer in accordance with the procedures laid down in the Guide for proposal submission and evaluation of Horizon 2020. In addition, one expert assisted the Programme Office as Quality Controller. Two independent experts were selected and appointed to conduct an ethical screening uniquely for proposals above the thresholds (main and reserve list). The ethical screening was finalised during the central evaluation.

For the first time, hearings with coordinators were organised for flagship actions for all submitted proposals. The hearings were organised to clarify the proposals, in particular with regard to the business plan and the technology maturity and to help the panel establish their final assessment or improve the experts' understanding of the proposal. The hearings were positively welcomed by the experts, applicants and the independent observer.

In selecting experts, the primary objective was to ensure a high level of expertise in the areas of the Call, taking also into consideration an appropriate gender balance and geographical diversity as well as participation of experts from the industry in the overall composition of the evaluation panels.

These considerations were reflected across the selection of 80 experts, giving a gender balance of 47 men (59%) and 33 women (41%) and a regional balance where 28 different countries were represented.

All applicants were informed on the evaluation outcome on 16 December 2016, no later than five months after the proposal submission deadline, The Grant Agreements are expected to be signed no later than eight months after the proposal submission deadline, thus by 8 May 2017.

Two redresses were submitted for this Call in January 2017.

Outcome

All published topics received at least one proposal, except RIA 12. Table 13 provides a breakdown of the proposals submitted and retained per topic as well as the success rate and budget allocated per action. In total 29 proposals were retained against 103 submitted, resulting in an overall success rate for the Call of 28%.

The overall quality of the proposals was high and the competition was substantial. A subset of two DEMO, six RIA and one CSA topics are not covered by retained proposals (D1, D4, R2, R3, R4, R10, R11, R12 and S4).

	Topic	Total number proposals received	Retained proposals	Success rate (%)	Topic Title	Indicative budget (EUR)
DEMO	D1	2	0	45%	Improve sustainability of value chains based on forest biomass and increase productivity and profitability on supply side by adapting forests to climate changes	70.2 million
	D2	1	1		Improvement and adaptation of industrial crop varieties and novel sources of biomass to diversify biomass feedstock for biorefineries	
	D3	4	2		Valorisation of lignin and other side-streams to increase efficiency of biorefineries and increase sustainability of the whole value chain	
	D4	2	0		New and optimised biorefinery approaches enabling the creation of local	

	Topic	Total number proposals received	Retained proposals	Success rate (%)	Topic Title	Indicative budget (EUR)
					value chains in underdeveloped or unexploited areas	
	D5	2	1		Bio-based polymers/plastic materials with new functionalities for medical, construction, automotive and textile industries	
	D6	3	2		Valorisation of the organic content of Municipal Solid Waste and contributing to the renewable circular economy	
	D7	2	1		Optimise technical production routes to bio-based chemicals in bio- or chemo-catalytic process	
	D8	2	1		New sources of proteins for animal feed from co-products to address the EU protein gap	
	D9	2	1		Biomass production on unused land for conversion into added-value products while 'boosting rural and industrial development'	
RIA	R1	8	1	21%	Valorisation of the organic content of wastewater as feedstock, contributing to the renewable circular economy	50.0 million
	R2	1	0		Develop consolidated bioprocesses for direct fermentation into bio-compounds for chemicals and materials	
	R3	2	0		Improve control over microorganism growth in bio-catalysis operations in order to reduce/avoid contamination without antibiotics	
	R4	2	0		Flexible bio-refining technologies able to handle different feedstock, leading to new value chains or enlarging existing ones by using the same processing plant	
	R5	11	4		Advanced biomaterials for smart food packaging	
	R6	3	1		Bio-based alternatives to improve protection of human health and the environment	
	R7	8	4		Biopolymers with advanced functionalities for high performance	

	Topic	Total number proposals received	Retained proposals	Success rate (%)	Topic Title	Indicative budget (EUR)
					applications	
	R8	8	1		Emerging technologies for conversion of the organic content of Municipal Solid Waste and improving waste-to-chemicals value chains	
	R9	23	4		Exploiting algae and other aquatic biomass for production of molecules for pharma, nutraceutic, food additives and cosmetic applications	
	R10	3	0		Industrial biotransformation for the production of bio-based chemicals	
	R11	1	0		Recover and reuse enzymes to reduce costs of existing industrial processes	
	R12	0	0		Emerging technologies for separation and purification of fermentation products to obtain high grade bio-based molecules at industrial level	
FLAG	F1	3	1	33%	Valorisation of by-products from the food processing industry into high added-value products for market applications	40.0 million
	F2	3	1	33%	Converting bio-based feedstocks via chemical building blocks into advanced materials for market applications	25.0 million
CSA	S1	2	1	43%	A roadmap for the chemical industry to a bioeconomy	3.5 million
	S2	1	1		Bioeconomy related open access research infrastructure and assessing its capabilities for industry driven development projects	
	S3	2	1		Open-innovation Platform strengthening cooperation and joint development of bio-based industries and downstream sectors	
	S4	2	0		Clustering and networking for new value chains	
Total		103	29	28%		188.7 million

Table 13: Call 2016 Number of proposals submitted and retained per AWP topic

Figure 28 shows the type of participants in submitted and retained proposals. These fall under the five following categories:

- Private for Profit (PRC);
- Research Organisation (REC);
- Higher or Secondary Education (HES);
- Public Body (excluding research and education) (PUB);
- Other type of organisations (OTH).

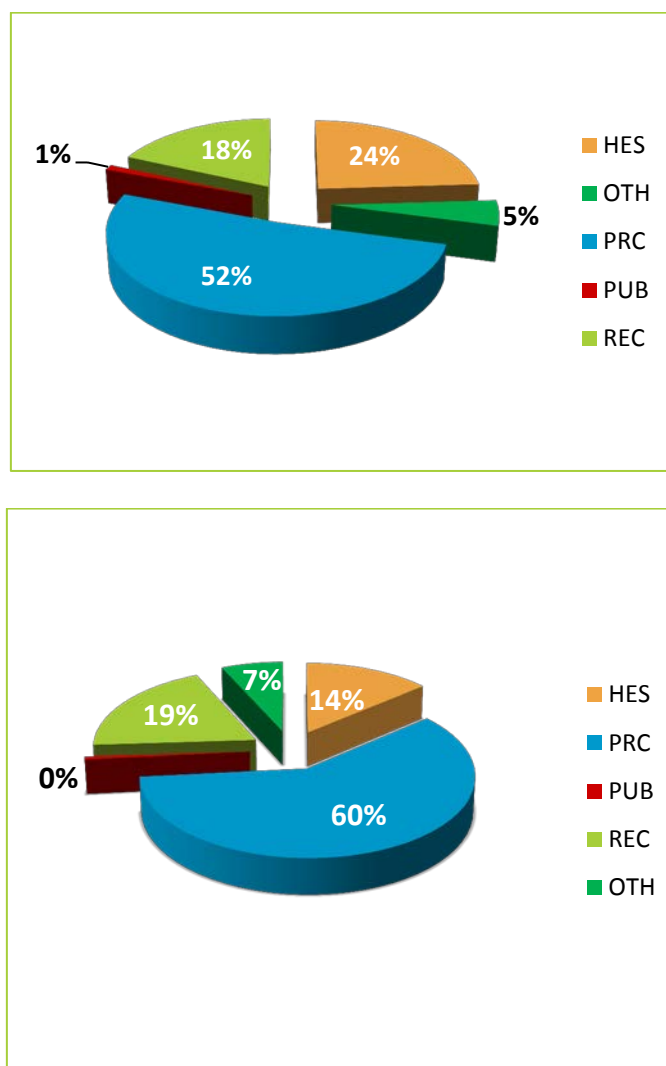


Figure 29: Type of participants in submitted proposals (top panel) and proposals retained for funding (bottom panel) in Call 2016

Figures 29 and 30 show the distribution of applicants and beneficiaries per country, indicating a stronger presence from countries in the EU-15 as compared to EU-13.

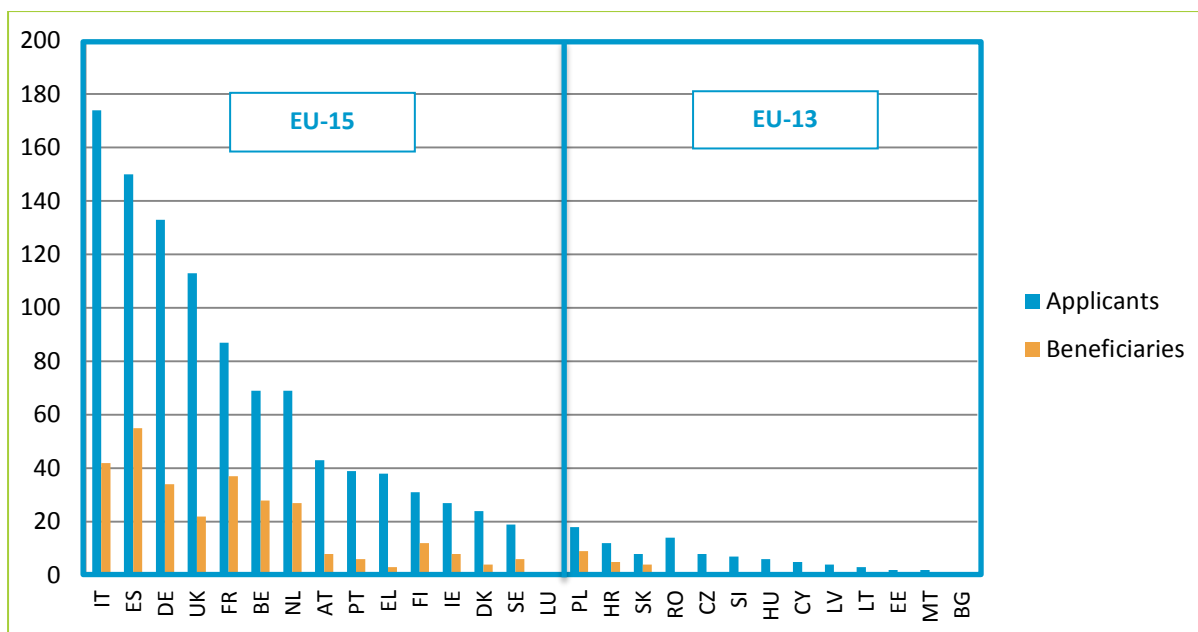


Figure 30: Distribution of applicants and beneficiaries per country from EU-15 and EU-13 in Call 2016

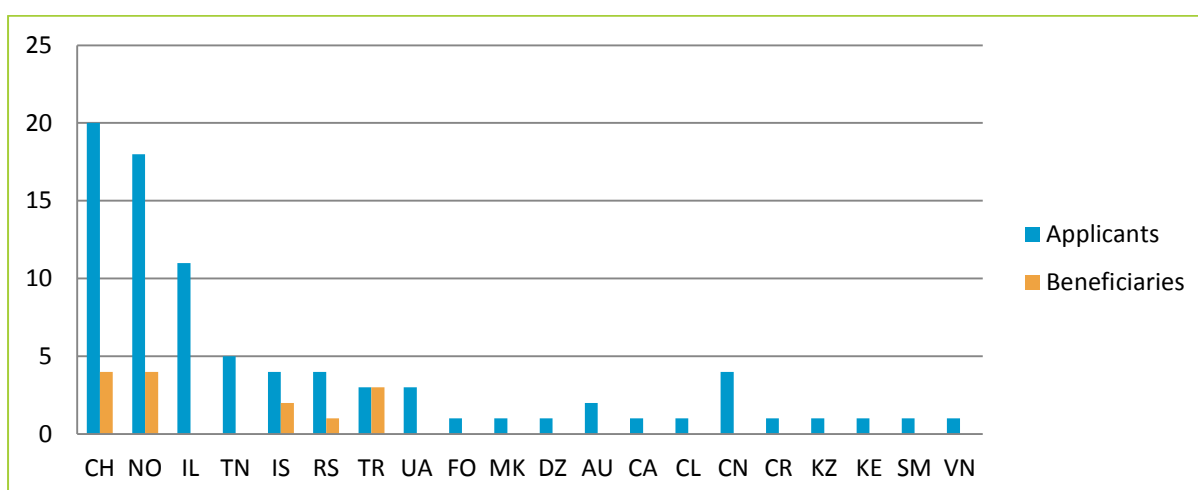


Figure 31: Distribution of applicants and beneficiaries per country from associated countries and third countries (Industrialised countries and emerging economies and Developing countries) in Call 2016

With respect to SMEs, in Call 2016, 398 participants were self-declared as SMEs, out of 1.190 thus representing 33% of the total number of participants (Figure 31, top panel). In retained proposals, SMEs represented 36.7% of all participants, (Figure 31, bottom panel) corresponding to 35% of the total funding of €64 899 158 (Figure 32).

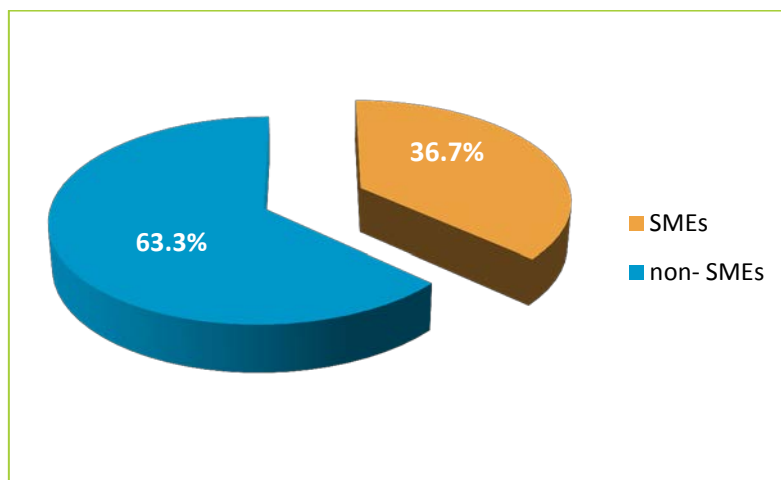
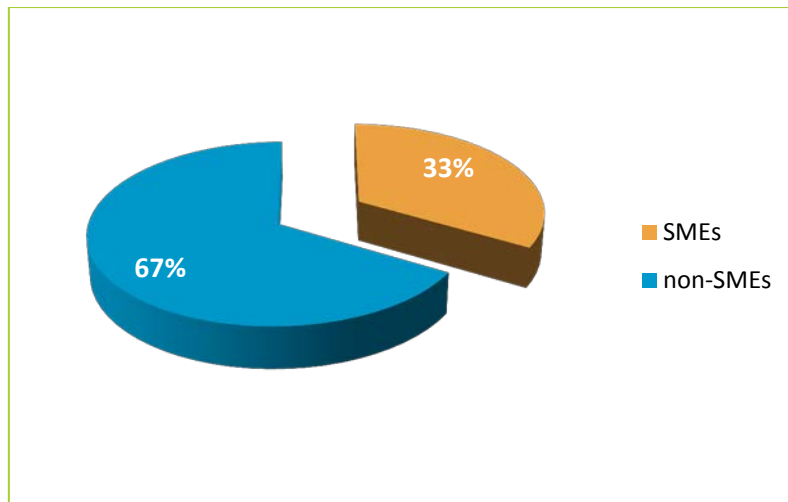


Figure 32: SMEs share in applications (top panel) and retained proposals (bottom panel) in Call 2016

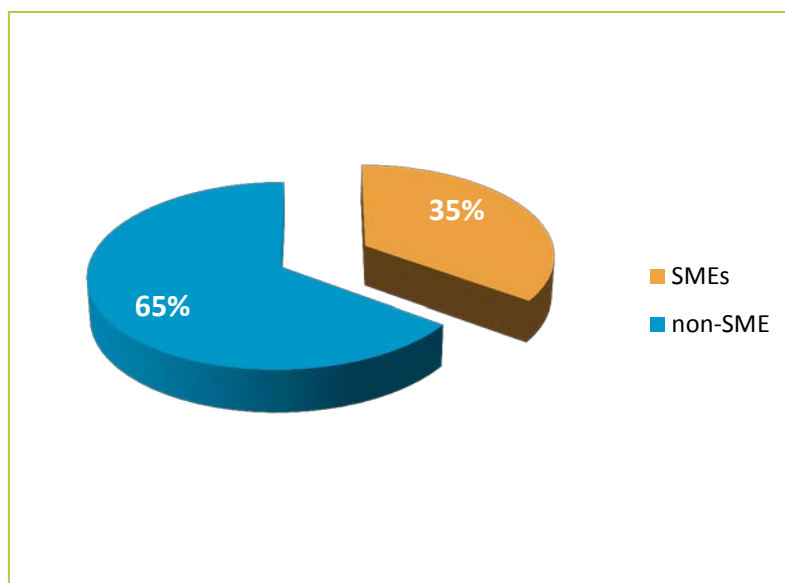


Figure 33: SMEs funding in 2016 projects

1.4. Call for tenders

No Calls for tenders were planned in the AWP 2016 within the scope of Horizon 2020 forms of funding to support the development and implementation of research and innovation agendas. Public procurements and contracts concluded for BBI JU administrative expenditure are reported under section 2.4 below.

1.5. Dissemination and information on projects results

Dissemination activities are key deliverables for ongoing projects. Below is an overview of dissemination and information activities linked to project deliverables for the current project portfolio by Call.

Call 2014 projects started in July and August 2015 and have a duration of 36-48 months. By the end of 2016, the Call 2014 projects were almost or exactly halfway through their lifecycle, so that only intermediate results, if any, could be disseminated in 2016. Table 14 is an overview of the ten Call 2014 projects, showing their public website addresses as their main dissemination tool, and the communication materials or publications delivered by the end of December for dissemination purposes.

Acronym	Type of Action	Website	Other Dissemination activities in 2016
CARBOSURF	RIA	http://www.carbosurf.eu	None
FIRST2RUN	FLAG	http://www.first2run.eu/	5 events, and 11 website news (incl. a poster), participation in BBI JU event
GreenLight	RIA	http://www.innventia.com/greenlight	1 event, 2 website news items, participation in BBI JU event
NewFert	RIA	http://newfert.org/	2 website news items

PROMINENT	RIA	http://www.prominent-protein.eu/	6 website news items, participation in BBI JU event, leaflet
PROVIDES	RIA	http://www.providespaper.eu/	2 scientific articles, 1 press release, 1 radio interview, 1 video, 1 news event
PULP2VALUE	DEMO	http://pulp2value.eu/	Project leaflet, 1 press release, participation in BBI JU event
SmartLi	RIA	http://clicinnovation.fi/activity/smartli/	Project leaflet
US4GREENC HEM	RIA	http://www.us4greenchem.eu/	None
ValChem	DEMO	http://www.valchem.eu	Project leaflet, participation in BBI JU event

Table 14: Overview of project dissemination deliverables for Call 2014 (RIA = Research & Innovation Action; DEMO = Innovation Action, Demonstration project; FLAG = Innovation Action, Flagship project)

Call 2015.1 resulted in three flagship projects, starting in May and June 2016. Although only a limited amount of project results was available in 2016, some projects have already disseminated and communicated project activities (see table 15 below).

Acronym	Website	Other Dissemination activities in 2016
LIGNOFLAG	n/a	None

BIOSKOH	http://bioskoh.eu/	4 news events, participation in BBI JU event
EXILVA	http://www.h2020-exilva.com/	6 news events, a blog with 6 posts, participation in BBI JU event

Table 15: Overview of project dissemination deliverables for Call 2015.1

The Call 2015.2 GAP resulted in 23 new projects starting between August and November 2016. As a result of these Q3-Q4 2016 starts, project-related dissemination and information activities by both BBI JU and projects themselves were limited to Q4 2016, and were mainly focused on disseminating and communicating project objectives, not project results (as concrete project results were limited in 2016). Furthermore, by the end of 2016, only a limited amount of Call 2015.2 project websites were operational.

Although the amount of dissemination materials was limited in 2016, BBI JU created a webpage dedicated to project management (<https://www.bbi-europe.eu/participate/project-management>), which included the following information linked to project result dissemination:

- Communication guidelines for projects, including the texts and logos to use to acknowledge EU funding. ;
- A 'FAQ for coordinators' document, which includes a specific section on dissemination, communication and exploitation, and a question (Q 5.4) dedicated to the 'Common Exploitation Booster' (CEB). In 2016, 2 BBI JU projects submitted CEB applications, but their applications were not retained. The FAQ document was regularly updated (5 times in 2016), and always took into account new insights gathered via the DiEPP¹⁹ meetings, which were regularly attended by BBI JU Project Officers.

As BBI JU is an industry-driven programme, in principle all projects have a high exploitation potential. However, as the Innovation Actions are closest to market (highest Technology Readiness Level), the demonstration and flagship projects have the highest exploitation potential.

¹⁹ DiEPP = **D**issemination and **E**xploitation **P**ractitioners' **P**latform, a community of practice supporting the exchange of information and best practices on dissemination and exploitation at the level of the EU's Research and Innovation Family.

1.6. Operational budget execution

In April 2016 BBI JU published a Call for proposals for a total maximum funding amount of € 188 650 000. The total budget committed was € 188 995 048 including € 27 845 109 of unused appropriations from the Calls of 2014 and 2015 as well as € 750 000 financial (in-cash) contribution to operational costs from BIC. The actions covered by the Call were RIAs, DEMOs, Flagships and CSAs.

29 Proposals were selected for a requested total funding of € 185 602 866 counting for a foreseen consumption of 98.2 % of the Call budget. The difference between the Call amount and the total requested funding of € 3 097 134 is intended to be redeployed during the 2017 financial year according to the provision included in Article 6(5) of the BBI JU financial rules to supplement the 2017 Call for proposals. A residual unused amount of € 293 865, following the final requested total funding, will be de-committed in 2017 for reactivation in 2018.

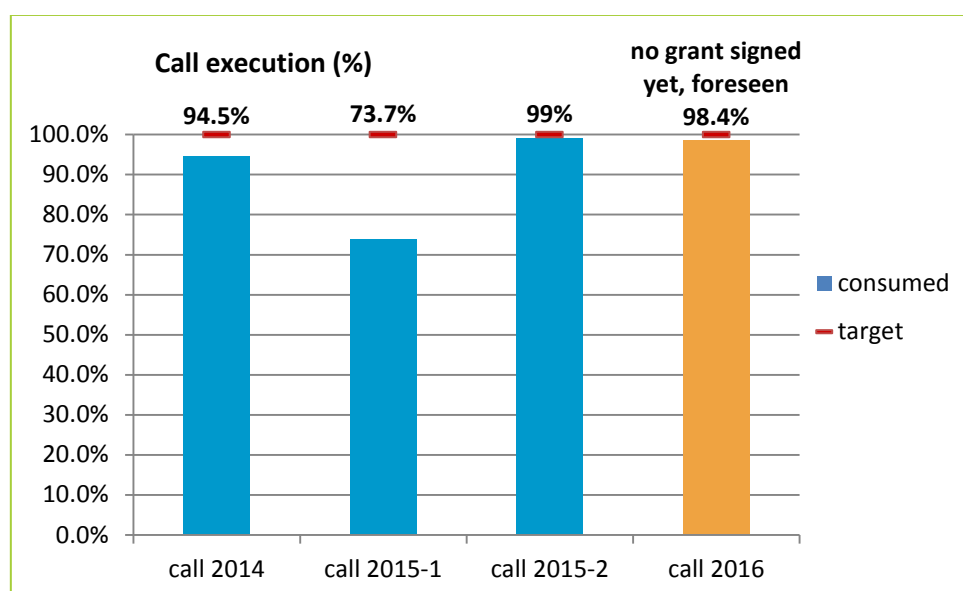


Figure 34: Call budget execution

In relation to Call 2015.1, three grants for over € 73 million funding were signed by May 2016 within the given deadline of eight months from the Call closure and with an average TTG of 227 days. Pre-financings were paid within an average time to pay of 16 days.

In relation to Call 2015.2, 23 grants for over € 105 million funding were signed by August 2016 within the given deadline of eight months from the Call closure and with an average TTG of 239 days. All pre-financing was paid on time within an average TTP of seven days.

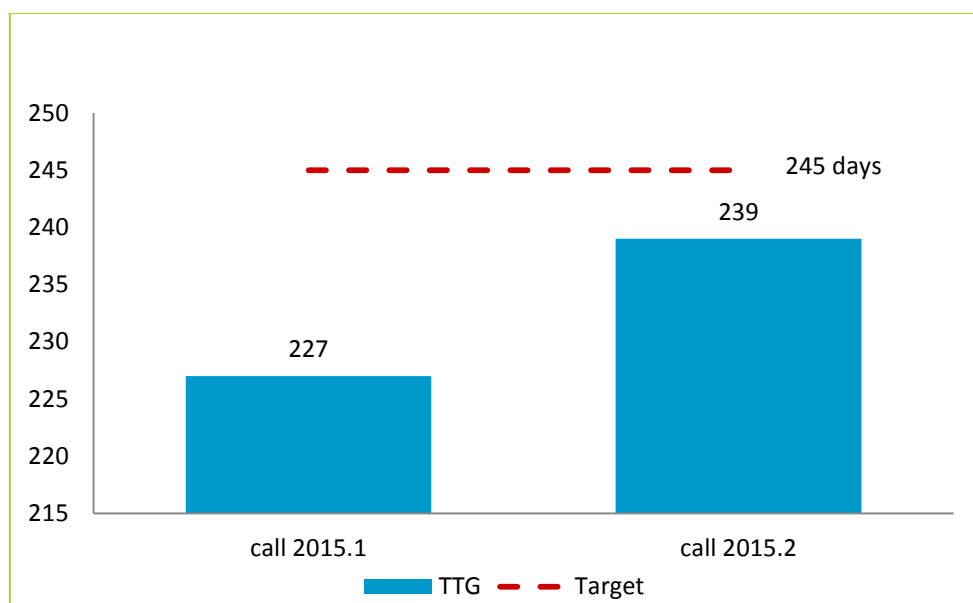


Figure 35: Time to grant performance in 2016 for Calls 2015.1 & 2015.2

1.7. In-kind contributions

Global level

Under the Council Regulation establishing the BBI JU, the total private contribution shall be at least €2.73 billion, of which €1 755 million are in-kind contributions to additional activities. The EU contribution to the BBI JU shall be up to €975 million.

In-kind contribution towards operational costs (IKOP)

IKOP represents the costs incurred by members other than the Union or their constituent entities in the implementation of indirect actions less the contribution of the BBI JU and any other Union contribution to those costs.

The IKOP report 2016 is based on the estimation of in-kind contributions made by BIC members participating in BBI JU's projects for costs incurred during the implementation of projects during the year 2016.

These estimations were reported by 31 January 2017 in line with the requirements of Article 4.3 of the Council Regulation establishing the BBI JU.

On this basis, BBI JU is able to report in the table below on the values of IKOP incurred in 2016 and detail the information per Call.

Call for proposal	Estimated IKOP incurred as provided by BIC members
2014	€ 4 081 301
2015.1	€ 3 013 000
2015.2	€ 738 826
TOTAL	€7 833 127

Table 16: Values of estimated IKOP incurred in 2016, per Call

Several industry members participating in BBI JU's projects could not report their IKOP by the deadline, either because their own 2016 accounts were not yet closed, or because the projects had started close to the end of 2016. In these cases, BBI JU applied EC guidelines for accounting standards and made a pro-rata estimation on the basis of project costs.

In-kind contribution in the implementation of additional activities (IKAA): certification and validation

IKAA constitutes the in-kind contribution incurred by the members other than the Union or their constituent entities consisting of the costs incurred by them in implementing additional activities outside the work plan of the BBI JU contributing to the objectives of the BBI initiative.

In July 2016 BIC delivered the first report of certified IKAA incurred during 2014-2015. The report was endorsed by the Governing Board on 15 December 2016. The in-kind contributions certified are linked to those reflected in the IKAA plan for 2014-2015. The IKAA value of €291 482 000 is fully certified by the independent external auditors in compliance with Article 4.4 of the Council Regulation establishing the BBI JU.

In July 2016 BIC presented a first draft of the IKAA plan 2016, and up to €339 million of additional activities are expected to have been invested by BIC members in 2016. The draft plan is still under discussions, at working level and has not been approved by the GB yet.

2. SUPPORT TO OPERATIONS

2.1. Communication activities

Communication and stakeholder management activities continued during 2016, which was a critical year for structuring BBI JU's communications strategy. Many of the activities undertaken in 2016 were shared with its founding members and its advisory bodies.

2.1.1. Priorities

The communication objectives set at the beginning of 2016 were to increase visibility and reputation of the organisation. Specifically, these focused on the following:

- Promote the BBI JU Calls for proposals, and explain potential synergies with the wider EU funding environment to all potential participant groups using a variety of channels and media.
- Widen stakeholder engagement in the BBI JU programme by targeting priority stakeholders like SMEs, regions and underrepresented areas and sectors using outreach activities with these groups.
- Profile the programme to key influencers to widen support for the programme amongst policy makers using specific tailored and targeted actions.
- Improve the visibility and recognition of the value of the bio-based industries through the dissemination of programme/project activities, impacts and results to the wider stakeholder audience using appropriate communication channels and tools.

The communication policy, strategy and stakeholder mapping were all developed during 2016, in collaboration with the founding members (BIC and the EU represented by the EC), and assisted by expert external communication experts. They provided the roadmap for achieving BBI JU's long-term communication goals.

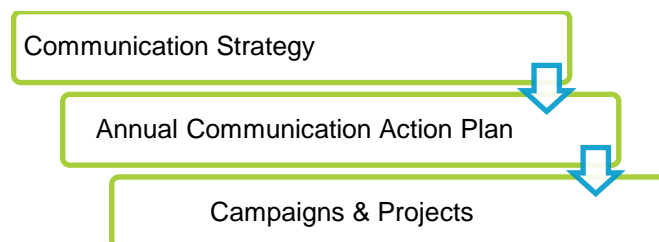


Figure 36: Communication Strategy -> Annual Communication Plan -> Campaigns & projects

2.1.2. Outreach activities

The Programme Office was very active in its interactions and external relations with its stakeholders in 2016. The Programme Office participated in 15 national Info Days across member states and associated countries in 2016, compared with participation in four similar events in 2015. BBI JU was presented at a further 34 events (as guest speaker, session organiser, or as event co- or sole organiser), which were all advertised on the BBI website event pages.

In addition, the widening participation strategy was further implemented in an initiative to promote the programme directly with eight Polish regions through BBI's first letter of intent.

2.1.3. Promoting BBI JU Calls

The annual Call 2016 was launched on 19 April 2016 and was promoted through the following channels:

- BBI JU website – dedicated page and home page banner
- Horizon 2020 Participants portal
- Dedicated 2016 Call brochure
- Social media – Twitter & Linked In
- BBI Partnering platform
- Direct mailing – over 3,800 individuals were sent 'Save the date' announcements
- Via SRG, NCPs and SC
- BBI Open Info Day event
- Through other national Info Day events
- Press release

BBI JU held its third Info Day on 21 April 2016 in Brussels. More than 530 participants registered for the event. Despite challenging security threats one month before the Open Info Day, which made travel to/from Brussel extremely difficult, more than 305 participants attended in person and more than 80 participants joined via the live streaming, making more than 500 individual logins. Participants came from more than 40 different Member States and associated countries. This represented an increase of 25% from 2015.

The format of the day was similar to previous years. New for 2016, a representative from the GREENLIGHT project consortium presented a testimony of preparing a proposal. The BBI Programme Office provided manned info booths of relevant services, organisations and initiatives, including one for the Programme Office and both founding members. There was strong support from the Bio NCPs and BBI's advisory State Representatives Group, who attended in numbers at the Info Day.

In addition to plenty of informal networking during breaks, the afternoon formal brokerage event saw more than 600 face-to-face meetings scheduled through the BBI JU Partnering Platform. Users, including 270 participants actively updated their profiles for the event, and more than 50 participants used the partnering platform on site for the first time. This level of participant activity, which included users accessing the newly launched BBI JU Partnering mobile meeting app, represents a two-fold increase in use compared with 2015.

 <small>Business Support on Your Doorstep</small>	 <small>European Regions Research and Innovation Network</small>	
 <small>European Network for Rural Development</small>		<small>A-Z index Site map About this site Organisation FAQ What?</small>  RESEARCH & INNOVATION DG RTD F.1 & D.2
 <small>BIO-BASED INDUSTRIES</small> <small>Public-Private Partnership</small>	 <small>European Commission</small> <small>Executive Agency for Small and Medium-sized Enterprises</small>	 <small>Summating Private Industry Through Resource and Strategic Efficiency</small>

Table 17: Organisations with Info Booths present at the BBI OID 2016

Media Consulta handled media coverage of the event which resulted in 11 articles or citations in the media/press (monitored until 30 June). BBI JU issued a press release, which was circulated to approximately 230 members of the press/press organisations.

Full recordings of the sessions and the presentation files were published and can be viewed or downloaded from the Info Day event page of the BBI JU website.

2.1.4. Promoting BBI JU projects and success stories

BBI JU promoted the programme and its projects through active participation in a number of external events, either solely or jointly with founding members. BBI JU contributed to the following 34 events over 2016 shown in table 18 below:

Event	Date	Place	Type of participation	Organiser
BioNCP meeting	26 January	Brussels, BE	Speaker	Bio Horizon NCP project
BIC General Assembly	3 March	Brussels, BE	Speakers	BIC members
MEP breakfast 'The 21st century is Bioeconomy: will Europe lead?' hosted by MEP Kumpula-Natri.	17 March	Brussels, BE	Speaker	EP intergroup on climate change, Biodiversity and Sustainable development'
EESC committee hearing on the role & effect of JTIs/PPPs in implementing Horizon 2020 for sustainable industrial change.	23 March	Brussels, BE	Speaker	Committee of Regions
Committee of the Regions workshop ' Bioeconomy challenges for the EU regions	29 March	Brussels, BE	Speaker	Committee of Regions
Governing Board Dinner	11 April	Utrecht, NL	High-level networking	BBI JU
Bio-economy conference	12-14 April	Utrecht, NL	Speaker	Dutch Presidency
Workshop on Biomass resources for renewable energy production	2 June	Madrid, ES	Speaker	EEN

Course on Bioeconomy projects management and financing	15 June	Madrid, ES	Speaker	EEN
4th SPIRE PPP Brokerage event	15 June	Brussels, BE	Speaker	SPIRE
SusChem Stakeholder Event	16 June	Brussels, BE	Speaker	SUSChem
Lignobiotech IV Symposium	19 - 22 June	Barcelona, ES	Speaker	
IX Enterprise Europe Network annual meeting	21 June	Madrid, ES		EEN
European Parliament debate on 'Innovating towards resource efficiency, jobs and growth: the challenges and opportunities of creating a circular bioeconomy'	21 June	Brussels, BE	Speaker	
Bio-based industries Joint Undertaking: opportunities for Brussels-based organisations	22 June	Brussels, BE	Speaker	BE NCP
Horizon 2020 Societal Challenge 2 Info Week	28 June	Brussels, BE	Speaker	EC/NCPs
Innovation Day: Evolution of biogas plants to new models based on the concept of biorefinery	28 June	Madrid, ES	Speaker	
17th European Congress on Biotechnology	3 July	Warsaw, PL	Poster presentation	
Triple-Helix Conference on Bio-Based Economy	19 July	Budapest, HU	Speaker	
Workshop 'EU Cohesion policy regions: the potential of biomass to bio-based product'	8 September	Brussels, BE	Speaker	
European Union Competition for Young Scientists	19 September	Brussels, BE	BBI JU prize award	EC
Italian Forum on Industrial Biotechnology and Bioeconomy (IFIB) - Horizon 2020 and the Bio-based Industries initiative: opportunities for jobs and growth in the Mediterranean region	22-23 September	Vicenza, IT	Speaker	Co-organiser
Lodz Bioeconomy Congress	6 -7 October	Lodz, PL	BBI Panel	Lodz Region
European Week of Regions and Cities - Enhance Regional Innovation and Growth: possibilities for integrated funding through regional cooperation with Joint Undertakings	11 October	Brussels, BE	Joint JU panel	Region of Carinthia/JUs

European Week of Regions and Cities - From bio-waste to bio-based products workshop	11 October	Brussels, BE	Speaker	F.2 DG RTD
FOOD2030	12-13 October	Brussels, BE	Joint booth with Prominent project	F.3, DG RTD
Bratislava Bio-Economy Congress	17 October	Bratislava, SK	Session and exhibition	Slovakian Presidency Ministry of Agriculture
EFIB 2016 (The European Forum for Industrial Biotechnology and the Bioeconomy)	18 - 20 October	Glasgow, UK	Session & shared booth	
ECOMONDO 2016	9 November	Rimini, IT	Speaker	SRG (Italy)
EC-Workshop on Maximising the impact of KET Biotechnology	16 November	Brussels, BE	Speaker	RTD.D2
Synergies	24 November	Brussels, BE	Meeting	BBI - European Council of Academies of Applied Sciences, Technologies and Engineering
Mission to Rome and Alghero	5 December	Rome/Alghero, IT	Speaker/Visit	First2Run project
Joint visit bio-refinery of Bazancourt-Pomacle	8 December	Reims, FR	Visit	RTD-F1
BBI JU Cocktail reception	14 December	Brussels, BE	Host/Speaker	BBI JU

Table 18: Participation in external events

Other outreach activities included setting up the working group for BBI – SPIRE communication and collaboration. Delegations were received from the Canadian Permanent Mission to the EU and the Animal Task Force, who presented their organisations and discussed possible future collaboration. Executive Director Philippe Mengal met with Pekka Pesonen (Secretary General of Copa-Cogeca) to explain the role and activities of BBI JU, stressed farmers' key contribution to the development of the sector and heard the concerns and expectations from the farmers' side. There was also a bilateral meeting between BBI JU and Europabio.

BBI also presented the 2016 Call at 15 national Info Days:

Event	Date	Place
Info Day	29 February	DE
Info Day	3 March	UK
Info Day	1 April	IT
Info Day	3 May	CZ
Info Day	5 May	ES
Info Day	12 May	NO
Info Day	17 May	PT
Info Day	17 May	IS

Table 19: Participation in national Info Days in 2016

Info Day	17 May	DK
Info Day	31 May	IL
Info Day	1 June	DE
Info Day	13 June	SL
Covenant of Mayors	29 June	Webinar
Info Day	29 June	NL
Webinar for applicants	30 June	DE

BBI has used several events in 2016 to show case its ongoing projects. These are as follows:

Project	Type of participation	Event	Link
Greenlight	Speaker	BBI Open Info Day 2016, April	http://www.innventia.com/greenlight
Prominent	Shared Info Booth	Food 2030, October	http://www.prominent-protein.eu/
Tech4Effect	Panellist	Lodz Bioeconomy	https://www.bbi-europe.eu/projects/tech4effect
Hyperbiocoat	Panellist	Lodz Bioeconomy	https://www.bbi-europe.eu/projects/hyperbiocoat
ValChem	Panellist	Lodz Bioeconomy/EFIB 2016	http://www.valchem.eu
Exilva	Exhibition	Bratislava Bioeconomy Conference	https://www.bbi-europe.eu/projects/exilva
First2Run	Exhibition/ Panellist	Bratislava Bioeconomy Conference/EFIB 2016	http://www.first2run.eu/
Bioskoh	Exhibition	Bratislava Bioeconomy Conference/EFIB 2016	http://bioskoh.eu/
Pulp2Value	Exhibition	Bratislava Bioeconomy Conference	https://www.bbi-europe.eu/projects/pulp2value

Table 20: Showcasing ongoing projects

The Programme Office compiled new factsheets for all ongoing projects in collaboration with the project officers and coordinators. The factsheets were translated into new project web pages, which provide a dynamic look and feel per project, highlighting relevant information like objectives, achievements, news and multimedia promotional materials to be accessible. The Programme Office completed an external mid-value procurement process to select an external supplier of video services and completed a BBI corporate video. In addition the Programme Office shot footage for a series of promotional videos linking programme objectives to ongoing projects. Flagship projects First2Run, Bioskoh, Exilva and demo project Pulp2Value were the first of those to be filmed.

2.1.5. Website and social media

Website

The [website](#) continued to provide access and an entry point to BBI activities for around 68 497 unique visitors during the year. This is similar to website traffic for 2015. There were peaks of activity around the Open Info Day, and key BBI JU events in September and October. The home page, the Call 2016 page and project pages saw the highest number of visits and by country, the highest were from users in Belgium, Germany, Italy and Spain.

The Programme Office made some significant developments to the website, including re-launching the SRG and SC 'Members' areas, new design and content for BBI project pages, and the addition of a project coordinators dedicated page.

LinkedIn group/corporate page

The Programme Office launched its [Linked In group](#) and corporate page in May. BBI JU staff, founding members and advisory bodies/NCPs have been encouraged to post their stories, news and events. The Linked In group/page was one of the channels used to promote the 2016 Call and Programme vacancies at the Programme Office in addition to the exposure given on the public website.

Twitter

The Programme Office embraced social media during 2016 to reach a wider audience. Activity on Twitter via the [@BBI2020](#) account was followed by 1280+ users by December 2016, rising from 198 followers in February 2016. @BBI2020 tweeted 175 + messages and retweets which resulted in reaching 185 436 accounts, and saw active engagement by followers more than 2 500 times. There were peaks in activity around the Open Info Day and around the key events in September and October.

2.1.6. Publications and media relations

The Programme Office actively promoted BBI JU achieving visibility in recognised publications linked to priority stakeholders, like MEPs, Council Members and other policy

makers. The Programme Office published several 'infotorials' in The Parliament magazine. A summary of all BBI JU publications in 2016 is below.

Title	Month	Link
Bio-based Industries Joint Undertaking (BBI) leveraging public money for a coherent sustainable bio-based economy	February	
Bio-Based Industries Joint Undertaking Investing in the European bioeconomy	May	
Joint JU supplement in The Parliament Magazine – Doing things together: The value of public–private partnerships (BBI leading in this horizontal JU communications activity)	October	
BBI JU Showcases Novel Bio-Based Products at the Bratislava Bioeconomy Conference Article by Advanced Biofuels USA	October	http://advancedbiofuelsusa.info/bbi-ju-showcases-novel-bio-basedproducts-at-the-bratislava-bioeconomy-conference/
Bratislava brings the bioeconomy closer to the EU citizens Interview by Mario Bonaccorso - The BioJournal	October	http://www.thebiojournal.com/bratislava-brings-the-bioeconomycloser-to-the-eu-citizens/
Euroactiv.SK – 2 articles	October	http://euractiv.sk/fokus/biohospodarstvo/biohospodarstvominulost-pritomnost-a-buducnost/ http://euractiv.sk/clanky/biohospodarrstvo/ked-sa-veda-stretne-spriemyslom/
Formule Verte - article	October	http://formule-verte.com/produits-biosources-deja-une-realite-eneurope-selon-le-bbi-ju/
BBI JU SHOWCASES NOVEL BIO-BASED PRODUCTS AT BRATISLAVA BIOECONOMY CONFERENCE Article by Agro & Chemie	October	http://www.agro-chemie.nl/nieuws/en-bbi-ju-showcases-novel-biobased-products-at-bratislava-bioeconomyconference/?platform=hootsuite
The Bio-Based Industries Joint Undertaking (BBI JU): The catalyst for a sustainable bio-based economy in Europe	December	
From Bratislava: there is no EU bioeconomy without regions Article by Il Bioeconomista	October	https://ilbioeconomista.com/2016/10/17/from-bratislava-there-isno-eu-bioeconomy-without-regions/

Table 21: BBI external publications

The media was engaged through external agencies. BBI JU has an existing media database containing approximately 200 contacts: an average of 100 journalists from all EU-28 Member States and the rest are Brussels-based correspondents and Belgian media. Sustainability Consult was used to cover media and press relations for the key events in Bratislava and Glasgow.

Subject	Date	Linked to
Call for proposals 2016	19 April	Call launch
Enhanced Central And Eastern Regional Cooperation Boosts European Bioeconomy	6 October	Lodz Bioeconomy Conference and signing letter of intent (Joint press release with BIC)
BBI JU showcases novel bio-based products at the Bratislava Bioeconomy conference	18 October	Bratislava Presidency Bioeconomy Conference

Table 22: BBI press releases distributed in 2016

Other communication materials developed and delivered in 2016 include

- Call 2016 brochure
- BBI poster/roll up published
- New infographics for use in publications, presentations etc
- Walking Exhibition brochure
- BBI collection of bio-based products – mobile exhibition
- BBI JU corporate video
- BBI JU walking exhibition video

2.2. Legal and financial framework

The Programme Office implemented its activities in compliance with the applicable rules and procedures to support the appropriate management of public and private funds. This was done under the authority of the Executive Director as Chief Executive responsible for the day-to-day management of the BBI JU, and in accordance with the decisions of the Governing Board.

BBI JU is a joint undertaking within the meaning of Article 187 of the Treaty on the Functioning of the European Union, set up by the EC Council Regulation (EC) No 560/2014 of 6 May 2014.

The financial framework applicable is established by:

- Financial Regulation (FR) — Regulation (EC, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the European Union (OJ L 298, 26.10.2012, p.1). The JU is a 'Union Body' as referred to in Article 208 of Regulation (EU, Euratom) No 966/2012;

- Rules of Application (RAP) — Commission Delegated Regulation (EU) No 1268/2012 of 29 October 2012 on the rules of application of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council on the financial rules applicable to the general budget of the Union (OJ L 298, 26.10.2012, p.1);
- BBI JU Financial Rules adopted by the Governing Board on 9 December and amended on 23 December 2015.
- The management of BBI JU programming and grant processes is governed by the Horizon 2020 legislation, and in particular:
- Council Regulation (EU) No 560/2014 of 6 May 2014, establishing the Bio-based Industries Joint Undertaking;
- Horizon 2020 Framework Programme — Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - The Framework Programme for Research and Innovation (2014-2020) (OJ 347, 20.12.2013, p. 104);
- Rules for Participation (RfP) — Regulation (EU) No 1290/2013 of the European Parliament and of the Council of 11 of December 2013 laying down the rules for the participation and dissemination in Horizon 2020 – the Framework Programme for Research and Innovation (2014-2020) (OJ L 347, 20.12.2013, p.81);
- Specific programme implementing Horizon 2020 - Council Decision 2013/743/EU of 3 December 2013 establishing the specific programme implementing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decisions 2006/971/EC, 2006/972/EC, 2006/973/EC, 2006/974/EC and 2006/975/EC.

2.3. Budgetary and financial management

The BBI JU has been autonomous from a budgetary management perspective since its autonomy in October 2015.

The draft budget was conceived in pre-autonomy still, whereas the final budget 2016 was formally adopted during post-autonomy. The execution of the 2016 administrative budget was mainly impacted –by the assumption that the recruitment of the BBI JU staff would already be completed by the start of 2016, whereas it turned out to be nearly the case only towards the end of the year. This resulted in a budget surplus, mostly in Title 1. Taking into account the surplus brought forward from year 2015 (also mainly in Title 1 for similar reasons), there was a cumulated surplus on the administrative budget of more than €2 million by the end of 2016. This situation is currently under discussion and will be addressed in future years, after taking into account the 2017 budget execution, that – despite the 2017 Title 1 budget being higher than that of 2015 or 2016 – will be positively impacted by BBI JU personnel being fully in place during 2017.

Statement of Revenues	Voted budget 2016		Amended Budget 2016 ²⁰	
Heading	Commitment appropriations (in €)	Payment appropriations (in €)	Commitment appropriations (in €)	Payment appropriations (in €)
EU contribution excl. EFTA	158 082 500	62 095 038	158 082 500	62 095 038
of which Administrative	1 946 263	1 946 263	1 946 263	1 946 263
of which Operational	156 136 237	60 148 775	156 136 237	60 148 775
EFTA contribution²¹	4 315 652	1 695 195	4 315 652	1 695 195
of which Administrative	53 133	53 133	53 133	53 133
of which Operational	4 262 519	1 642 062	4 262 519	1 642 062
Industry financial (cash) contribution	2 943 315	2 193 315	2 943 315	2 193 315
of which Administrative (incl. 2/6 compensation for 2014)	2 193 315	2 193 315	2 193 315	2 193 315
of which Operational ²²	750 000	0	750 000	0
SUB-TOTAL title revenues	165 341 467	65 983 548	165 341 467	65 983 548
C2 reactivation of unused appropriations from administrative expenditure (2015)			1 108 111	1 212 639
C2 reactivation of unused appropriations from operational expenditure (2014)			1 846 292	0
C2 reactivation of unused appropriations from operational expenditure (2015)			26 000 000	0
SUB-TOTAL reactivations			28 954 403	1 212 639
GRAND TOTAL	165 341 467	65 983 548	194 295 870	67 196 187

Table 23: BBI 2016 budget – Statement of revenues

²⁰ The 2016 budget was amended three times during 2016. Amendment n°1 was for including unused appropriations from 2015 which were carried forward to 2016. Amendments n°2 and n°3 were mainly made to envisage that part of the EU incl. EFTA contribution to the BBI JU administrative expenditure 2016 (€ 500 000 in the end) was not directly implemented by the BBI JU, but transferred by the EC on behalf of the BBI JU to the REA for the management and payment of the BBI JU expert-evaluators 2016.

²¹ 2.73% for 2016

²² BIC's financial (cash) contribution to BBI JU 2016 commitment appropriations for operational expenditure

EXPENDITURE (Commitment appropriations)	Amended budget 2016	Executed Budget 2016	%	Carry over to 2017 (C8)	Available for future use (N+3 rule) (C2)
Title 1 - Staff expenditure	3,357,069	1,807,295	53.84%	88,635	1,549,774.43
11 Salaries & allowances	2,953,523	1,555,009	52.65%	14,529	1,398,514.43
12 Expenditure relating to Staff recruitment	150,400	114,945	76.43%	28,000	35,455.00
13 Mission expenses	118,200	54,593	46.19%	4,117	63,607.00
14 Socio-medical infrastructure (inc training)	114,091	74,948	65.69%	41,786	39,143.00
15 Receptions, events and representation	20,855	7,800	37.40%	204.33	13,055.00
Title 2 - Infrastructure and operating expenditure	1,943,753	1,448,619	74.53%	244,323	495,134.00
20 Rental of buildings and associated costs	273,131	263,035	96.30%	-	10,096.00
21 Information, communication technology and data processing	172,860	150,692	87.18%	45,937	22,168.00
22 Movable property and associated costs	75,300	64,218	85.28%	6,000	11,082.00
23 Current administrative expenditure	17,100	8,439	49.35%	2,300	8,661.00
24 Postage / Telecommunications	20,400	15,850	77.70%	6,931	4,550.00
25 Expenditure on formal meetings	72,900	37,094	50.88%		35,806.00
26 External communication information and publishing	462,500	366,388	79.22%	149,015	96,112.00
27 Studies	121,500	34,140	28.10%	34,140	87,360.00
28 Experts contracts and evaluations	728,011	508,763	69.88%	-	219,248.00
Title 3 - Operational expenditure	188,995,048	185,602,886	98.21%	335,082,603	3,392,162.00
30 Previous years' Calls	-			149,525,760	0.00
31 Addition to Call 2015.2	341,071		0.00%		341,071.00
32 Call 2016	188,653,977	185,602,866	98.38%	185,556,843	3,051,111.00
TOTAL	194,295,870	188,858,800	97.20%	335,415,561	5,437,070.43

EXPENDITURE (Payment appropriations)	Amended Budget 2016	Executed Budget 2016	%	Available for future use (N+3 rule) (C2)
Title 1 - Staff expenditure	3,338,335	1,747,743	52.35%	1,590,592
11 Salaries & allowances	2,991,168	1,549,151	51.79%	1,442,017
12 Expenditure relating to Staff recruitment	106,139	95,585	90.06%	10,554
13 Mission expenses	141,913	52,501	37.00%	89,412
14 Socio-medical infrastructure (inc training)	91,133	61,525	67.51%	29,608
15 Receptions, events and representation	7,982	7,881	98.73%	101
Title 2 - Infrastructure and operating expenditure	2,065,831	1,309,625	63.39%	756,206
20 Rental of buildings and associated costs	381,871	263,035	68.88%	118,836
21 Information, communication technology and data processing	184,095	177,599	96.47%	6,496
22 Movable property and associated costs	135,081	58,218	43.10%	76,863
23 Current administrative expenditure	33,174	19,773	59.60%	13,401
24 Postage / Telecommunications	26,757	12,831	47.95%	13,926
25 Expenditure on formal meetings	98,665	37,094	37.60%	61,571
26 External communication information and publishing	384,177	232,312	60.47%	151,865
27 Studies	94,000	-	0.00%	94,000
28 Experts contracts and evaluations	728,011	508,763	69.88%	219,248
Title 3 - Operational expenditure	61,792,021	61,792,021	100.00%	0
30 Previous years' Calls	61,792,021	61,792,021	100.00%	0
31 Addition to Call 2015.2	0 00			
32 Call 2016	0 00			
TOTAL	67,196,187	64,849,389	96.51%	2,346,798

Table 24: BBI 2016 budget – statement of expenditure

Administrative costs

The budgeted costs for 2016 were based on an assumption of the full staff headcount having already been recruited by 1 January, whereas only thirteen members of staff were actually in place. Another seven were recruited during 2016, filling 20 of the available 22 posts by 31 December 2016. This situation led to a considerable under-execution of Title 1 of the Programme Office administrative budget, taking also into account the surplus accumulated in 2015 for similar reasons.

Title 1: Staff related costs such as salaries and missions are showing only a limited execution in commitment appropriations (53% and 46% respectively), while representing a relevant amount of over €1, 6 M. Recruitment and removal expenses are much stronger at 81%. The general execution of the original 2016 voted budget in commitment appropriations is over 73%, but when the large surplus reactivated from 2015 is taken into account this drops to 54%. These figures do however constitute a tangible improvement compared to the 40% execution recorded in 2015 on Title 1. More information about the evolution in 2016 of the filling in of BBI JU posts, with regard to the Staff Establishment Plan, is available under section 2.6 Human Resources.

Title 2: Buildings, IT and communications costs show strong execution in 2016 contributing to an overall implementation of 84% in commitment appropriations for title 2, respectively for €263 035, €150 692 and €366 388. Taking into account the appropriations reactivated from 2015 this drops to 75%. This budgetary implementation does include the spending related to evaluators contracts; this budget was executed by the Research Executive Agency for an amount of €472 740.²³

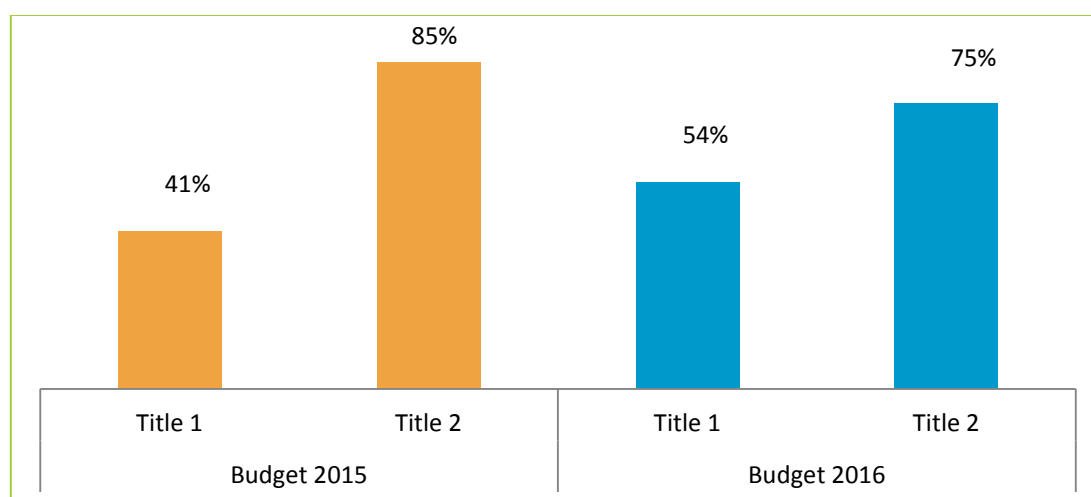


Figure 37: Comparison in Administrative budget execution (2015 – 2016)

²³ € 472 740 executed by the REA in 2016 out of the commitment and payment appropriations of € 500 000 each, that were transferred by the EC on behalf of BBI JU for the management and payment of the BBI JU experts-evaluators for its Call for proposals 2016.

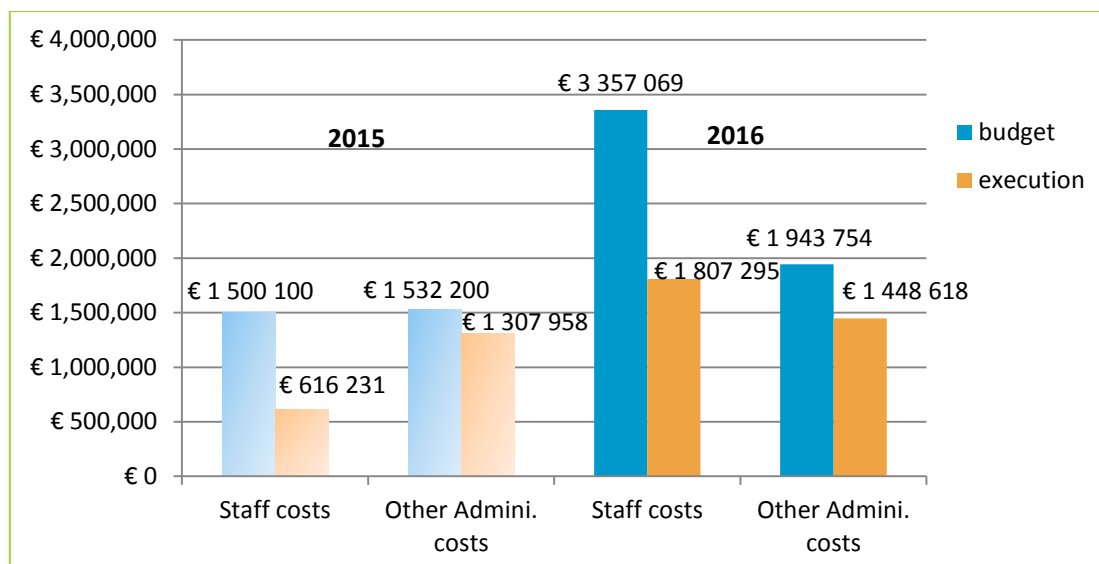


Figure 38: 2016 (amended) Budget execution – commitment appropriations in title 1 and Title 2 Title (in M €)

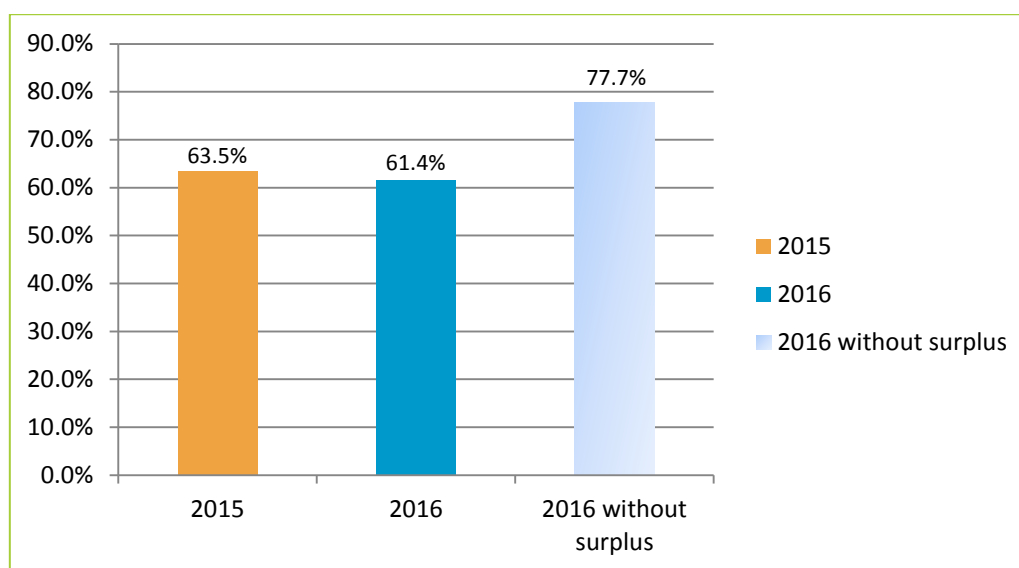


Figure 39: Total execution of commitment appropriations

Total execution of commitment appropriations counts for 77.7% of the original 2016 budget, while it decreases to 61.4% taking into account the amended budget.

For what concerns payment appropriations, the overall consumption of Titles 1 and 2 compared to the original budget shows 72.9% consumption, while compare to the amended budget it drops to 56.6%²⁴.

²⁴ These execution figures take into account € 472,740 executed by the REA in 2016 on the payment

In accordance with the BBI JU financial rules, the unused appropriations can be used until year N+3. Therefore the unexecuted budget will be reactivated to supplement the 2017 budget via a formal amendment.

In terms of the time to pay on the administrative budget, the Programme Office executed over 500 payments of which 91% were within the time limit. This percentage increased to 94% during the second semester, when additional financial staff were in place.

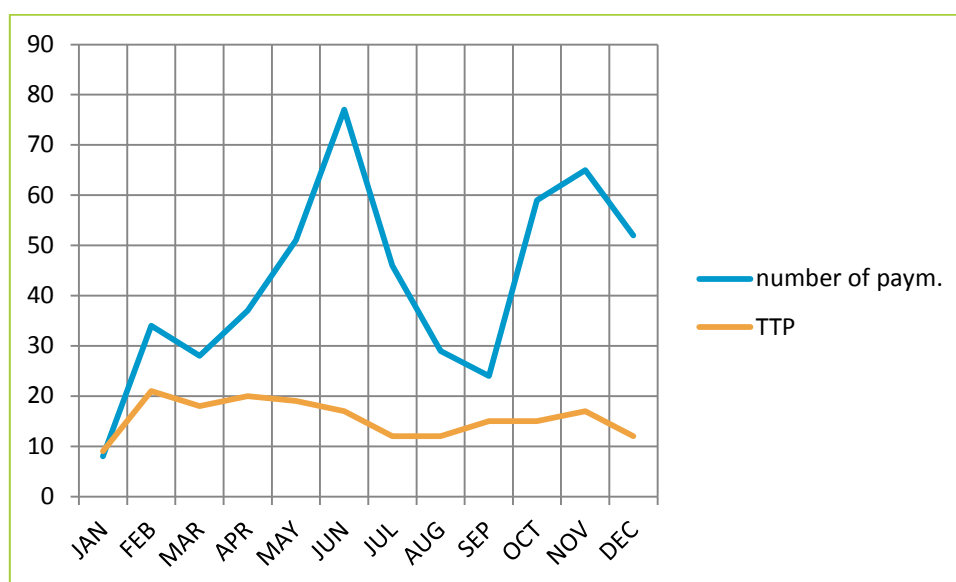


Figure 40: 2016 payments on the administrative budget

Operational costs

Please refer also to section 1.6 “Operational budget execution”, above.

Concerning the commitment appropriations of the operational budget, the Programme Office concluded 26 grant agreements from the Calls 2015.1 and 2015.2. Three grants of the 2015.1 Call resulted in a consumption of 73.7% on the commitment appropriations envisaged for this Call (€ 100.0 million), while the unused € 26.3 million were carried forward to top up the 2016 Call. From the 2015.2 Call, 23 grant agreements resulted in a 99% execution of commitment appropriations envisaged for this Call (€ 106.4 million).

The 2016 Call was committed for € 188 995 048 including € 160 398 756 of voted commitment appropriations, € 27 846 292 of unused commitment appropriations from 2014 and 2015, € 750 000 from BIC); the evaluation was successfully concluded by the end of 2016, resulting in a potential consumption of 98.2% if all grants are signed in 2017. Unused appropriations (on the available budget) totalling € 3.1 million will be brought forward to 2017

appropriations (€ 500,000), transferred by the EC, on BBI JU's behalf, for the management and payment of the BBI JU experts-evaluators for its Call for proposals 2016.

and reactivated via a budgetary amendment in order to top up the 2017 Call. A residual unused amount of € 293 865 will be de-committed in 2017 and reactivated in 2018.

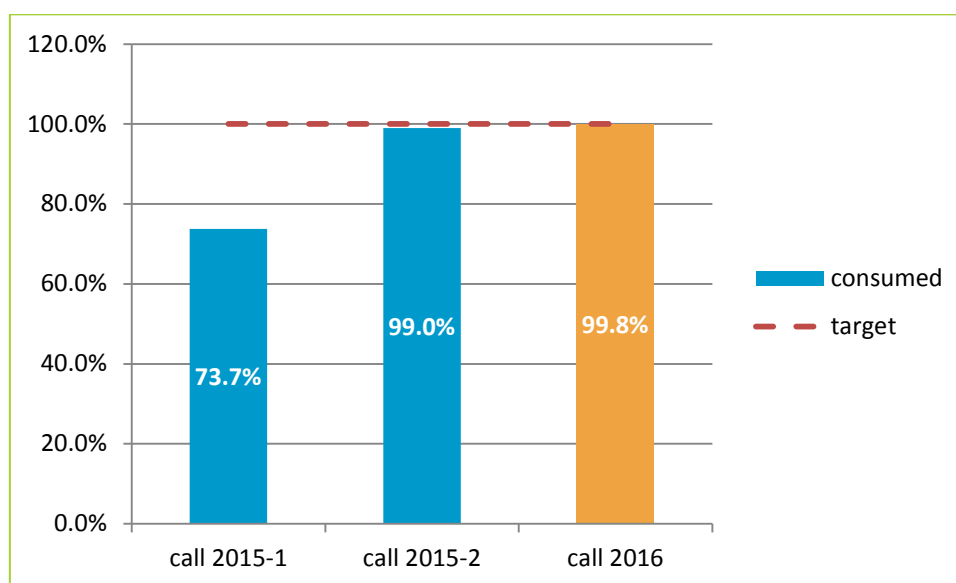


Figure 41: 2016 operational commitment execution by Call

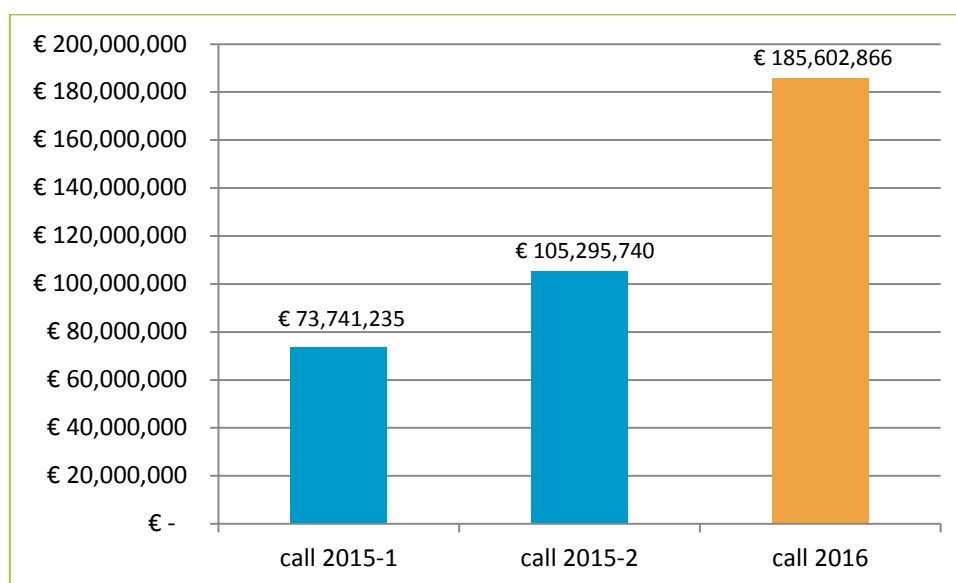


Figure 42: 2016 commitment execution amount

In respect of payment appropriations, the Programme Office achieved 100% execution of the 2016 budget with pre-financing payments for the grants of Calls 2015.1 and 2015.2. These payments were executed within an average time to pay of eight days and 25 out of 26 payments were on time; one payment was late by one day.

2.4. Procurement and contracts

As described in the AWP 2016, and in order to set up the necessary legal and financial frameworks necessary for additional administrative requirements throughout the course of the year, the Programme Office has joined several framework contracts of the European Commission to enable the JU to purchase different goods and services.

BBI JU signed specific contracts under the framework contracts jointly managed with the other JUs present in the White Atrium, for common IT services and the engagement of interim staff. .

In addition, throughout 2016, BBI JU has used Service Level Agreements (SLAs) in force with the European Commission to get supplies and services through OIB and DG HR.

The following contracts were made in 2016 for single amounts higher than € 15 000:

Contractor	Framework contract Y/N	Tender procedure	Subject of the contract	Signature date	Amount (EUR)
Retell	Y	Extension Specific Contract	Web-page	19/12/2016	24 635
Fleishman-Hilliard SA	N	Negotiated Procedure	Audio-visual services – Production of BBI's Projects Promotional Videos	02/09/2016	122 450
PKF Little John	Y	Re-opening of FWC	Ex-post audit services	21/12/2016	56 900
Start People	Y	Three Specific Contracts	Interim Staff	14/03/2016	18 254
				18/05/2016	19 541
				16/02/2016	16 487
				14/07/2016	16 863
				04/08/2016	28 395

Table 25: Contracts made in 2016 over € 15 000

2.5. IT and logistics

IT – Administrative

BBI JU adopted a corporate mobile device policy and a business continuity plan (including the disaster recovery plan). The ICT prerequisites of remote work/teleworking were implemented by providing portable computers and authentication devices to all staff members. Corporate mobile phones were provided to the senior managers and an additional pool of mobile phones has been made available to serve BBI staff on an *ad hoc* basis (for business trips, events, etc.).

BBI JU shares ICT infrastructure with other joint undertakings located in the same building. BBI JU adopted in 2016 the Common IT Strategy and participated in the implementation of the Common IT Work Program.

BBI JU started the process to adopt two EC corporate IT tools: ARES for document and records management and Sysper for HR management. By the end of 2016 the business owners of the IT systems still had to provide a roadmap.

IT – Operational

The mandate of the Common Support Centre (CSC) for Horizon 2020 set up by Commission Decision SEC(2013)655 is to provide high quality services to all research Directorates-General, Executive Agencies and Joint Undertakings implementing Horizon 2020. BBI JU participated in the Business Process Governance meetings of the CSC and provided feedback where necessary. Each business process (a defined area of Horizon 2020 operational activity) is led by a business process owner (BPO) and its deputy. The BPO, serving the whole R&I family (including the BBI JU), assumes overall responsibility for that specific business process. The BBI JU has also delegated its staff members to the Key User Groups of the relevant services to be able to closely follow and provide feedback on the new features implemented in the Horizon 2020 Grant and Expert IT management systems.

Logistics

The offices of the staff members who joined BBI JU in 2016 and some common areas (waiting area, lunch area, second meeting room, storage/archive room) were equipped with the essential pieces of furniture under the SLA and framework contracts signed with DG OIB.

In order to make best use of Horizon 2020 corporate services, BBI JU used the facilities of the Research Executive Agency (REA) for the evaluation of Call 2015.2 and Call 2016. The delegation agreement between BBI JU and the European Commission mentions this possibility.

2.6. Human Resources

Staff and recruitment

By the end of 2016, the BBI JU team was almost complete, with 20 staff members employed out of 22 posts allocated to the JU by the Staff Establishment Plan (Annex 2). One additional recruitment procedure was finalised at the end of 2016 with a starting date of the recruited person in January 2017. The target set in the AWP 2016 was fully achieved, with the recruitment of 13 temporary agents and 8 contract agents coming from ten EU Members States. The selection procedure for the remaining position will be launched in 2017.

The graph below shows the evolution of the Programme Office staffing levels in 2016:

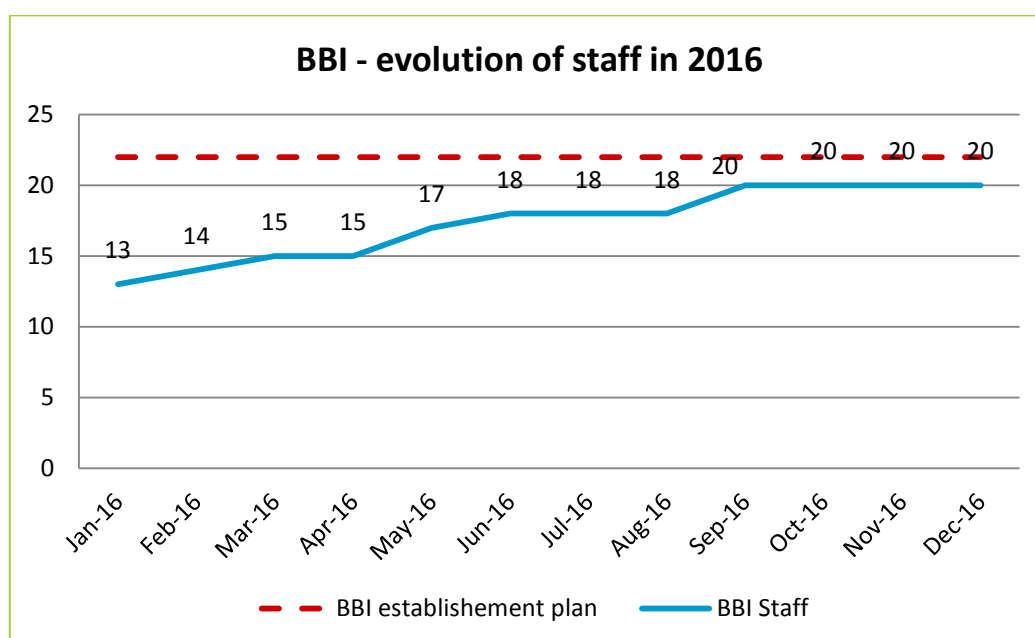


Figure 43: Staffing levels from January to December 2016

The two graphs below show the gender and geographical balance within BBI JU on 31/12/2016:

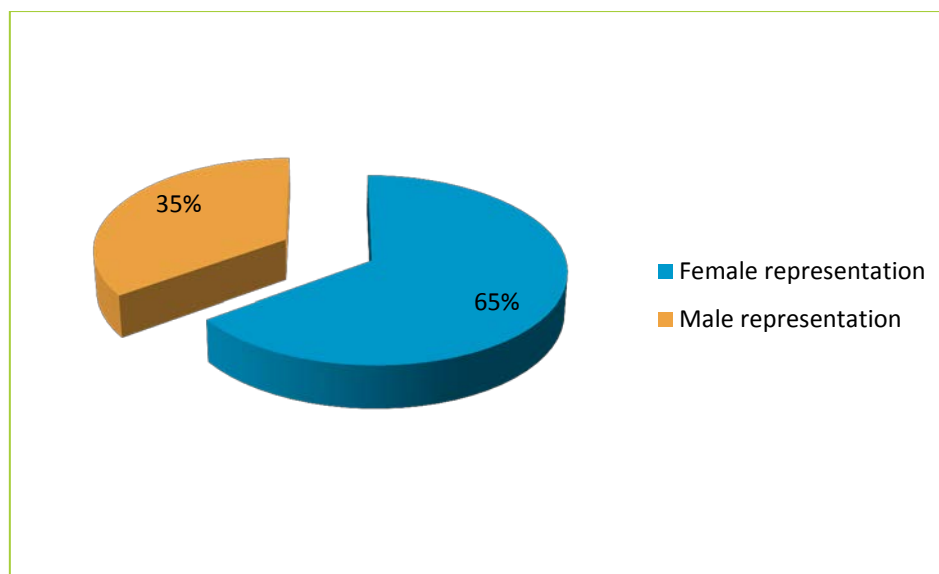


Figure 44: Gender balance of the Programme Office staff as at 31/12/2016

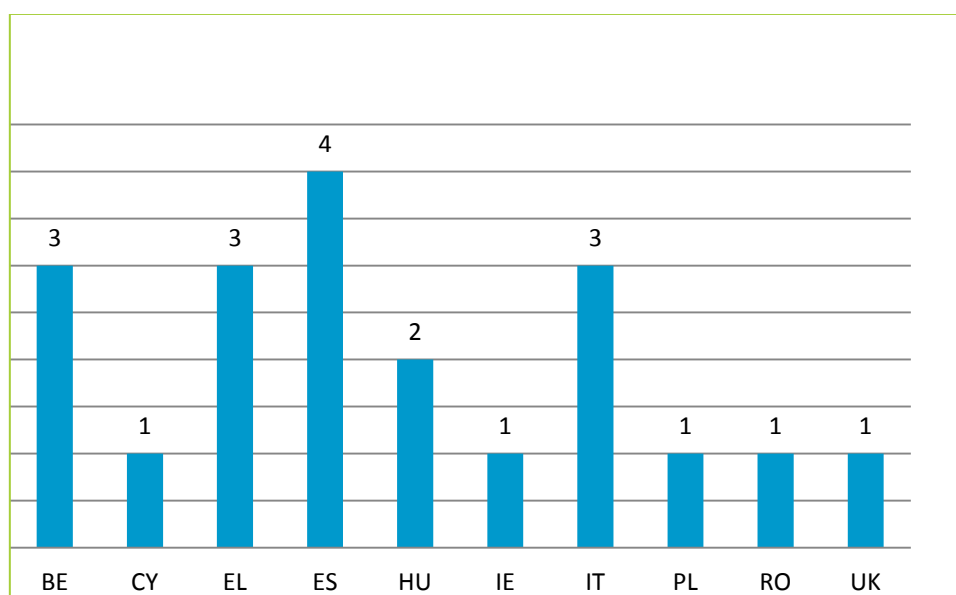


Figure 45: Programme Office staff by nationality as at 31/12/2016

Seven staff members started working at BBI JU in 2016. Key positions filled during 2016 are reported in table 26 below.

Position	Grade	Taking up duties on
Internal Control and Audit Manager	FG IV	01/01/2016
Communication and Stakeholders Relationships Officer	AD7	01/02/2016
2 Financial Assistants	FG III	01/05/2016 16/05/2016
Head of Finance and Administration	AD11	1/06/2016
Executive and Communication Assistant	AST 4	01/09/2016
Head of Programme	AD 11	16/09/2016

Table 26: BBI JU positions filled during 2016

As planned in the AWP 2016, BBI JU had access to the inter-JUs framework contract for interim services and used it in order to sign two short-term contracts providing support to the programme unit and to the communication function.

BBI JU also launched its first traineeship programme in 2016 and gave the opportunity to one trainee to acquire a first-hand working experience of the BBI JU programme. The traineeship provided a high-quality experience that enriches the professional profile of the laureate while providing a preliminary insight into the objectives and activities of the BBI JU. The trainee joined the programme unit for a period of six months.

Legal framework

In 2016 the HR function has continued to strengthen the legal framework paying particular attention to the application of the implementing rules of the European Commission to the BBI JU. In this respect, nine new implementing rules have been adopted by the Governing Board in 2016:

- General implementing provisions on setting up a Staff Committee;
- General implementing provisions on the procedure governing the engagement and use of temporary staff under Article 2(f) of the CEOS;
- General provisions for implementing Article 43 of the Staff Regulations and implementing the first paragraph of Article 44 of the Staff Regulations for temporary staff;

- General provisions for implementing Article 87(1) of the Conditions of Employment of Other Servants of the European Union and implementing the first paragraph of Article 44 of the Staff Regulations;
- General implementing provisions regarding Article 87(3) of the Conditions of Employment of Other Servants of the European Union;
- General implementing provisions regarding Article 54 of the Conditions of Employment of Other Servants of the European Union;
- General implementing provisions on the application by analogy of the implementing rules on part-time work;
- General implementing provisions on the application by analogy of the implementing rules on telework;
- General implementing provisions on measures concerning unpaid leave for temporary and contract staff of the European Union.

Following the adoption of the relevant Implementing Rules by the BBI JU Governing Board, BBI JU organised the elections of its Staff Committee at the end of 2016. Three members and one alternate member were appointed in November 2016.

Learning and career development

The BBI JU values the continuous development of its staff in order to ensure that staff members are competent in their roles and can respond to changing requirements. A Learning and Development Framework was developed in 2016 in line with the importance given to competence and career development of individuals. A Service Level Agreement in force with the European Commission provided access to a wide catalogue of trainings and ad hoc learning opportunities have been constantly communicated to staff members across the year. In addition, a wide range of training activities and workshops has also been organised in house:

- Priority management;
- Stakeholders management;
- Ethics and integrity;
- Preserving dignity and respect at work;
- Media handling workshop;
- Training on procurement rule.

In addition mandatory and highly recommended trainings for several key functions have been organised. For example, during 2016 the Executive Director and the two Heads of Unit attended a training for newly appointed Directors and newly appointed Heads of Unit delivered by European School of Administration.

Individual training maps have been developed for each staff member and, as a general rule, BBI JU staff dedicated at least ten days to learning and development activities in 2016, including traditional classroom learning, and also informal learning such as on-the-job learning, coaching, e-learning, teambuilding activities, etc. A welcome brochure has been developed to facilitate the integration of newly recruited staff.

3. GOVERNANCE

3.1. Governing Board

The Governing Board has overall responsibility for the strategic orientation and the operations of the BBI JU and shall supervise the implementation of its activities, in accordance with Article 7 of the BBI JU Statutes²⁵.

The Governing Board includes five representatives of the BIC and five representatives of the EC with the same voting rights. While Mr Rudolf Strohmeier acted as Vice-Chair in the first two Governing Board meetings of 2016, in the meeting of September Ms Ruxandra Draghia-Akli, his successor as Deputy Director-General of DG RTD, was elected Vice-Chair.

During 2016 there were several changes of positions both in the EC and in BIC. In addition, at the meeting of 13 September 2016, the Chair announced he would only hold his position until 31 December 2016, due to a change of employment that implied a forced resignation from the BIC board and consequently the BBI JU Governing Board, after the last meeting in December. As of the last meeting in December 2016, the composition of the Governing Board was:

EC (As designated by their post according to Commission Decision 4255 (2014) of 27 June 2014)	BIC members
Ruxandra Draghia-Akli, Deputy Director-General, DG RTD (Vice-chair)	Marcel WUBBOLTS, Chief Technology Officer, DSM ²⁶ (Chair)
John BELL, Director "Bioeconomy", DG RTD/F	Mat QUAEDVLIEG, Director Manufacturing SFPE, Member of Sappi Global Technology Development Board, Sappi
Carlo PETTINELLI, Director "Consumer, Environmental and Health Technologies", DG GROW/D	Christophe LUGUEL, Head of International Affairs, IAR Cluster
Aldo LONGO, Director "General Aspects of Rural Development and Research", DG AGRI/H	Claus CRONE FUGLSANG, Senior Vice-President for Research and Innovation, Novozymes
Peter DROELL, Director "Industrial Technologies", DG RTD/D	Agnes Van Ardenne (President - Dutch Biorefinery Cluster)

Table 27: Members of the Governing Board as at 31/12/2016

²⁵ Annex to the Council Regulation (EU) No 560/2014 of 6 May 2014 establishing the Bio-based Industries Joint Undertaking (BBI Regulation).

²⁶ Until end October 2016.

In 2016 four ordinary meetings took place as planned in the AWP 2016, of which one was held by teleconference (9 March), and three were face-to-face (11 April, 13 September and 15 December). The GB meeting of April took place in Utrecht in the framework of the 4th Bio-economy Stakeholder Conference.

The main decisions taken by the GB during 2016 respected the indicative timetable set in the AWP and were the following:

- First amendment of the 2016 Annual Work Plan and Budget to include in the Call 2016 the leftover budget from Call 2015 and Call 2014, and to reactivate unused administrative appropriations from 2015;
- Second and third amendments of the 2016 budget (and thus of the Annual Work Plan) to foresee that part of the EU contribution to BBI JU's 2016 administrative expenditure was transferred by the EC to the REA, on the BBI JU's behalf, for the management and payment of the experts-evaluators of its Call 2016;
- Amendment of the Specific Criteria for the selection of new Scientific Committee members;
- Funding of indirect actions pursuant to the 2015.2 Call for proposals;
- Adoption of the Annual Activity Report 2015;
- Adoption of the Call for new Scientific Committee members;
- Adoption of the Mission Charter of the Internal Audit Service of the European Commission in relation to bodies having legal personality set up by a basic act and entrusted with the implementation of a public private partnership;
- Decision on the setting up a Staff Committee;
- Adoption of the BBI JU Work Plan and Budget for 2017.

3.2. Executive Director

The Executive Director is the chief executive responsible person for the day-to-day management of the BBI JU in accordance with the decisions of the Governing Board. Mr Philippe Mengal has been Executive Director of the Programme Office since 1 October 2015.

Each year the Executive Director presents his proposals of priorities for the coming year to the Governing Board. The priorities are translated into yearly objectives for the BBI JU programme team and then cascaded into individual objectives for all staff members according to the SMART principles (Specific, Measurable, Accepted, Realistic and Time-related).

For 2016 the priorities and objectives were presented to the Governing Board at the meeting held on 11 April 2016. The priorities were mainly about building the organisation: the team, its tools, processes and procedures, while managing the Calls 2015.1 & 2. An important priority of 2016 was also to build communication and stakeholder management strategy while already performing communication activities to promote BBI and its Calls.

The objectives 2016 were organised around five priorities further explained below:

- Target operational excellence;
- Solve main key issues;
- Build trust and commitment;
- Establish strong, clear and reliable KPIs and reporting;
- Build visibility and recognition for the initiative.

For 2017, the Executive Director and his management team proposed five priorities to the Governing Board and the BBI Advisory Bodies:

- Have the Programme Office operate successfully at full speed;
- Continue to build an effective and well-balanced project portfolio;
- Confirm the industry commitment to the overall initiative;
- Reinforce BBI JU operational excellence thanks to successful reporting and audits;
- Move the BBI JU image from awareness to reputation and recognition.

The Executive Director and his management team have incorporated these priorities in the AWP2017. They will be cascaded into Programme Office objectives and further into individual objectives for the Programme Office staff by the end of February 2017.

3.3. States Representatives Group

The SRG is an advisory body of the BBI JU established in accordance with the BBI JU Regulation²⁷. The SRG represents the interests of Member States and associated countries under Horizon 2020. Its members provide advice to the Governing Board on the programme progress and achievement of its targets. It also provides advice on the definition of the strategic orientations for the programme and the AWP. It also has an important role in reporting on national activities and programmes related to the deployment of the bio-based industrial sector at national level, in order to promote synergies and complementarities with the programme, which operates at European level.

Tables 28 and 29 show the status of representation of Member States and associated countries linked to Horizon 2020 in the SRG as of 31/21/2016.

²⁷ For the role of the SRG see art 11 of the Statutes of the BBI JU annexed to Council Regulation (EU) [No 560/2014](#).

Member States (MS)	Nomination of a representative by MS
Austria	Yes
Belgium	Yes
Bulgaria	Yes
Croatia	Yes
Cyprus	No
Czech Republic	Yes
Denmark	Yes
Estonia	Yes
Finland	Yes
France	Yes
Germany	Yes
Greece	Yes
Hungary	Yes
Ireland	Yes
Italy	Yes
Latvia	Yes
Lithuania	Yes
Luxembourg	Yes
Malta	No
Netherlands	Yes
Poland	Yes
Portugal	Yes
Romania	Yes
Slovakia	Yes
Slovenia	Yes
Spain	Yes
Sweden	Yes
United Kingdom	Yes

Table 28: Member States represented on SRG

Associated countries (AC)	Nomination of a representative by the AC
Albania	Yes
Bosnia and Herzegovina	No
F.Y.R Macedonia	No
Faroe Islands	Yes
Georgia	No
Iceland	Yes
Israel	Yes
Moldova	Yes
Montenegro	No
Norway	Yes
Serbia	No
Tunisia	No
Turkey	Yes
Ukraine	No

Table 29: Associated Countries represented on SRG

Two Member States and seven associated countries have not nominated a representative yet, meaning that 20% of the Member States and associated countries are currently unrepresented.

SRG meetings in 2016

During 2016, two ordinary meetings of the SRG were organised by the Programme Office, on 25 May 2016 and 5 October 2016. The SRG made a valuable contribution to the strategic orientation of the programme in terms of the adjustment of the SIRA and the development of the AWP 2017. It also supported other programme-related activities by issuing concrete recommendations for the widening participation actions, improving communication and information to applicants, synergies and complementarities and was active in the deployment of the programme at national level.

In addition to the two ordinary meetings, on 26 May 2017 the Programme Office organised a half-day seminar between BIC and the SRG. The objective was to enable an informal discussion between BIC and the SRG on aspects related to the organisation and functioning of BIC. The seminar allowed the participants to gain a better understanding of the organisation and process of preparation of the work plan on BIC's side and to discuss the challenges and benefits for national stakeholders of joining BIC. As a result, a set of recommendations to improve cooperation between the SRG and BIC were drawn up and implemented during 2016.

The SRG was chaired by Chair José Manuel González Vicente (Spanish representative) and Vice-Chair Niels Götke (Danish representative). Meetings were also attended by the Chair of the Scientific Committee, representatives of the Governing Board, the BBI JU Executive Director, BIC, the European Commission, and Programme Office staff.

The objectives for SRG meetings in 2016 were:

- to receive advice from the SRG on the adjustment of the SIRA and on the priority paper for the preparation of the 2017 AWP. The SRG discussed and presented their key messages on the SIRA adjustment and priorities for AWP to the Governing Board.
- to give advice to BBI JU on the final draft of the AWP 2017
- to inform the SRG on the progress of the programme towards the achievement of its targets, including the results of the 2015 Calls and information on ongoing projects results. Topics presented included SME participation, coverage of Call topics and value chains, the level of commitment of the industry in-kind (IKOP and IKAA) and in-cash (financial contributions), the balance of the budget of RIAs vs. IAs, KPIs and synergies and complementarities.
- to elect a second Vice-Chair, Fabio Fava (Italian representative), for the following two years.

- to discuss national activities on deployment, communication and dissemination, based on a questionnaire on national activities completed by the SRG members in advance. As a result, the SRG promoted the organisation of an event on barriers and opportunities for the deployment of the bio-based industrial sector in the Mediterranean region.
- to conduct elections for the position of SRG Chair for a period of two years, according to the SRG Rules of Procedure. The current Chair (José Manuel González Vicente) has held the position since September 2014 and was re-elected unanimously by the group for two additional years
- The SRG was also updated on the progress in the implementation of the programme towards the achievement of its targets, including preliminary submission results of the 2016 Call, synergies with other EU initiatives, information on the Scientific Committee composition and the BBI JU communication strategy.

One of the recommendations made by the SRG was the organisation of a dedicated training workshop for National Contact Points. The training should help NCPs to be better prepared to address questions from applicants and is planned for April 2017.

Minutes and documents from both meetings were distributed to the BBI JU members (BIC, EC) and all participants. A secure dedicated member area for the States Representatives Group was re-launched in 2016 to securely distribute and archive all related background documents, agendas and presentations and meeting minutes and recommendations.

3.4. Scientific Committee

The SC is the other advisory body of the BBI JU, established in accordance with the BBI JU Regulation. The SC assists the BBI JU in providing scientific advice on the areas of work undertaken by the BBI JU, such as advice on the scientific priorities to be addressed in the annual work plans, as well as commenting on the scientific achievements.

The SC met twice in 2016 in the Programme Office at Brussels. In 2016, the SC made valuable contributions to the strategic orientation of the programme, such as to the adjustment of the SIRA and the development of the AWP 2017. The SC also supported other activities by issuing concrete recommendations in the definition of programme KPIs, communication activities, and the SC selection process. This contribution was made via a two-stage consultation process.

The first stage in spring 2016 was to collect SC input for the need to adjust the SIRA based on recent scientific, technological and market developments, and to specify the priorities that should serve as the basis for the topics in the AWP 2017. The second stage of the consultation in Autumn 2016 was to review the draft versions of the SIRA and the AWP 2017, while giving detailed recommendations and advice on the scientific content. The consultation process was supported by the SC meetings.

Scientific Committee meetings in 2016

During 2016 two meetings of the SC took place on 24 May and 4 October 2016. The first meeting was also attended by the newly appointed Chair of the Governing Board (Marcel Wubbolts), the Vice-Chair of the SRG (Niels Gøtke) and representatives from BIC, the European Commission and Programme Office staff and its ED. The second meeting was attended by Ruxandra Draghia-Akli as the newly appointed Vice-Chair of the Governing Board along with representatives from BIC, the European Commission, the Executive Director and other Programme Office staff. Both meetings were chaired by Kevin O'Connor (SC Chair).

The objectives of the 2016 meetings were to:

- to update the SC on the progress of the programme towards the achievement of its targets, including the results of the 2015 Calls for proposals and information on ongoing projects.
- to discuss the SC input from the first stage consultation process on the adjustments of the SIRA and on the priorities for the AWP 2017. In general, the SC supported the priorities for AWP 2017 and there was a general agreement that the draft of the adjusted SIRA was heading in the right direction. The SC provided detailed written recommendations to the Programme Office, which were transferred to the founding members in BIC and the EC. The SC chair presented the main messages from the SC meeting during the SRG meeting the following day.
- to obtain the SC's input from the second stage of the consultation on the AWP 2017. The AWP 2017 topics and budget had been sent to the SC members in advance. SC members provided their individual input to the SC Chair one week before the meeting. The input of the SC members was discussed during the meeting.
- to discuss the need to have complementary expertise represented in the SC in order to cover all relevant scientific domains in the broadening bio-based industries field. The feedback received from the participants was presented to the SRG and helped the Programme Office in setting up the workflow for the SC members' selection (see below)
- to exchange information on communication, dissemination and deployment activities linked to BBI programme activities. Progress in the implementation of the BBI JU widening participation strategy and activities related to SRG and national activities was discussed.
- to discuss the progress and achievements made by the programme since the previous meeting and its ongoing work, including results of submissions to the 2016 Call for proposals, information on synergies with other EU initiatives, and on the progress made to complete the composition of the Scientific Committee.
- to present the ongoing process for establishing the BBI JU communication strategy. BIC and the Programme Office provided an update on the progress of adjustments to

the industry's SIRA and on the planning and priorities for the AWP 2017.

In general, the SC members acknowledged that the AWP draft was of high quality and accurately reflected previous SC recommendations related to the priorities to be addressed in the AWP 2017. The SC members appreciated the need to select only a selection of the possible topics for AWP 2017 from the Priority Paper 2017-2018 due to budget restrictions, while retaining some topics for the AWP 2018.

Topic-specific recommendations were formulated and presented to the SRG the following day. These were provided to the Programme Office and the founding members (BIC and EC) in the form of a set of written recommendations. As a follow-up action the partners (BIC and EC) provided written feedback to the Programme Office on how the SC recommendations have been implemented in the final version of the AWP 2017. This feedback was distributed to the SC members.

Minutes and documents from both meetings were distributed to the BBI JU founding members (BIC, EC) and all participants. A secure dedicated member area for the members of the Scientific Committee was re-launched in 2016 to securely distribute and archive all related background documents, agendas and presentations and meeting minutes and recommendations.

Selection and Composition of the Scientific Committee

The Specific Criteria and Selection Process for the Composition of the SC was adopted at the Governing Board meeting on 27 June 2014 and amended in 2016 by the Governing Board Decision 4/16. The SC can consist of fifteen members who are appointed for three years. The appointment can be renewed once for a new three-year term upon confirmation by the Governing Board.

At the end of 2016 there were ten SC members, as two members left the SC in autumn 2016. One member left the SC due to personal matters and one member was withdrawn from the SC membership due to non-compliance with the SC rules (attendance of meetings).

Additionally, one member resigned from the SC membership in January 2017 due to a conflict of interest (change of employment/full BIC member). The mandate of the remaining nine SC members will conclude in 2017. The majority of the currently active members expressed interest to continue their SC membership for another three-year term (seven SC members).

In order to ensure cover for any missing expertise in the SC and to create a reserve list the Programme Office launched a new selection process of SC members.

The call for expressions of interest for independent experts to be appointed as SC members of BBI JU was published on 3 December 2016 in the Official Journal of the European Union (OJ), on the BBI JU and BIC websites and distributed via the relevant networks (SRG, SC, GB, and others). The appointment of the additional SC members is expected to take place before the start of the consultation process of the AWP 2018 in April 2017.

4. INTERNAL CONTROL FRAMEWORK

BBI JU adopted its Internal Control Framework in September 2015 in order to provide reasonable assurance to the Governing Board regarding the achievement of its objectives. This framework involves all the measures taken to ensure that:

- Operational activities are effective and efficient – the BBI JU meets its objectives defined in the Annual Work Plan using the adequate human and financial resources and avoiding misuse.
- Legal and regulatory requirements are met – the BBI JU operates fully in accordance with all legal and regulatory requirements.
- Reporting is reliable – Programme Office management produces regular, reliable and easily accessible management information on financial management, use of resources and progress on the achievement of operational objectives.
- Assets and information are safeguarded – Programme Office management takes the necessary measures to ensure the completeness and preserve the integrity of the data on which management decisions are taken and reports are issued.

All Programme Office management processes and functions meet these four objectives, meaning that the largest possible preventive, detective and corrective controls are in place. The main activities performed in 2016 include the following:

- Ensure awareness and implementation of BBI JU Internal Control Standards (ICS) through yearly assessment;
- Report on compliance and effectiveness in the annual activity report;
- Carry out periodic review of risks at least yearly in the context of preparing the annual work programme;
- Coordinate visits of the European Court of Auditors;
- Liaise with the auditors of the Internal Audit Service;
- Follow up on the implementation of action plans on audit recommendations and on observations of the discharge authority.

4.1. Financial Procedures

The BBI JU adopted a Manual of Financial Procedures in October 2015 as a requirement for its autonomy. These procedures were revised during 2016 in light of the EC DG Budget guidelines and in order to better address the particular risks and various other specificities

of the joint undertaking. This revision also took into account the increased number of Programme Office staff in order to establish a clearer definition of roles. The Programme Office carried out an analysis to establish a common procedure for tendering and signing procurement contracts, which will be definitively put in place from the beginning of 2017.

4.2. Ex-ante controls on operational expenditure

The Programme Office, under the administration and finance unit, has been performing *ex-ante* controls in line with the provision of article 18 of the BBI JU Financial Rules²⁸ in order to provide assurance to the authorising officer on the correctness of all payments.

Checklists further complement guidance on *ex-ante* controls included in the financial rules and in the Manual of Financial procedures of BBI JU. For the operational expenditure, the processing and recording of the transactions in the accounting IT system (ABAC) are mostly performed via the corporate Horizon 2020 IT tools (SYGMA/COMPASS), which assures a high degree of automation, and controls are embedded in each workflow. In addition to this, the Programme Office has established internal step-by-step procedures for financial verification in order to ensure coherence in controls and to facilitate the learning curve of newly recruited staff.

During 2016, the only operational expenditure was the grant pre-financing payments from the Calls 2015.1 (3 payments) and 2015.2 (23 payments). The average TTP was eight days (against a target of 30 days) and 25 out of 26 payments were on time.

Throughout 2016 the Programme Office has been cooperating with other members of the Horizon 2020 research family in the definition of a common *ex-ante* strategy for interim and final payments related to grants, under the coordination of the Common Support Centre (CSC) of DG RTD of the European Commission.

The overall objective was to define cost-effective, efficient, rapid and harmonised *ex-ante* controls avoiding unnecessary burden for beneficiaries while ensuring a reasonable level of controls. In parallel to this process, taking into account risk-based and cost-effectiveness considerations, the Programme Office has commenced the setup of internal procedures defining the *ex-ante* controls to be performed on the first batch of periodic reports and cost claims that are expected to be received by the first quarter of 2017. Additionally, the Programme Office has planned mid-term project reviews to be carried out by external experts and *ad-hoc* technical reviews to be launched when deemed necessary.

²⁸ 'each operation shall be subject at least to an *ex-ante* control based on a desk review of documents and on the available results of controls already carried out relating to the operational and financial aspects of the operation'

4.3. Ex-post control of operational expenditure and error rates identified

No *ex-post* audits were carried out on operational expenditure in 2016 because the first batch of periodic reports and cost claims are to be processed and paid only by Q2 of 2017. This means that in October 2016 it was not possible to proceed with the selection of audits for the audit planning of 2017 along with the other clients of the Common Audit Service (CAS) of DG RTD. The Programme Office requested the CAS to proceed with a dedicated selection during 2017.

The Programme Office has been cooperating with other members of the Horizon 2020 research family, under the coordination of the CSC, on the update of the Horizon 2020 Common Audit Strategy for interim and final payments of operational expenditure and in the definition of implementing rules. These cover the Audit Approach for Bankruptcy Cases, Materiality Threshold for Extrapolations, Indicative Audit Programme instructions on the audit findings, Sampling methodology, Working Arrangements for Horizon 2020 Processes, Coordination of Horizon 2020 audits under the coordination of the CSC.

4.4. Audit of the European Court of Auditors

On 15 November 2016 the European Court of Auditors (ECA) published its report on BBI JU's annual accounts for the financial year 2015, in which the ECA issued a 'clean opinion' (with no qualifications) on the reliability of the accounts and the legality and regularity of all transactions underlying the annual accounts.

4.5. Internal Audit

The Internal Audit Service (IAS) of the European Commission performs the internal audit function for the BBI JU as specified in its financial rules adopted by the Governing Board on 09 December 2014 as amended by the GB decision of 23 December 2015.

On 11 April 2016 the Governing Board ratified the IAS mission charter and, during July/August 2016, the IAS carried out a risk assessment exercise covering the Programme Office's major processes, both operational and administrative.

The exercise consisted of the following steps:

- a desk review of the main documents concerning the BBI JU; interviewing on-site key BBI JU staff in order to obtain an overview of the processes and the related key controls;
- assessing the most important risks related to these processes;
- drafting a strategic audit plan with a short list of future audit topics.

The assessment of the administrative processes, including the IT processes of the joint undertaking, was based on a standardised, structured risk assessment questionnaire.

Questions specifically adapted to the operational processes of the programme were used for the assessment of the operational processes.

The results of the risk assessment have been summarised in a matrix mapping the processes of the Programme Office according to their maturity in relation to risks and related controls. Auditors have assessed the risks in order to establish the possible audit topics and to prioritise them in view of the future audit plan.

On that basis, on 22 December 2016 the IAS delivered its Strategic Internal Audit Plan (SIAP) 2017-2019 to the Executive Director and Governing Board and the following prospective topics have been proposed for the three years to come:

- in 2017: a limited review of the implementation of the Internal Control Standards (ICS);
- in 2018: Horizon 2020 grant process (from the identification of the Call topics to the signature of the grant agreement);
- in 2019: a performance management of activities.

The strategic internal audit plan will be subject to an annual review and the topics may be adjusted or new topics may be added to reflect new and emerging risks as well as significant changes in the processes. The next in-depth risk assessment is planned for 2020.

4.6. Risk management and Conflict of Interest

The Programme Office has put a comprehensive risk management process in place, in line with applicable provisions and guidelines. In 2016, the Programme Office conducted the risk assessment exercise at two levels:

- risk assessment within the scope of the objectives set in the AWP 2017.
- risk assessment within the scope of the priorities set for the organisation and cascaded to individuals for 2017.

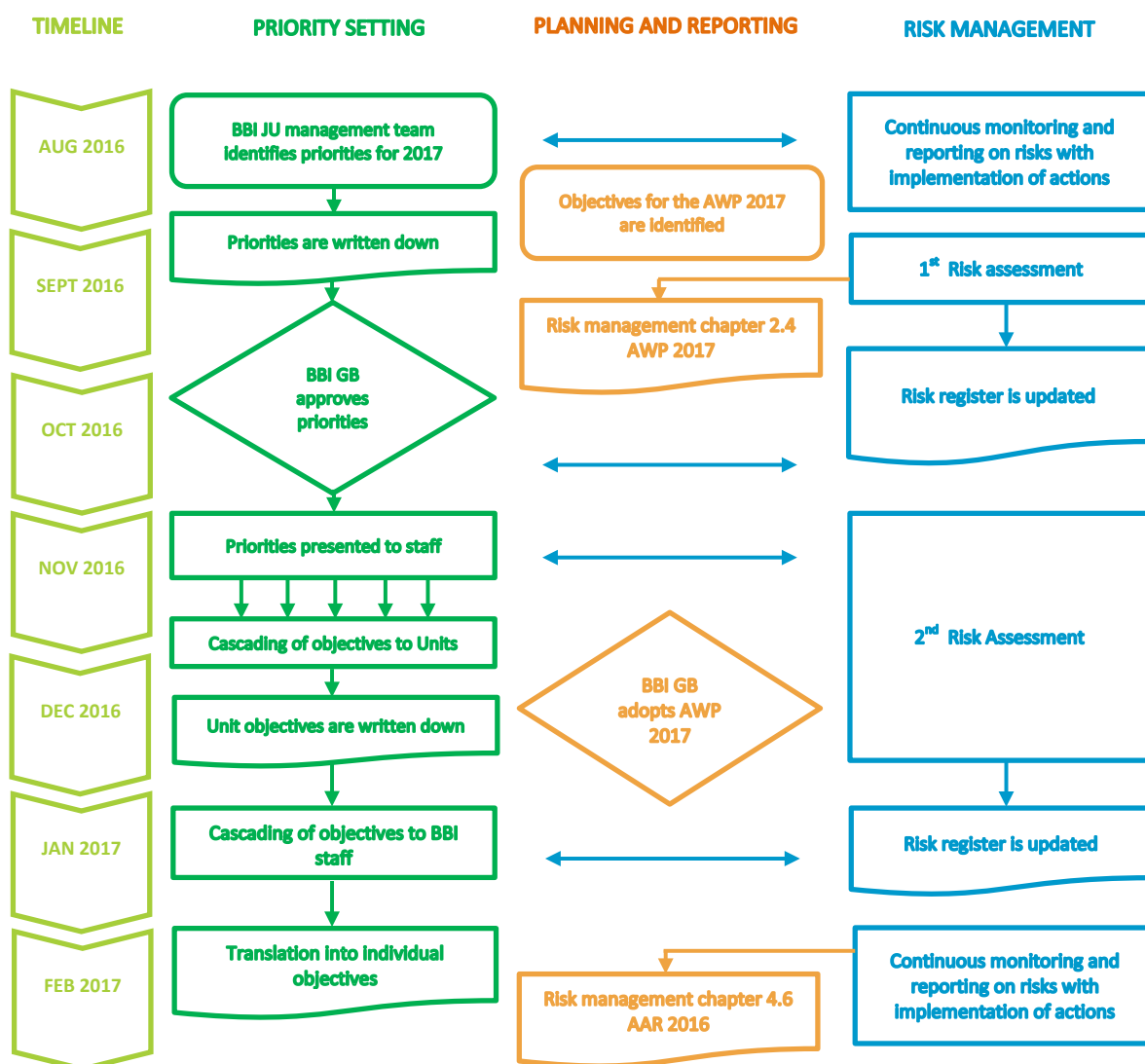


Figure 46: Flowchart of risk management process implemented at BBI JU in 2016.

The management team of the Programme Office steered the risk assessment on the wider spectrum of activities needed to achieve the objectives identified in the AWP 2017 and the priorities set by the Executive Director. The risk identification and assessment considered the root causes of each risk and their potential consequences, factoring in the controls already existing in the BBI JU Programme Office and the convergences and inter-dependencies between risks. This process has been documented in the internal Risk Register of the organisation, which also incorporates a description of the plans of actions with action owners and individual deadlines.

A total of 20 risks have been identified and described in the Risk Register with different degrees of importance, convergence and inter-dependency. The detailed sensitive information contained in the risk register was shared with the ECA and with the IAS. Risks

whose management relies on the cooperation with the principal stakeholders of the joint undertaking (the European Commission, BIC and the BBI JU advisory bodies), were communicated before the adoption of the AWP.

The most important risks currently requiring further actions in addition to existing controls are:

- Programme Management:

Risks related to the external environment potentially affecting reporting and certification of in-kind contributions;

- Project Management:

Risks related to the external environment and to the Programme Office planning, processes and systems potentially affecting payments of pre-financing, ex-ante controls and, more in general, the swift processing of reports and payments;

Risks related to legality and regularity aspects potentially affecting ex-post controls on operational expenditure and their timely implementation and reporting of their results;

- HR management:

Risks related to people and to the organisations potentially affecting availability and efficient allocation of resources.

As risks naturally evolve, the Programme Office has established a continuous reporting process to the Executive Director. This process covers updating the Risk Register, monitoring of identified risks and implementing relevant actions for assurance purposes.

Other sensitive topics have been assessed as effectively and efficiently addressed through the controls already implemented at BBI JU. The following points are reported in more detail:

- Management of potential conflicts of interest:

The Programme Office has developed a comprehensive set of rules and procedures that are effectively implemented across its entire governance structure on a day-to-day basis as follows:

- On joining the Programme Office team, each staff member acknowledges and agrees the application of the staff regulations and signs a declaration of honour on the management of conflicts of interests.
- A copy of the code of good administrative behaviour is also provided to staff members. Furthermore, training on identification and management of conflict of

interests and whistleblowing was provided in 2016.

- Conflict of Interest procedures for the members of the Governing Board and of the advisory boards of BBI JU are effectively implemented.
- Specific measures have been implemented for prevention and management of conflicts of interest of experts in charge of the evaluation of grant applications, projects and tenders and for providing opinions and advice in specific cases.

The European Commission has been consulted since 2015 on the Implementing Rules (IRs) on the prevention and management of conflicts of interests for the Programme Office staff. In January 2017 DG HR of the European Commission agreed on a final version of the IRs and launched the procedure for a formal decision. Following this, the Programme Office will be able to submit these rules to the Governing Board for adoption. This will allow in particular the adoption of a common template for the declaration of absence of a conflict of interest, and also enable a reporting to the discharge authority on the completion of these declarations.

- Fraud prevention and detection

According to Article 12 of the BBI JU's Financial Rules, the budget should be implemented in compliance with effective and efficient internal control, including prevention, detection, correction and follow-up of fraud and irregularities.

Following the adoption of an Anti-Fraud Strategy by the Commission in June 2011, the first common Research Anti-Fraud Strategy was adopted in July 2012, and updated in March 2015 to take account of changes introduced by Horizon 2020. The Research Anti-Fraud Strategy includes an action plan to be implemented in cooperation with all the members of the Research Family.

In 2016 BBI JU continued to cooperate in this field within the Fraud and Irregularities network of Horizon 2020 research family. No potential fraud cases have been detected in the course of the year.

Relevant Programme Office staff have had training on fraud detection and the possibility to refresh knowledge in the field has been promoted within the learning and development framework of the BBI JU.

- Data protection

The Programme Office has taken the necessary measures to assure that appropriate data protection measures are in place and appointed two key internal functions in this field and in line with legal and framework requirements. These two functions are:

- The Local Informatics Security Officer (LISO) in charge of ensuring the security of information systems at a local level.

- The Data Protection Officer (DPO) in charge to ensure that any controller of BBI data respects the data protection obligations and that data subjects are informed of their rights and obligations pursuant to the Regulation (EC) 45/2001.

BBI JU shares ICT infrastructure with other Joint Undertakings located in the same building. BBI JU adopted in 2016 the Common Security Policy, which sets out the security and data protection requirements and principles to be applied by data processors on outsourced activities.

Preservation of internal information security is covered under the Security Plan of Managed Services. Preservation of data integrity, legibility and accessibility is assured in the IT infrastructure of BBI JU and relevant elements of assurance are addressed in the Business Continuity Plan and in the Disaster Recovery Plan.

Within the processing of personal data, application of Regulation (EC) No 45/2001 is ensured in two distinct contexts:

- Data collection in the context of the Calls for proposals under Horizon 2020; this data is collected and treated within the corporate specifications of Horizon 2020 IT tools;
- Processing of personal data in the context of public procurement, recruitment²⁹, spontaneous contact, etc. Such data is also processed pursuant to Regulation (EC) No 45/2001 under the responsibility of the BBI JU Data Protection Officer (DPO).

4.7. Compliance and effectiveness of Internal Control

In line with articles 12 and 17.3 of the BBI JU Financial Rules, the Governing Board adopted 16 Internal Control Standards (ICSs) on 14 September 2015 on the basis of the equivalent standards laid down by the European Commission for its own departments, having due regard to the risks associated with the Joint Undertaking management environment.

The 16 ICSs are structured around six major areas:

- Mission and values (ICS1 Mission, ICS2 Ethical and organisational values);
- Human resources (ICS3 Staff allocation and flexibility, ICS4 Staff evaluation and development);
- Planning and risk management process (ICS5 Objective and performance indicators, ICS6 Risk management process);

²⁹ Personal files are subject to a different procedure and directly communicated to the European Data Protection Services (EDPS) by the HR Manager.

- Operations and control activities (ICS7 Operational structure, ICS8 Processes and procedures, ICS9 Management supervision, ICS10 Business continuity, ICS11 Document management);
- Information and financial reporting (ICS12 Information and communication, ICS13 Accounting and financial reporting);
- Evaluation and audit (ICS14 Evaluation activities, ICS15 Assessment of internal control systems, ICS16 Internal audit function).

Each ICS consists of two components: the standard itself that defines the minimum control objectives to be achieved, and the requirements that detail the relevant systems that shall be put in place and the practical actions that shall be implemented in order to assure the effective implementation of each standard.

The compliance with ICSs and the effectiveness of the internal control systems have been monitored and assessed across the full year. IAS activities in this regard did not provide any assurance audit on Programme Office processes and systems. However, the risk assessment performed with the IAS provided to the Programme Office the opportunity to map and assess the level of documented controls in place. This also provided valuable information on the state of implementation of IC systems. The internal risk management process is an integral part of BBI JU's internal control framework and it incorporates an assessment of internal controls measures in place against identified risks.

The information available from other internal and external control monitoring tools was analysed for its impact on the effectiveness of BBI JU's internal control system. This was carried out in addition to complement the compliance and effectiveness assessment. The information used came mainly from: quality controls from the accountant at the European Commission, reports from the European Courts of Auditors, quarterly reports to the Governing Boards, the registry of exceptions and internal control weaknesses.

The Programme Office achieved all the priority objectives set in the AWP 2016 for the ICSs. It implemented the necessary actions to assure compliance with the overall set of control objectives and continuously reviewed the underlying IC systems throughout. The responsible Programme Office staff identified initiatives with an updated action plan, monitored the implementation and reported to the management.

According to the AWP 2017 of BBI JU, in 2017 the focus will be put on a limited review of BBI JU ICS. This work will be performed in cooperation with the IAS, as agreed in its SIAP 2017-2019 for BBI JU. The aim will be to provide a higher degree of maturity of the system. The Programme Office will conduct a control gap analysis and correct any anomalies found. The Programme Office has also started the formal documentation of processes and procedures that will continue in 2017. The emphasis on controls will be placed on prevention vs. detection, with a focus on process owners being responsible for a robust self-assessment of operating effectiveness. These activities will be supported and complemented by an in depth self-assessment aimed to provide a critical analysis on organisation, processes and resources. This process is expected to assess compliance and effectiveness of the Programme Office IC systems, and to further promote its efficiency.

5. MANAGEMENT ASSURANCE

5.1. Assessment of the Annual Activity Report by the Governing Board

Introduction

The Bio-based Industries Joint Undertaking (BBI JU) Programme Office sent the first version of the BBI JU Annual Activity Report (AAR) for 2016 to the BBI JU Governing Board (GB) on 28 February 2017. Due to the substantial number of comments (and changes requested) by the European Commission (EC), the BBI JU Programme Office submitted a second version to the Commission on 27 April 2017, and a third version on 19 May 2017. This third version is the object of this assessment.

On 15 December 2016, the GB had mandated a 'Working Group' to assess the AAR 2016. The members of this Working Group are Mr Dirk Carrez (Executive Director of the Bio-Based Industries Consortium (BIC), the member other than the Union) and the Head of Unit DG RTD.F2 of the EC (now Ms Gaia Fantechi). The GB had agreed on the launching of a written procedure for its adoption, following the Working Group's assessment.

In accordance with Article 15(3) of the GB's rules of procedure, Ms Fantechi and Mr Carrez reported back to the GB on 16 June 2017 by providing a draft assessment, which is the basis for the GB's current assessment.

Analysis

The Annual Work Plan (AWP) 2016 was adopted by the GB on 16 December 2015 and was subsequently amended on 23 March 2016 and on 15 December 2016. The GB recognises the progress made by the BBI JU towards achieving the objectives set in the AWP 2016. It notes in particular that:

- The grant agreements of Calls 2015.1 and 2015.2 were signed with an average time to grant of 227 days and 239 days respectively (against a target of 243 days), thus reflecting the efforts made. The Union provided a total amount of EUR 179 036 975 in funding for the 26 projects resulting from these calls.
- Call 2016 was published on 18 April 2016 with a deadline for submission of proposals on 8 September 2016. It had an estimated Union budget of EUR 188 650 000. The resulting 29 grant agreements, which included a Union contribution of EUR 185 602 866, were signed by May 2017.
- Including the projects resulting from Call 2016 – which had not yet been signed at the reference date of 31 December 2016, but had undergone selection only – the BBI JU project portfolio accounts for 65 projects, with a total Union contribution of EUR 414 293 549. The funding is allocated as follows: 33 % for six flagships; 40 % for 20 demonstration actions; 26 % for 33 research and innovation actions; 1 % for six coordination and support actions.
- Among the 729 beneficiaries of the Calls 2014-16, 264 (36 %) are small or medium-sized enterprises (SMEs), which received 29 % of the Union contribution. This is higher than the overall target for Leadership in Enabling and Industrial Technologies (LEIT) and the Societal Challenges in Horizon 2020. The share of the Union contribution going to SMEs

rose from 20 % in 2014 to 25.4 % in 2015 and further increased to 35 % in 2016 (in terms of SME participation: 24.5 % in 2014; 40 % in 2015; and 36.7 % in 2016).

- For the calculation of the leverage, only the signed grant agreements from Calls 2014 and 2015 can be considered, as the Call 2016 grant agreements have been signed during 2017 only. Until the end of 2016, the BBI JU funds committed to these projects amount to EUR 228 690 682. This Union contribution has leveraged a total contribution from the member other than the Union or its constituent entities of EUR 406 853 657. This total contribution consists of:
 - In kind contributions to operational activities (IKOP) of EUR 114 621 657 (signed grant agreements from Calls 2014-15);
 - In kind contributions to additional activities (IKAA) of EUR 291 482 000 (certified for 2014 and 2015);
 - Financial contributions to operational costs ('in cash') of EUR 750 000 (Calls 2014 to 2016). This is far below the objective of EUR 182 500 000 for the full duration of the BBI JU.
 - The in kind contributions to additional activities (IKAA) for 2016 can neither be taken into account, as they have not yet been certified at the time of finalising the AAR 2016.
 - The financial contribution ('cash') at project level of EUR 2 939 158 (signed grant agreements from Calls 2014-15) cannot be taken into account yet, as the current Council Regulation does not allow for this.
- The GB observes that the BBI JU has refrained from showing figures highlighting the calculated leverage effect in the AAR 2016, in either of the sections that are announced for this (sections 1.3.1.3 and 1.7). The GB proposes to use the figures and calculation mentioned below.
- By applying the leverage formula used by the EC for the interim evaluation of the Joint Technology Initiatives (JTIs),ⁱ the total leverage effect obtained in the first three years of operations is already 1.8, meaning that the member other than the Union or its constituent entities have contributed 1.8 euro for every euro of Union contribution. Whereas the operational leverage is at 0.5, the additional leverage is at 1.3. By taking into account also the (not yet certified) figures given in the Draft IKAA Report 2016³⁰, the additional leverage reaches 2.1, giving a total leverage effect of 2.6. Taken together, this is a positive step in the attempt to achieve the expected leverage factor of 2.8 by 2024.
- In 2016, the BBI JU Programme Office successfully used the facilities of the Research Executive Agency (REA) for the evaluation of Calls 2015.2 and 2016 for the first time.
- The GB takes note of the reported under-execution of the administrative budget. The GB appreciates the efforts to absorb this administrative surplus, which was due to an over-budgeting of the staff costs for 2015 and 2016, which were decided before the autonomy of the BBI JU.
- The GB appreciates the very active work on communication and outreach done by the BBI JU Programme Office and its staff, which participated actively in 15 national info

³⁰ Note that the IKAA Plan 2016 is in the process of being approved by the GB at the time of finalising this assessment. The IKAA Report 2016, which is based on that plan, is expected to be certified just after the approval of the IKAA Plan 2016.

days and 34 further events, improved the web site and increased visibility on social media, and took part in external publications.

- The GB notes that the target of 22 staff members set in the AWP 2016 has almost been met, and that the BBI JU staff carried out activities in 2016 that were relevant to their role.
- The GB acknowledges that the Programme Office management processes and functions meet the four objectives of its Internal Control Framework as a result of: a yearly assessment of the BBI JU's Internal Control Standards; a report on compliance and effectiveness in the AAR; yearly periodic reviews of risks; liaising with auditors from the Internal Audit Service and the European Court of Auditors; and follow-up on the implementation of action plans on audit recommendations and on observations by the discharge authority. The GB also appreciates the revision of the Manual of Financial Procedures of 2015 in light of the DG Budget guidelines with a view to better addressing the particular risks facing the joint undertaking. The BBI JU Programme Office has been performing *ex-ante* controls in line with Article 18 of the BBI JU Financial Rules in order to provide assurance to the authorising officer on the correctness of all payments: use of the IT tools of Horizon 2020, and internal step-by-step procedures for financial verification. Moreover, the GB also acknowledges that in 2016 the BBI JU Programme Office continued to participate in the Fraud and Irregularities network of the Horizon 2020 research family, and that no potential fraud cases were detected. The GB takes note that no *ex-post* audits were carried out on operational expenditure in 2016, because no periodic payments have been made yet.

The GB however considers that the following aspects of the report require improvement:

- The GB notes that the BBI JU has made an effort to address the numerous concerns the EC had on the first version of the report on key performance indicators (KPIs). Correct and sound reporting is crucial for avoiding any reputational risk to the BBI JU (and by extension, the EC and BIC), since the figures will be public and will be scrutinised with the utmost attention by various stakeholders.
- The GB also asks the BBI JU, the BIC and the EC to make a strong effort to improve the questionnaire to coordinators as well as to develop a consistent methodology to verify self-reported information (KPIs reported by the coordinators).
- The GB requests that the AAR 2017 gives and describes the value for the operational and additional leverage calculated according to the official leverage formula used by the EC for the interim evaluation of the JTIs. To remove the bias due to the unavoidable time lag between the finalisation of the AAR, the approval of the IKAA Plan and the certification of the IKAA Report, the figures of the Draft IKAA Report could be considered for the additional leverage calculation, in addition to those given in the already approved IKAA Reports, but clearly distinguishing between the results based on certified data and those based on the draft report.
- The GB asks the BBI JU to refrain from qualitative and premature statements, such as '... showing Europe is back on the map of the attractive areas to invest in the bio-based industry'.
- The GB notes that the AAR submitted should conform to the standards for publication. This was not the case for the first two versions submitted, requiring supervision by the EC. The GB asks all parties involved to perform a critical analysis of the AAR drafting process in order to deliver timely and efficiently an improved AAR fit for publication.

Conclusion

The GB believes that the technical and operational information provided in the AAR 2016 reflects the situation at the end of 2016 in a realistic way. It believes that the AAR 2016 provides a complete and accurate report of the progress made by the BBI JU during 2016, in particular on the objectives set in the AWP 2016 as last amended on 15 December 2016. The report clearly identifies the risks associated with the BBI JU's operations, duly reports on how the resources provided were used, and indicates the efficiency and effectiveness of the BBI JU's internal control system.

However, the GB also draws the BBI JU's attention to the issues that merit improvement, such as the lack of leverage figures in the AAR, verifying and describing KPIs, and the quality management of outgoing documents. It also draws the attention of BIC to the still existing risk of BIC failing to deliver on the financial contribution to operational costs (in cash).

Based on the Working Group's report, the declaration of the Authorising Officer, and the information provided in this report, the conclusion of the assessment of the GB is that the 2016 key objectives have been achieved in compliance with the principles of legality and of sound financial management.

The GB, taking note of the declarations of assurance provided by the BBI JU's management, confirms that overall, suitable internal control standards have either been put in place or are still being developed, and that the BBI JU is properly monitoring and mitigating risks.

ⁱ The leverage refers to contributions from participants in the BBI Initiative to the activities of the initiative. It is calculated as the sum of two elements: operational leverage and additional leverage. These two are hereby described:

$$\text{Operational leverage} = \frac{\sum IKOP + \sum "in\ cash"}{\sum EU\ contribution}$$

Based on the in-kind and financial ("in cash" contributions to operational costs of Calls 2014 to 2016 as well as the signed grant agreements of Calls 2014-15, the result by 31 December 2016 is:

$$\text{Operational leverage} = (114\,621\,657 + 750\,000) / 228\,690\,682 = 0.504$$

The additional leverage refers to contributions from the member other than the Union or its constituent entities to the additional activities outside the work plan of the BBI JU contributing to the objectives of the BBI Initiative:

$$\text{Additional leverage} = \frac{\sum IKAA}{\sum EU\ contribution}$$

Based on the available certified contributions to additional activities in 2014 and 2015 and the signed grant agreements of Calls 2014-15, the result by 31 December 2016 is:

$$\text{Additional leverage} = 291\,482\,000 / 228\,690\,682 = 1.275$$

For 2016, the certified contributions to additional activities were not available by the date of drafting the current assessment and therefore had to be disregarded.

The total leverage effect is thus

$$Total\ leverage = 0.504 + 1.275 = \mathbf{1.779}$$

By taking into account already now also the figures given in the Draft IKAA Report 2016,¹ the result of the additional leverage would be:

$$Additional\ leverage_{incl.\ Draft\ IKAA\ Report\ 2016} = (291\ 482\ 000 + 185\ 863\ 000) / 228\ 690\ 682 = 2.087$$

The total leverage effect including the not-yet certified figures of the Draft IKAA Report 2016 would be thus

$$Total\ leverage_{incl.\ Draft\ IKAA\ Report\ 2016} = 0.504 + 2.087 = \mathbf{2.591}$$

5.2. Elements supporting assurance

This section reviews the assessment of the elements reported in chapters 2 and 4 and draws conclusions that enable the Executive Director to obtain a full picture of the state of play of the BBI JU, underpinning the reasonable assurance given by the Authorising Officer in his declaration of assurance of the Annual Activity Report.

The main elements supporting such assurance are based on the management assessment of results of key indicators related to the budget execution, the internal control self-assessment, the results of audits from the ECA and of the work performed by the IAS in the course of the reporting year, as well as the reporting from the Head of Administration and Finance, from the Head of Programme, from the Internal Control and Audit Manager and from the Accounting Officer of BBI JU.

All this information positively supports the statements of the declaration of assurance and no significant weaknesses were identified that Call into question the reasonable assurance as to the use of resources for their intended purpose, in accordance with the principles of sound financial management and the fact that the implemented control procedures give the necessary guarantees on the legality and regularity of the underlying transactions.

5.3. Reservations

No reservation is made for 2016.

5.4. Overall conclusion

In conclusion, management has reasonable assurance that, overall, suitable controls are in place and working as intended; risks are being appropriately monitored and mitigated; and necessary improvements and reinforcements are being implemented. Therefore, the Executive Director, in his capacity as Authorising Officer, has signed the declaration of assurance presented below.

6. DECLARATION OF ASSURANCE

I, the undersigned, Philippe Mengal, Executive Director of the Bio-Based Industries Joint Undertaking,

In my capacity as authorising officer

Declare that the information contained in this report gives a true and fair view³¹.

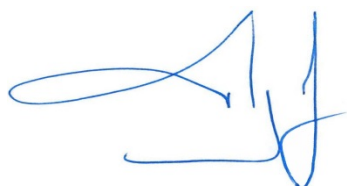
State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-ante controls the work of the Internal Audit Service, and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.

Confirm that I am not aware of anything not reported here which could harm the interests of the Joint Undertaking.

Place: Brussels

Date: 28/02/2017



(signature)

Philippe MENGAL
Executive Director

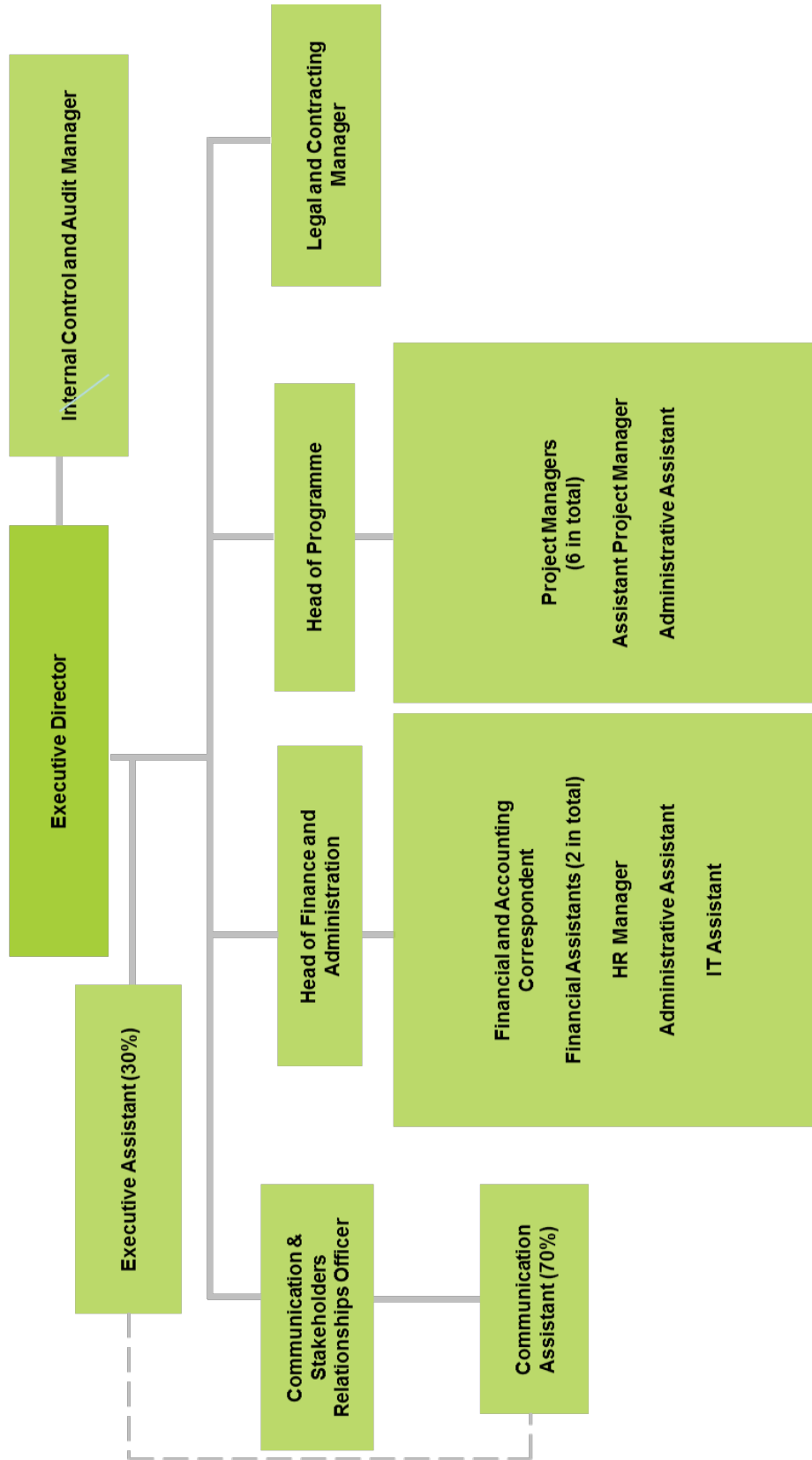
³¹ True and fair in this context means a reliable, complete and correct view on the state of affairs in the Joint Undertaking.

7. ANNEXES

- 7.1 Organisational chart
- 7.2 Staff Establishment plan
- 7.3 Publications from projects
- 7.4 Patent from projects
- 7.5 Scoreboard of Horizon 2020 common KPIs
- 7.6 Indicators for monitoring cross-cutting issues
- 7.7 Scoreboard of KPIs specific to BBIJU
- 7.8 Final annual accounts
- 7.9 Materiality criteria
- 7.10 Results of technical review
- 7.11 List of acronyms

7.1. Organisational chart

BBI JU INTERNAL ORGANISATION



7.2. Staff Establishment plan

Function group and grade	2016			
	Request of the Joint Undertaking		Draft Budget Request	
	Permanent posts	Temporary Posts	Permanent posts	Temporary Posts
AD 16				
AD 15				
AD 14		1		1
AD 13		1		1
AD 12				
AD 11		2		2
AD 10		2		2
AD 9				
AD 8		2		2
AD 7		2		2
AD 6				
AD 5				
AD total		10		10
AST 11				
AST 10				
AST 9				
AST 8				
AST 7		3		3
AST 6				
AST 5				
AST 4				
AST 3				
AST 2				
AST 1				
AST total		3		3
AST/SC 6				
AST/SC 5				
AST/SC 4				
AST/SC 3				
AST/SC 2				
AST/SC 1				
AST/SC total				
TOTAL		13		13
GRAND TOTAL	13		13	

Staff resources also include five GF IV and four GF III contract agents.

7.3. Publications from projects

Not available yet.

7.4. Patent from projects

Not available yet.

7.5. Scoreboard of Horizon 2020 common Key Performance Indicators

		Key Performance Indicator	Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
INDUSTRIAL LEADERSHIP	12	SME - Share of participating SMEs introducing innovations new to the company or the market (covering the period of the project plus three years);	Based on Community Innovation Survey (?). Number and % of participating SMEs that have introduced innovations to the company or to the market;	Number of SMEs that have introduced innovations;	N/A	N/A	N/A	N/A
	13	SME - Growth and job creation in participating SMEs	Turnover of company, number of employees	Turnover of company, number of employees;	N/A	N/A	N/A	N/A
SOCIETAL CHALLENGES	14	Publications in peer-reviewed high impact journals	The percentage of papers published in the top 10% impact ranked journals by subject category.	Publications from relevant funded projects (DOI: Digital Object Identifiers); Journal impact benchmark (ranking) data to be collected by commercially available bibliometric databases.	Not available yet	Not available yet	Not available yet	Not available yet
	15	Patent applications and patents awarded in the area of the JTI	Number of patent applications by theme; Number of awarded patents by theme	Patent application number	Not available yet	Not available yet	Not available yet	Not available yet

		Key Performance Indicator	Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
	16	Number of prototypes testing activities and clinical trials ³²	Number of prototypes, testing (feasibility/demo) activities, clinical trials	Reports on prototypes, and testing activities, clinical trials	Not available yet	Not available yet	Not available yet	Not available yet
	17	Number of joint public-private publications in projects	Number and share of joint public-private publications out of all relevant publications.	Properly flagged publications data (DOI) from relevant funded projects	Not available yet	Not available yet	Not available yet	Not available yet
	18	New products, processes, and methods launched into the market	Number of projects with new innovative products, processes, and methods,	Project count and drop down list allowing to choose the type processes, products, methods,	Not available yet	Not available yet	Not available yet	Not available yet
EVALUATION	NA	Time to inform (TTI) <u>all applicants</u> of the outcome of the evaluation of their application from the final date for submission of completed proposals	To provide applicants with high quality and timely evaluation results and feedback after each evaluation step by implementing and monitoring a high scientific level peer reviewed process	Number and % of information letters sent to applicants within target Average TTI (calendar days) Maximum TTI (calendar days)	38 letters (100%) Average: 146 Maximum: 240	9 letters (100%) Average: 86 Maximum: 240	73 letters (100%) Average: 141 Maximum: 240	103 letters (100%) Average: 99 Maximum: 240

³² Clinical trials are IMI specific

		Key Performance Indicator	Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
	NA	Redress after evaluations	To provide applicants with high quality and timely evaluation results and feedback after each evaluation step by implementing and monitoring a high scientific level peer reviewed process	Number of redresses requested	0	0	0	2 ³³
GRANTS	NA	Time to grant (TTG) measured (average) from Call deadline to signature of grants	To minimise the duration of the granting process aiming at ensuring a prompt implementation of the Grant Agreements through a simple and transparent grant preparation process	Number and % of grants signed within target Average TTG in calendar days Maximum TTG in calendar days	10 Grants (100%) Average: 240.8 Maximum: 270	3 Grants (100%) Average: 227 Maximum: 270	23 Grants (100%) Average: 239 Maximum: 270	N/A
	NA	Time to sign (TTS) grant agreements from the date of informing successful applicants (information letters)		Number and % of grants signed within target Average TTG in calendar days Maximum TTG in calendar days	10 Grants (100%) Average: 94 Maximum: 126	3 Grants (100%) Average: 141 Maximum: 155	23 Grants (100%) Average: 98 Maximum: 103	N/A
PAYMENTS	NA	Time to pay (TTP) (% made on time) -pre-financing - interim payment -final payment	To optimize the payments circuits, both operational and administrative, including payments to experts	Average number of days for Grants pre-financing, interim payments and final payments; Number of experts appointed Average number of days for administrative	14.3 days for pre-financing; no interim and final payments yet; Experts:31	16 days for pre-financing no interim and final payments yet; Experts: 13	23 days for pre-financing no interim and final payments yet; Experts: 63	No pre-financing ,interim and final payments Experts: 84

³³ The result of the evaluation review concluded that the two complaints were unfounded.

		Key Performance Indicator	Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
				payments;	Admin: 16			
HR	NA	Vacancy rate (%)		% of post filled in, composition of the JU staff ³⁴	N/A	N/A	N/A	N/A
JU EFFICIENCY	NA	Budget implementation/execution: 1. % CA to total budget 2. % PA to total budget	Realistic yearly budget proposal, possibility to monitor and report on its execution, both in commitment (CA) and payments (PA), in line with sound financial management principle	% of CA and PA	CA: 96.4% PA: No payments executed in 2014	CA: 73.7% PA: 98.18 % (pre-financing of the 2014 projects)	CA: 98.97% PA: No payments executed in 2015	CA: Projects in GAP Expected execution 98.36% PA: 100% (pre-financing of the 2015.1 and 2015.2 projects)
	NA	Administrative Budget: Number and % of total of late payments	Realistic yearly budget proposal, possibility to monitor and report on its execution in line with sound financial management principle	Number of delayed payments % of delayed payments (of the total)	Not Applicable (pre-autonomy phase). All payments executed by EC/DG RTD	36 delayed payments 39.1%		51 Late Payments 10.1% of delayed payments

³⁴ Additional indicators can be proposed/discussed with R.1 and/or DG HR

7.6. Indicators for monitoring cross-cutting Issues

Cross-cutting issue	Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)	
2	Widening the participation	2.1 Total number of participations by EU-28 Member State	Nationality of Horizon 2020 applicants & beneficiaries (number of)	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1 and Call specific figures provided in section 1.3.2	Cumulative figures provided in section 1.3.1.1 and Call specific figures provided in section 1.3.2
		2.2 Total amount of EU financial contribution by EU-28 Member State (EUR millions)	Nationality of Horizon 2020 beneficiaries and corresponding EU financial contribution	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1
NA		Total number of participations by Associated Countries	Nationality of Horizon 2020 applicants & beneficiaries (number of)	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1 and Call specific figures provided in section 1.3.2	Cumulative figures provided in section 1.3.1.1 and Call specific figures provided in section 1.3.2
NA		Total amount of EU financial contribution by Associated Country (EUR millions)	Nationality of Horizon 2020 beneficiaries and corresponding EU financial contribution	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1

Cross-cutting issue		Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
3	SMEs participation	3.1 Share of EU financial contribution going to SMEs (Enabling & industrial tech and Part III of Horizon 2020)	Number of Horizon 2020 beneficiaries flagged as SME; % of EU contribution going to beneficiaries flagged as SME	25 flagged as SME (24.5%) 20% of EU contribution going to SME	9 flagged as SME (36%) 8.41% of EU contribution going to SME	110 flagged as SME (40.14%) 37.3% of EU contribution going to SME	120 flagged as SME (36.7%) 35% of EU contribution going to SME
6	Gender	6.1 Percentage of women participants in Horizon 2020 projects	Gender of participants in Horizon 2020 projects	Not available	Not available	Not available	Not available
		6.2 Percentage of women project coordinators in Horizon 2020	Gender of MSC fellows, ERC principle investigators and scientific coordinators in other Horizon 2020 activities	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1
		6.3 Percentage of women in EC advisory groups, expert groups, evaluation panels, individual experts, etc.	Gender of memberships in advisory groups, panels, etc.	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1	Cumulative figures provided in section 1.3.1.1
7	International cooperation	7.1 Share of third-country participants in Horizon 2020	Nationality of Horizon 2020 beneficiaries	0	0	0	0
		7.2 Percentage of EU financial contribution attributed to third country participants	Nationality of Horizon 2020 beneficiaries and corresponding EU financial contribution	0	0	0	0

Cross-cutting issue		Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
9	Bridging from discovery to market ³⁵	9.1 Share of projects and EU financial contribution allocated to Innovation Actions (IAs)	Number of IA proposals and projects properly flagged in the WP; follow up at grant level.	Number of proposals: 18 Number of projects: 3	Number of proposals: 9 Number of projects: 3	Number of proposals: 24 Number of projects:9	Number of proposals:26 Number of projects:11
		9.2 Within the innovation actions, share of EU financial contribution focussed on demonstration and first-of-a-kind activities	Topics properly flagged in the WP; follow-up at grant level	1 FLAG (34%) 2 DEMO (39.7%)	3 FLAG (100%)	9 DEMO (59.5%)	2 FLAG (25.3%) 9 DEMO (43.7%)
NA		Scale of impact of projects (High Technology Readiness Level)	Number of projects addressing TRL ³⁶ between ...(4-6, 5-7)?	7 RIA TRL 3-5 2 DEMO TRL 6-7 1 FLAG TRL 8-9	3 FLAG TRL 8-9	11 RIA TRL 3-5 9 DEMO TRL 6-7	11 RIA TRL 3-5 9 DEMO TRL 6-7 2 FLAG TRL 8-9
11	Private sector participation	11.1 Percentage of Horizon 2020 beneficiaries from the private for profit sector	Number of and % of the total Horizon 2020 beneficiaries classified by type of activity and legal status	66 beneficiaries 64%	18 beneficiaries 72%	168 beneficiaries 61%	195 beneficiaries 60%
		11.2 Share of EU financial contribution going to private for profit entities (Enabling & industrial tech and Part III of Horizon 2020)	Horizon 2020 beneficiaries classified by type of activity; corresponding EU contribution	73.6%	94.2%	58%	67.6%
12	Funding for PPPs	12.1 EU financial contribution for PPP (Art 187)	EU contribution to PPP (Art 187)	50 M€in WP € 49 653 707 in projects	100 M€in WP € 73 741 234 in projects	106 M €in WP € 105 295 739 in projects	188.65 M€in WP € 185 602 866 in projects

³⁵ This indicator (9.2) is initially intended to monitor the Digital Agenda (its applicability could be only partial)

³⁶ TRL: Technology Readiness Level

Cross-cutting issue		Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
		12.2 PPPs leverage: total amount of funds leveraged through Art. 187 initiatives, including additional activities, divided by the EU contribution	Total funding made by private actors involved in PPPs - in-kind contribution already committed by private members in project selected for funding - additional activities (i.e. research expenditures/investment of industry in the sector, compared to previous year)	Figures provided in sections 1.3.1.3 and (?)	Figures provided in sections 1.3.1.3 and (?)	Figures provided in sections 1.3.1.3 and (?)	Figures provided in sections 1.3.1.3 and (?)
13	Communication and dissemination	13.3 Dissemination and outreach activities other than peer-reviewed publications - [Conferences, workshops, press releases, publications, flyers, exhibitions, trainings, social media, web-sites, communication campaigns (e.g. radio, TV)]	A drop down list allows to choose the type of dissemination activity. Number of events, funding amount and number of persons reached thanks to the dissemination activities	Not available yet (some information is provided in section 1.5)	Not available yet (some information is provided in section 1.5)	Not available yet (some information is provided in section 1.5)	Not available yet (some information is provided in section 1.5)
14	Participation patterns of independent experts	14.2 Proposal evaluators by country	Nationality of proposal evaluators	EU28: 15F/16M	EU28: 4F/6M	EU28: 26F/28M AC: 1F/3M Other: 0F/1M	EU28: 31F/44M AC: 1F/1M Other: 1F/2M
		14.3 Proposal evaluators by organisations' type of activity	Type of activity of evaluators' organisations	Not available	Not available	Not available	Not available

Cross-cutting issue		Definition/Responding to Question	Type of Data Required	Call H2020-BBI-PPP-2014	Call H2020-BBI-PPP-2015.1	Call H2020-BBI-PPP-2015.2	Call H2020-BBI-PPP-2016 (under GAP)
NA	Participation of RTOs and Universities	Participation of RTO ³⁷ s and Universities in PPPs (Art 187 initiatives)	Number of participations of RTOs to funded projects and % of the total Number of participations of Universities to funded projects and % of the total % of budget allocated to RTOs and to Universities	RTO: 22; 21.36% participation HES: 9; 8.74% participation RTO:15% of the budget HES: 6.6% of the budget	RTO: 4; 16% participation HES: 2; 8% participation RTO:2.8% of the budget HES: 2% of the budget	RTO: 55; 20.07% participation HES: 36; 13.14% participation RTO: 26.86% of the budget HES:12.21% of the budget	RTO: 63; 19.27% participation HES: 45; 13.76% participation RTO: 15.54% of the budget HES: 14.35% of the budget
NA	Ethics	The objective is ensuring that research projects funded are compliant with provisions on ethics efficiently	% of proposals not granted because non-compliance with ethical rules/proposals invited to grant (target 0%); time to ethics clearance (target 45 days) ³⁸	0	0	0	0
NA	Audit	Error rate	% of common representative error; % residual error	N/A	N/A	N/A	N/A
NA		Implementation of ex-post audit results	Number of cases implemented; in total €million; % of cases implemented/total cases	N/A	N/A	N/A	N/A

Notes:

³⁷ RTO: Research and Technology Organisation

³⁸ Data relates to pre-granting ethics review. This time span runs in parallel to granting process.

- * Horizon 2020 applicants - all those who submitted Horizon 2020 proposals
- * Horizon 2020 beneficiaries - all those who have signed a Horizon 2020 Grant Agreement
- *Responsible Directorate - DG RTD Directorates and R&I DGs family in charge with management of Horizon 2020 activities
- *Services -Executive Agencies and other external bodies in charge with Horizon 2020 activities
- *Project officer - is in charge of managing Horizon 2020 projects in Responsible Directorate/Service including Executive Agencies

7.7. Scoreboard of Key Performance Indicators specific to BBI JU

#	Key Performance Indicator	Call H2020-BBI-PPP- 2014	Call H2020-BBI-PPP- 2015.1	Call H2020-BBI-PPP- 2015.2	Call H2020-BBI-PPP- 2016 (under GAP)
1	PPP leverage: - in-cash contribution already committed by private members in project selected for funding	€2 010 000	€0	€929 158	
2	Balance (%) of R&D, demonstration and supporting projects	Funding: DEMO: 39.7% RIA: 26.08% FLAG: 34.2%	Funding: FLAG: 73.7%	Funding: RIA: 37.7% DEMO: 59.5% CSA: 2.9%	Funding: DEMO: 43.75% RIA: 29.35% CSA: 1.5% FLAG: 35.3%
3	N° of new cross-sector interconnections in BBI projects	56	9	81	NA
4	New bio-based value chains realised	36	11	35	NA
5	Number of new bio-based building blocks	18	8	20	NA
6	Number of new bio-based materials	19	62	25	NA
7	Number of new bio-based 'consumer' products	10	25	16	NA
8	Number of flagship biorefinery plants started based on BBI demonstration projects	1	3	0	NA

7.8. Final annual accounts

CERTIFICATION OF THE ACCOUNTS

The final annual accounts of the Bio-based Industries Joint Undertaking for the year 2016 have been prepared in accordance with the Financial Rules of the JU and the accounting rules adopted by the Commission's Accounting Officer, as are to be applied by all the institutions, agencies and joint undertakings.

I acknowledge my responsibility for the preparation and presentation of the annual accounts of the Joint Undertaking in accordance with Article 43 of the Financial Rules of the JU.

I have obtained from the Authorising Officer, who guaranteed its reliability, all the information necessary for the production of the accounts that show the JU's assets and liabilities and the budgetary implementation.

I hereby certify that based on this information, and on such checks as I deemed necessary to sign off the accounts, I have a reasonable assurance that the accounts present a true and fair view of the financial position of the JU in all material aspects.

[signed]

Rosa ALDEA BUSQUETS

Accounting Officer

June 2017

Background information on the BBI JU

The Bio-based Industries Joint Undertaking (BBI JU) was established by the Council Regulation (EU) 560/2014³⁹. The BBI JU is a public-private partnership between the European Union and the Bio-based Industries Consortium (BIC) and is based in Brussels. BBI JU is funded by the members contributing either in cash or in-kind to the administrative and operational costs of the JU. It aims to bring together all relevant stakeholders and contribute to establishing Europe as a key player in research, demonstration and deployment of advanced bio based products and biofuels.

BBI JU mission is to implement, under Horizon 2020 rules, the Strategic Innovation and Research Agenda (SIRA) developed by the industry, by organizing calls for proposals to support research, demonstration and deployment activities enabling the collaboration between stakeholders along the entire value chains covering primary production of biomass, processing industry and final use.

The objectives of BBI JU are to contribute to a more resource efficient and sustainable low-carbon economy and to increasing economic growth and employment, in particular in rural areas, by developing sustainable and competitive bio-based industries in Europe. This is based on advanced biorefineries that source their biomass sustainably and in particular aims to:

- Demonstrate technologies that enable new chemical building blocks, new materials and new consumer products from European biomass, that replace the need for fossil-based inputs;
- Develop business models that integrate economic actors along the value chain from supply of biomass to biorefinery plants to consumers of bio-based materials, chemicals and fuels, including the creation of new cross-sector interconnections and supporting cross-industry clusters;
- Set-up flagship biorefinery plants that deploy the technologies and business models for bio-based materials, chemicals and fuels and demonstrate cost and performance improvements to levels that are competitive with fossil-based alternatives.

Following Articles 38 and 43 of the BBI JU Financial Rules⁴⁰, the Governing Board of BBI JU appoints the Accounting Officer who is, amongst other tasks, responsible for preparation of the annual accounts of the joint undertaking. Following Article 40 of the BBI JU Financial Rules the annual accounts should be prepared in accordance with the accounting rules adopted by the Commission's Accounting Officer (EU Accounting Rules, EAR) that are based on the International Public Sector Accounting Standards (IPSAS). Following the decision of the BBI JU's Governing Board of 14 October 2014, the Accounting Officer of the Commission acts as the Accounting Officer of BBI JU.

³⁹ Council Regulation (EU) No 560/2014 of 6 May 2014 establishing the Bio-based Industries Joint Undertaking.

⁴⁰ Adopted by the decision of the BBI JU Governing Board.

FINANCIAL STATEMENTS AND EXPLANATORY NOTES

Balance sheet

EUR '000

	Note	31.12.2016	31.12.2015
NON-CURRENT ASSETS			
<i>Property, plant and equipment</i>	2.1	52	14
<i>Pre-financing</i>	2.2	66 894	17 714
		66 946	17 728
CURRENT ASSETS			
<i>Pre-financing</i>	2.2	12 168	-
<i>Exchange receivables and non-exchange recoverables</i>	2.3	3 168	1 547
		15 335	1 547
TOTAL ASSETS		82 281	19 274
CURRENT LIABILITIES			
<i>Payables and other liabilities</i>	2.4	(20 959)	(3 503)
<i>Accrued charges and deferred income</i>	2.5	(38 365)	(6 971)
		(59 324)	(10 475)
TOTAL LIABILITIES		(59 324)	(10 475)
NET ASSETS		22 957	8 800
NET ASSETS			
<i>Contribution from Members</i>	2.6	67 911	1 927
<i>Accumulated deficit</i>		6 873	-
<i>Economic result of the year</i>		(51 826)	6 873
NET ASSETS		22 957	8 800

Statement of financial performance

EUR '000

	Note	2016	2015
REVENUE			
Revenue from non-exchange transactions			
<i>Other</i>	3.1	-	17 714
Total		-	17 714
Revenue from exchange transactions			
<i>Financial income</i>		2	-
<i>Other exchange revenue</i>		4	11
Total		6	11
Total revenue		6	17 725
EXPENSES			
<i>Operating costs</i>	3.2	(48 741)	(10 291)
<i>Staff costs</i>	3.3	(1 567)	(234)
<i>Finance costs</i>		(1)	-
<i>Other expenses</i>	3.4	(1 523)	(327)
Total expenses		(51 832)	(10 852)
ECONOMIC RESULT OF THE YEAR		(51 826)	6 873

Cashflow statement⁴¹

	EUR '000	
	2016	2015
<i>Economic result of the year</i>	(51 826)	6 873
Operating activities		
<i>Amortisation and depreciation</i>	10	3
<i>Non-cash expenses in-kind</i>	—	—
<i>Cash contribution from the Members</i>	65 984	1 927
<i>(Increase)/decrease in pre-financing</i>	(61 348)	(17 714)
<i>(Increase)/decrease in exchange receivables and non-exchange recoverables</i>	(1 621)	(1 547)
<i>Increase/(decrease) in accounts payable and other liabilities</i>	17 456	3 503
<i>Increase/(decrease) in accrued charges and deferred income</i>	31 394	6 971
Investing activities		
<i>(Increase)/decrease in intangible assets and property, plant and equipment</i>	(48)	(17)
NET CASHFLOW	—	—
<i>Net increase/(decrease) in cash and cash equivalents</i>	—	—
<i>Cash and cash equivalents at the beginning of the year</i>	—	—
<i>Cash and cash equivalents at year-end</i>	—	—

Statement of changes in net assets

	EUR '000			
	Contribution from Members	Accumulated Surplus/ (Deficit)	Economic result of the year	Net Assets
BALANCE AS AT 31.12.2014	—	—	—	—
<i>Cash contribution</i>	1 927	—	—	1 927
<i>Economic result of the year</i>	—	—	6 873	6 873
BALANCE AS AT 31.12.2015	1 927	—	6 873	8 800
<i>Allocation 2015 economic result</i>	—	6 873	(6 873)	—
<i>Cash contribution</i>	65 984	—	—	65 984
<i>Economic result of the year</i>	—	—	(51 826)	(51 826)
BALANCE AS AT 31.12.2016	67 911	6 873	(51 826)	22 957

⁴¹ Following the appointment of the Accounting Officer of the Commission as the Accounting Officer of BBI JU, the treasury of BBI JU was integrated into the Commission's treasury system. Therefore, BBI JU does not have any bank accounts of its own. All payments and receipts are processed via the Commission's treasury system and registered on intercompany accounts which are presented under the heading exchange receivables.

NOTES TO THE FINANCIAL STATEMENTS

1. Significant accounting policies

1.1. Accounting principles

The objective of financial statements is to provide information about financial position, performance and cashflows of an entity that is useful to a wide range of users.

The overall considerations (or accounting principles) to be followed when preparing the financial statements are laid down in EU Accounting Rule 1 'Financial Statements' and are the same as those described in IPSAS 1: fair presentation, accrual basis, going concern, consistency of presentation, materiality, aggregation, offsetting and comparative information. The qualitative characteristics of financial reporting are relevance, reliability, understandability and comparability.

1.2. Basis of preparation

1.2.1. Reporting period

Financial statements are presented annually. The accounting year begins on 1 January and ends on 31 December.

1.2.2. Currency and basis for conversion

The annual accounts are presented in thousands of euros, the euro being the EU's functional and reporting currency. Foreign currency transactions are translated into euros using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of foreign currency transactions and from the re-translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the statement of financial performance. Different conversion methods apply to property, plant and equipment and intangible assets, which retain their value in euros at the date when they were purchased.

Year-end balances of monetary assets and liabilities denominated in foreign currencies are translated into euros on the basis of the European Central Bank (ECB) exchange rates applying on 31 December.

Euro exchange rates

Currency	31.12.2016	31.12.2015	Currency	31.12.2016	31.12.2015
BGN	1.9558	1.9558	PLN	4.4103	4.2639
CZK	27.0210	27.0230	RON	4.5390	4.5240
DKK	7.4344	7.4626	SEK	9.5525	9.1895
GBP	0.8562	0.7340	CHF	1.0739	1.0835
HRK	7.5597	7.6380	JPY	123.4000	131.0700
HUF	309.8300	315.9800	USD	1.0541	1.0887

1.2.3. Use of estimates

In accordance with IPSAS and generally accepted accounting principles, the financial statements necessarily include amounts based on estimates and assumptions by management based on the most reliable information available. Significant estimates include, but are not limited to; accrued and deferred income and charges, provisions, financial risk on accounts receivables, contingent assets and liabilities, and degree of impairment of assets. Actual results could differ from those estimates.

Reasonable estimates are essential part of the preparation of financial statements and do not undermine their reliability. An estimate may need revision if changes occur in the circumstances on which the estimate was based or as a result of new information or more experience. By its nature, the revision of an estimate does not relate to prior periods and is not

the correction of an error. The effect of a change in accounting estimate shall be recognised in the surplus or deficit in the periods in which it becomes known.

1.3. Balance sheet

1.3.1. Intangible assets

Acquired computer software licences are stated at historical cost less accumulated amortisation and impairment losses. The assets are amortised on a straight-line basis over their estimated useful lives. The estimated useful lives of intangible assets depend on their specific economic lifetime or legal lifetime determined by an agreement. Internally developed intangible assets are capitalised when the relevant criteria of the EU accounting rules are met. The costs capitalisable include all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management. Costs associated with research activities, non-capitalisable development costs and maintenance costs are recognised as expenses as incurred.

1.3.2. Property, plant and equipment

All property, plant and equipment are stated at historical cost less accumulated depreciation and impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition or construction of the asset. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits or service potential associated with the item will flow to the entity and its cost can be measured reliably. Repairs and maintenance costs are charged to the statement of financial performance during the financial period in which they are incurred. Land and works of art are not depreciated as they are deemed to have an indefinite useful life. Assets under construction are not depreciated as these assets are not yet available for use. Depreciation on other assets is calculated using the straight-line method to allocate their cost less their residual values over their estimated useful lives, as follows:

Type of asset	Straight line depreciation rate
<i>Buildings</i>	4 % to 10 %
<i>Plant and equipment</i>	10 % to 25 %
<i>Furniture and vehicles</i>	10 % to 25 %
<i>Computer hardware</i>	25 % to 33 %
<i>Other</i>	10 % to 33 %

Gains or losses on disposals are determined by comparing proceeds less selling expenses with the carrying amount of the disposed asset and are included in the statement of financial performance.

Leases

Leases of tangible assets, where the entity has substantially all the risks and rewards of ownership, are classified as finance leases. Finance leases are capitalised at the inception of the lease at the lower of the fair value of the leased asset and the present value of the minimum lease payments. The interest element of the finance lease payment is charged to statement of financial performance over the period of the lease at a constant periodic rate in relation to the balance outstanding. The rental obligations, net of finance charges, are included in financial liabilities (non-current and current). The interest element of the finance cost is charged to the statement of financial performance over the lease period so as to produce a constant periodic interest rate on the remaining balance of the liability for each period. The assets held under finance leases are depreciated over the shorter of the assets' useful life and the lease term.

Leases where the lessor retains a significant portion of the risks and rewards inherent to ownership are classified as operating leases. Payments made under operating leases are charged to the statement of financial performance on a straight-line basis over the period of the lease.

1.3.3. Impairment of non-financial assets

Assets that have an indefinite useful life are not subject to amortisation/depreciation and are tested annually for impairment. Assets that are subject to amortisation/depreciation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and its value in use.

Intangible assets and property, plant and equipment residual values and useful lives are reviewed, and adjusted if appropriate, at least once per year. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. If the reasons for impairments recognised in previous years no longer apply, the impairment losses are reversed accordingly.

1.3.4. Financial assets

The financial assets are classified in the following categories: financial assets at fair value through profit or loss; loans and receivables; held-to-maturity investments; and available for sale financial assets. The classification of the financial instruments is determined at initial recognition and re-evaluated at each balance sheet date.

(i) *Financial assets at fair value through profit or loss*

A financial asset is classified in this category if acquired principally for the purpose of selling in the short term or if so designated by the entity. Derivatives are also categorised in this category. Assets in this category are classified as current assets if they are expected to be realised within 12 months of the balance sheet date. During this financial year, the entity did not hold any investments in this category.

(ii) *Loans and receivables*

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the entity provides money, goods or services directly to a debtor with no intention of trading the receivable. They are included in non-current assets, except for maturities within 12 months of the balance sheet date. Loans and receivables include term deposits with the original maturity above three months.

(iii) *Held-to-maturity investments*

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturities that the entity has the positive intention and ability to hold to maturity. During this financial year, the entity did not hold any investments in this category.

(iv) *Available for sale financial assets*

Available for sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are classified as either current or non-current assets, depending on the period of time the entity expects to hold them, which is usually the maturity date.

Initial recognition and measurement

Purchases and sales of financial assets at fair value through profit and loss, held-to-maturity and available for sale are recognised on trade date - the date on which the entity commits to purchase or sell the asset. Cash equivalents, loans and term deposits are recognised at settlement date. Financial instruments are initially recognised at fair value. For all financial assets not carried at fair value through profit and loss transaction costs are added to the fair value at initial recognition.

Financial instruments are derecognised when the rights to receive cashflows from the investments have expired or the entity has transferred substantially all risks and rewards of ownership to another party.

Subsequent measurement

Financial assets at fair value through profit and loss are subsequently carried at fair value with gains and losses arising changes in the fair value being included in the statement of financial performance in the period in which they arise.

Loans and receivables and held-to maturity investments are carried at amortised cost using the effective interest method.

Available for sale financial assets are subsequently carried at fair value. Gains and losses arising from changes in the fair value being recognised in the fair value reserve. Interest on available for sale financial assets calculated using the effective interest method is recognised in the statement of financial performance.

The entity assesses at each balance sheet date whether there is objective evidence that a financial asset is impaired and whether an impairment loss should be recorded in the statement of financial performance.

1.3.5. Pre-financing amounts

Pre-financing is a payment intended to provide the beneficiary with a cash advance, i.e. a float. It may be split into a number of payments over a period defined in the particular contract, decision, agreement or basic legal act. The float or advance is either used for the purpose for which it was provided during the period defined in the agreement or it is repaid. If the beneficiary does not incur eligible expenditure, he has the obligation to return the pre-financing advance to the entity. The amount of the pre-financing may be reduced (wholly or partially) by the acceptance of eligible costs (which are recognised as expenses).

Pre-financing is, on subsequent balance sheet dates, measured at the amount initially recognised on the balance sheet less eligible expenses (including estimated amounts where necessary) incurred during the period.

1.3.6. Receivables and recoverables

As the EU accounting rules require a separate presentation of exchange and non-exchange transactions, for the purpose of drawing up the accounts, receivables are defined as stemming from non-exchange transactions and recoverables are defined as stemming from exchange transactions (when the entity receives value from another entity without directly giving approximately equal value in exchange).

Receivables from exchange transactions meet the definition of financial instruments and are thus classified as loans and receivables and measured accordingly (see 1.3.4 above).

Recoverables from non-exchange transactions are carried at original amount (adjusted for interests and penalties) less write-down for impairment. A write-down for impairment is established when there is objective evidence that the entity will not be able to collect all amounts due according to the original terms of the recoverables. The amount of the write-down is the difference between the asset's carrying amount and the recoverable amount. The amount of the write-down is recognised in the statement of financial performance.

1.3.7. Cash and cash equivalents

Cash and cash equivalents are financial instruments and classified and include cash at hand, deposits held at call or at short notice with banks, and other short-term highly liquid investments with original maturities of three months or less.

1.3.8. Provisions

Provisions are recognised when the entity has a present legal or constructive obligation towards third parties as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognised for future operating losses. The amount of the provision is the best estimate of the expenditure expected to be required to settle the present obligation at the reporting date. Where the provision involves a large number of items, the obligation is estimated by weighting all possible outcomes by their associated probabilities ('expected value' method).

1.3.9. Payables

Included under accounts payable are both amounts related to exchange transactions such as the purchase of goods and services and non-exchange transactions related e.g. to cost claims from beneficiaries, grants or other EU funding.

Where grants or other funding is provided to the beneficiaries, the cost claims are recorded as payables for the requested amount when the cost claim is received. Upon verification and acceptance of the eligible costs, the payables are valued at the accepted and eligible amount.

Payables arising from the purchase of goods and services are recognised at invoice reception for the original amount and corresponding expenses are entered in the accounts when the supplies or services are delivered and accepted by the entity.

1.3.10. Accrued and deferred income and charges

Transactions and events are recognised in the financial statements in the period to which they relate. At year-end, if an invoice is not yet issued but the service has been rendered, the supplies have been delivered by the entity or a contractual agreement exists (e.g. by reference to a contract), an accrued income will be recognised in the financial statements. In addition, at year-end, if an invoice is issued but the services have not yet been rendered or the goods supplied have not yet been delivered, the revenue will be deferred and recognised in the subsequent accounting period.

Expenses are also accounted for in the period to which they relate. At the end of the accounting period, accrued expenses are recognised based on an estimated amount of the transfer obligation of the period. The calculation of accrued expenses is done in accordance with detailed operational and practical guidelines issued by the Accounting

Officer which aim at ensuring that the financial statements provide a faithful representation of the economic and other phenomena they purport to represent. By analogy, if a payment has been made in advance for services or goods that have not yet been received, the expense will be deferred and recognised in the subsequent accounting period.

1.4. Statement of financial performance

1.4.1. Revenue

Revenue comprises gross inflows of economic benefits or service potential received and receivable by the entity, which represents an increase in net assets, other than increases relating to contributions from owners.

Depending on the nature of the underlying transactions in the statement of financial performance it is distinguished between:

(i) Revenue from non-exchange transactions

Revenue from non-exchange transactions are taxes and transfers because the transferor provides resources to the recipient entity without the recipient entity providing approximately equal value directly in exchange.

Transfers are inflows of future economic benefits or service potential from non-exchange transactions, other than taxes. The entity shall recognise an asset in respect of transfers when the entity controls the resources as a result of a past event (the transfer) and expects to receive future economic benefits or service potential from those resources, and when the fair value can be reliably measured. An inflow of resources from a non-exchange transaction recognised as an asset (i.e. cash) is also recognised as revenue, except to the extent that the entity has a present obligation in respect of that transfer (condition), which needs to be satisfied before the revenue can be recognised. Until the condition is met the revenue is deferred and recognised as a liability (pre-financing received).

(ii) Revenue from exchange transactions

Revenue from the sale of goods and services is recognised when the significant risk and rewards of ownership of the goods are transferred to the purchaser. Revenue associated with a transaction involving the provision of services is recognised by reference to the stage of completion of the transaction at the reporting date.

1.4.2. Expenses

Expenses are decreases in economic benefits or service potential during the reporting period in the form of outflows or consumption of assets or incurrence of liabilities that result in decreases in net assets/equity. They include both the expenses from exchange transactions and expenses from non-exchange transactions.

Expenses from exchange transactions arising from the purchase of goods and services are recognised when the supplies are delivered and accepted by the entity. They are valued at original invoice amount. Furthermore, at the balance sheet date expenses related to the service delivered during the period for which an invoice has not yet been received or accepted are recognised in the statement of financial performance.

Expenses from non-exchange transactions account for the majority of the entity's operating expenses. They relate to transfers to beneficiaries and can be of three types: entitlements, transfers under agreement and discretionary grants, contributions and donations. Transfers are recognised as expenses in the period during which the events giving rise to the transfer occurred, as long as the nature of the transfer is allowed by regulation or an agreement has been signed authorising the transfer; any eligibility criteria have been met by the beneficiary; and a reasonable estimate of the amount can be made.

When a request for payment or cost claim is received and meets the recognition criteria, it is recognised as an expense for the eligible amount. At year-end, incurred eligible expenses due to the beneficiaries but not yet reported are estimated and recorded as accrued expense.

1.5. Contingent assets and liabilities

1.5.1. Contingent assets

A contingent asset is a possible asset that arises from past events and of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity. A contingent asset is disclosed when an inflow of economic benefits or service potential is probable.

1.5.2. Contingent liabilities

A contingent liability is a possible obligation that arises from past events and of which the existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or a present obligation that arises from past events but is not recognised because: it is not probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation or, in the rare circumstances where the amount of the obligation cannot be measured with sufficient reliability.

1.6. Contributions from members

The contributions from the Members of the joint undertakings (JU) form the funding of the JU and are treated as contributions from owners. An owner in this context does not mean an owner in the sense of owning shares (no shares are issued) of the JU but rather in the sense of political interest and governance of the JU by exercising the voting rights linked to these contributions.

1.6.1. Financial contributions

Financial contributions are contributions of Members made in cash in order to provide funding of the operational or administrative needs of the JU. The financial contributions are recognised in the net assets in the period in which the right to receive the payment was established.

1.6.2. In-kind contributions

Members other than the EU (i.e. 'Private Members') can also contribute resources other than cash, e.g. laboratory equipment, specialised staff, etc. These in-kind contributions consist of the costs incurred by Private Members in implementing indirect actions.

The Regulation distinguishes between two types of in-kind contributions: (1) In-kind contributions to operational activities (IKOP) and (2) in-kind contributions to additional activities (IKAA).

The IKOP represents in-kind contributions made to the JU linked to its work plan and co-financed by the EU. The IKOP are recognised in the net assets of the JU in the period when the conditions for Members' contributions stipulated by the Regulation were met.

The expenses related to the IKOP incurred in the financial year are recognised in the statement of financial performance. At year-end, incurred IKOP not yet reported are estimated and recorded as other liabilities ('Contributions of Members to be validated').

The IKAA relates to contributions linked to implementing additional activities outside the work plan of the JU that contribute to the objectives of the JU. Because the outflow of resources related to those activities is outside of control of the JU, the contributions are not recognised in the financial statements of the JU.

2. NOTES TO THE BALANCE SHEET

ASSETS

2.1. Property, plant and equipment

	EUR '000			
	Plant and equipment	Furniture and vehicles	Computer hardware	Total
Gross carrying amount at 31.12.2015	4	10	3	17
Additions	24	23	1	48
Gross carrying amount at 31.12.2016	28	33	4	65
Accumulated depreciation at 31.12.2015	(0)	(2)	(1)	(3)
Depreciation charge for the year	(2)	(7)	(1)	(10)
Accumulated depreciation at 31.12.2016	(2)	(10)	(1)	(13)
NET CARRYING AMOUNT at 31.12.2016	26	23	2	52
NET CARRYING AMOUNT at 31.12.2015	4	8	2	14

2.2. Pre-financing

	EUR '000	
	31.12.2016	31.12.2015
Non-current pre-financing	66 894	17 714
Current pre-financing	12 168	0
Total	79 062	17 714

For all pre-financing amounts open at 31.12.2016 a case-by-case assessment has been performed and all the pre-financing that was considered unlikely to be cleared in the course of 2017 was classified as non-current pre-financing. In 2015 an amount of kEUR 18 was paid for the 2014 call. The prefinancing paid in 2016 was kEUR 62 and related to both calls of 2015.

The estimation of the clearing of pre-financing (related to the estimated operating expenses for on-going projects) is actually aligned to the way in which pre-financing is cleared for expenses incurred during the year. The clearing of pre-financing by estimated expenses amounted to kEUR 443. The remaining portion of estimated expenses are recorded in accrued charges (see note 2.5).

2.3. Exchange receivables & non-exchange recoverables

At 31.12.2016, BBI JU did not have any balances related to non-exchange recoverables. The amounts included under this heading are fully composed of current receivables from exchange transactions.

	EUR '000	
	31.12.2016	31.12.2015
Customers	500	—
Deferred charges relating to exchange transactions	10	—
Central treasury liaison accounts	2 655	1 547
Others	2	—
Total	3 168	1 547

The main element concerns the treasury liaison/intercompany accounts with the Commission that represent the virtual bank balance of BBI JU.

LIABILITIES

2.4. Payables and other liabilities

	EUR '000	
	31.12.2016	31.12.2015
<i>Contributions in kind to be validated</i>	20 466	3 503
<i>Current payables</i>	493	–
Total	20 959	3 503

Included under the sub-heading 'contributions in-kind to be validated' are the in-kind contributions from Members relating to on-going projects without a validated cost statement at 31.12.2016. The amount of in-kind contributions was estimated on a case-by-case basis using the best available information on the projects at 31.12.2016. The estimated cash contribution to the operating expenses of those projects are included under accrued charges (see note 2.5).

The sub-heading current payables is composed of liabilities to public bodies (kEUR 474) and to suppliers (kEUR 18).

2.5. Accrued charges and deferred income

At 31.12.2016 BBI JU had no balances related to deferred income. The amounts under this heading entirely relate entirely to accrued charges and are as follows:

	EUR '000	
	31.12.2016	31.12.2015
<i>Accrued charges</i>	38 365	6 971

Accrued charges are the amounts estimated by the Authorising Officer of costs incurred for services and goods delivered in year 2016 but not yet invoiced or processed by the end of the year. They are largely composed of estimated operating expenses of kEUR 38 123 for on-going projects without a validated cost statement, where the 2016 expense was estimated on a case-by-case basis using the best available information about the projects at 31.12.2016 (including non-certified periodic cost claims received from consortia). The portion of the estimated accrued charges which relates to pre-financing paid has been recorded as a reduction of the pre-financing amounts (see note 2.2).

Also included under this heading are accrued administrative expenses of kEUR 213 relating mainly to communication and publication expenses (kEUR 106), training costs (kEUR 35) and accrued staff expenses of kEUR 29 for untaken leave

NET ASSETS

2.6. Contributions from members

Research and Innovation funding programme for 2014-2020 (Horizon 2020)

	Commission		Industry		Total		EUR '000
	Cash	In kind	Cash	In kind	Cash	In kind	
A. Running Costs	2 784	–	3 006	–	5 791	–	
<i>Previous years</i>	785	–	813	–	1 598	–	
<i>Current year</i>	1 999	–	2 193	–	4 193	–	
B. Operational costs (R&D Projects)	62 120	–	–	–	62 120	–	
<i>Previous years</i>	329	–	–	–	329	–	
<i>Current year</i>	61 791	–	–	–	61 791	–	
<i>Adjustments</i>	–	–	–	–	–	–	
BALANCE AS AT 31.12.2016	64 904	–	3 006	–	67 911	–	
<i>BALANCE AS AT 31.12.2015</i>	1 114	–	813	–	1 927	–	
<i>Contribution in cash/kind in %</i>	95.57%	–	4.43%	–	100%	–	
<i>Total contribution in %</i>		95.57%		4.43%		100%	
<i>Voting rights %</i>		50.00%		50.00%		100%	

3. NOTES TO THE STATEMENT OF FINANCIAL PERFORMANCE

REVENUE

3.1. Revenue from non-exchange transactions

The balance included under this heading for 31.12.2015 was due to open pre-financing amounts related to on-going projects that were transferred from DG RTD at the set up of the BBI JU. In 2016 there was no such transfer.

EXPENSES

3.2. Operating costs

Included under this heading are operating expenses related to projects that were carried out in 2016. A part of the operating costs, related to on-going without any validated cost claims (or equivalent) available as at 31 December, was estimated using the best information available at the time of the preparation of the annual accounts. The estimation is based on the case-by-case assessment of completion which ensures that only costs that reflect the services or work performed by 31 December are included in the operating costs of the year. Depending on the availability of information at the time of the preparation of the annual accounts, the estimates are based either on reports of services or work performed (e.g. reports from members of the Joint Undertaking other than the EU on in-kind contributions as defined by Articles 4(3) and 4(4) of Regulation (EU) No 560/2014) or on costs incurred to date as a proportion of the estimated total costs of the projects ('pro-rata temporis'). It should be noted that in line with the accounting rules the portion of the estimated cost also includes a revision of accounting estimates made in the previous periods.

In 2016 there were no cost claims validated in relation to the on-going projects. The entire amount of operating costs was estimated using the best available information about the projects at 31.12.2016, including non-validated periodic cost claims received from certain consortia. The expenses incurred in 2016 are significantly higher due to the fact that in 2015 the only ongoing call was that from 2014, for which projects started in July 2015. In 2016 there was a full year of project costs for 2014 calls, as well as projects starting for the both calls of 2015 (total calls budget kEUR 206).

EUR '000

	Note	2016	2015
Operating costs: estimated in kind contributions	2.4	20 466	3 503
Operating cost: estimated EU contributions	2.5	28 275	6 788
Total		48 741	10 291

3.3. Staff costs

Included under this heading are expenses related to the salaries and other staff employment-related allowances.

3.4. Other expenses

EUR '000

	2016	2015
<i>Experts expenses</i>	508	1
<i>Property, plant and equipment related expenses</i>	276	72
<i>External non IT services</i>	182	18
<i>Communications & publications</i>	292	62
<i>Office supplies and maintenance</i>	73	43
<i>External IT services</i>	62	87
<i>Missions</i>	55	9
<i>Training costs</i>	53	21
<i>Communications and publications</i>	22	13
Total	1 523	327

Operating lease expenses related to the BBI JU building 'White Atrium' of kEUR 254 are included under the sub-heading 'property, plant and equipment related expenses'.

Amounts committed to be paid during the remaining term of this lease contract include rent and related charges and are as follows:

EUR '000

Future amounts to be paid				
	< 1 year	1- 5 years	> 5 years	Total
<i>Buildings</i>	270	1 434	614	2 318

4. OTHER SIGNIFICANT DISCLOSURES

4.1. Outstanding commitments not yet expensed

EUR '000

	31.12.2016	31.12.2015
<i>Outstanding commitments not yet expensed</i>	296 587	205 836

The amount of outstanding commitments not yet expensed comprises the budgetary RAL ('Reste à Liquider') less related amounts that have been included as expenses in the 2016 statement of financial performance. The budgetary RAL is an amount representing the open commitments for which payments and/or de-commitments have not yet been made. This is the normal consequence of the existence of multi-annual programmes.

4.2. Related parties

The related parties of the BBI JU are the participants of the JU and key management personnel of these entities. Transactions between these entities take place as part of the normal operations of BBI JU and as this is the case, no specific disclosure requirements are necessary for these transactions in accordance with the EU accounting rules.

4.3. Key management entitlements

The highest ranked civil servant of BBI JU is the Executive Director, who executes the role of the Authorising Officer.

	31.12.2016	31.12.2015
<i>Executive Director</i>	<i>AD 14</i>	<i>AD 14</i>

The Executive Director is remunerated in accordance with the Staff Regulation of the European Union that is published on the Europa website and which is the official document describing the rights and the obligation of all officials of the EU. The Executive Director has not received any preferential loans from BBI JU. It should also be noted that the members of the BBI's Governing Board do not receive any remuneration from BBI.

5. Financial instruments disclosures

5.1. Currency risks

Exposure of the BBI JU to currency risk at year end

At 31.12.2016 the ending balances of financial assets and financial liabilities did not include any material amounts quoted in different currencies than euro.

5.2. Credit risk

Financial assets that are neither past due nor impaired

The financial assets that are neither past due nor impaired are composed entirely of receivables and recoverables amounting to kEUR 3 168 at 31.12.2016.

Financial assets by risk category

At 31.12.2016 the financial assets are composed entirely of receivables and recoverables against entities without external credit rating. The entire amount of kEUR 3 168 relates to entities which have never defaulted in the past.

5.3. Liquidity risk

Maturity analysis of financial liabilities by remaining contractual maturity

The financial liabilities comprise accounts payable and other liabilities with a remaining contractual maturity of less than 1 year

REPORTS ON THE IMPLEMENTATION OF THE BUDGET

It should be noted that due to the rounding of figures into thousands of euros, some financial data in the tables below may appear not to add-up.

1. Budgetary principles, structure and implementation

1.1. Budgetary principles

The establishment and implementation of the budget of BBI JU is governed by the following basic principles set out in Chapter 2 of the Financial Rules of BBI JU:

Principles of unity and budget accuracy

This principle means that no revenue shall be collected and no expenditure effected unless booked to a line in the budget of BBI JU. No expenditure may be committed or authorised in excess of the appropriations authorised by the budget. An appropriation may be entered in the budget only if it is for an item of expenditure considered necessary.

Principle of annuality

The appropriations entered in the budget shall be authorised for a financial year which shall run from 1 January to 31 December. As specified in its Financial Rules, BBI JU is subject to an exception to the annuality principle, specific only to the joint undertakings (the “N+3” rule), whereby any unused appropriations may be entered in the estimate of revenue and expenditure of up to the following three financial years. These appropriations must be used first.

Principle of equilibrium

Revenue and payment appropriations shall be in balance.

Principle of unit of account

The budget shall be drawn up and implemented in euro and the accounts shall be presented in euro.

Principle of universality

Total revenue shall cover total payment appropriations and all revenue and expenditure shall be entered in full without any adjustment against each other.

Principle of specification

Appropriations shall be earmarked for specific purposes at least by title and chapter.

Principle of sound financial management

Appropriations shall be used in accordance with the principle of sound financial management, namely in accordance with the principles of economy, efficiency and effectiveness.

Principle of transparency

The budget shall be established and implemented and the accounts presented in accordance with the principle of transparency. The budget and any amending budgets shall be published on the internet site of the BBI JU within four weeks of their adoption and shall be transmitted to the Commission and the Court of Auditors.

1.2. Structure and presentation of the budget

Since 01/01/2015, no distinction between non-dissociated and dissociated appropriations is made. All appropriations follow the dissociated logic.

Following the provisions of the Financial Rules of BBI JU, the budget accounts shall consist of a statement of revenue and a statement of expenditure. The budget is distributed over the following titles:

Title 1 budget lines relate to staff expenditure such as salaries and allowances for personnel working with BBI JU. It also includes recruitment expenses, staff missions, expenses for the socio-medical infrastructure and representation costs.

Title 2 budget lines relate to all infrastructure, equipment and miscellaneous administrative expenditure.

Title 3 budget lines provide for the implementation of the activities and tasks assigned to BBI JU in accordance with its establishing Council Regulation (EC) No 560/2014.

1.3. Highlights of the budgetary implementation

The 2016 administrative budget has been managed by BBI JU following its autonomy (in late 2015) and still reflects some aspects inherited from the start-up phase of the organisation. In particular the surplus deriving from an over-budgeting of 2015 and 2016 costs (particularly Title 1) is heavily impacting the execution of the 2016 administrative budget. This situation is currently under discussion and will be addressed in future years, after taking into account the 2017 execution, which is based on a more realistic budget. For the operational budget, execution is showing satisfactory progress.

Administrative costs

The budgeted costs for 2016 were based on an assumption of the full staff headcount being recruited by 1st January, whereas roughly half were actually in place. Another 6 were recruited during 2016, filling 20 of the available 22 posts by 31st December 2016. This situation led to a considerable under-execution of the BBI administrative budget, taking also into account the surplus accumulated in 2015 for the same reasons.

Title 1: staff related costs such as salaries and missions are showing a poor execution (57 % and 46 % respectively), while recruitment and removal expenses are much stronger at 80 %. The general execution of the original 2016 voted budget is over 70 %, but when the large surplus brought forward from 2015 is taken into account this drops to 51 %. These figures do however constitute a tangible improvement compared to the 40 % execution recorded in 2015.

Title 2: buildings, IT and communications costs show strong execution in 2016 contributing to an overall implementation of 78 % in Title 2. Taking into account the brought-forward appropriations from 2015 this drops to 43 %. The budgetary implementation does not include the spending related to evaluators contracts; this budget was executed by the Research Executive Agency for an amount of kEUR 473 representing a 65 % execution.

In accordance with the BBI JU Financial Rules, the unused appropriations can be used until year N+3. Therefore the unexecuted budget will be carried forward to supplement the 2017 budget and a decision on the ultimate destination of the surplus will be presented to the BBI JU Governing Board.

Operational costs

Concerning the commitment appropriations of the operational budget, BBI JU concluded 26 grant agreements from the calls for proposals 2015.1 and 2015.2. Three grants of the 2015.1 call resulted in a consumption of 73.7 % of commitment appropriations, while the unused EUR 26 million were carried forward to top up the BBI 2016 call for proposals. Twenty-three grants of the 2015.2 call resulted in a 99 % execution of commitment appropriations.

The 2016 call for proposals was committed for EUR 188.9 million and was successfully evaluated by the end of 2016, resulting in a potential consumption of 98 % if all grants are signed in 2017. Unused appropriations totalling EUR 3 million will be brought forward to 2017 (via a budgetary amendment) in order to top up the BBI 2017 call for proposals.

Concerning the payment appropriations, BBI JU achieved 100 % execution with the pre-financing payments for the grants of calls 2015.1 and 2015.2

2. Result of the implementation of the budget

		EUR '000	
	Title	2016	2015
Revenue		65 487	1 932
of which:			
JU revenues	A-1	65 487	1 932
Expenditure		(64 377)	(1 927)
of which:			
Staff expenditure	A-1	(1 748)	
Admin expenditure	A-2	(837)	
Operational expenditure	B-3	(61 792)	
Budget result		1 110	5

3. Reconciliation of economic result with budget result

EUR '000

	2016	2015
ECONOMIC RESULT OF THE YEAR	(51 826)	6 873
Adjustment for accrual items (items not in the budgetary result but included in the economic result)		
<i>Adjustments for accrual cut-off (net)</i>	49 260	10 474
<i>Unpaid invoices at year end but booked in expenses</i>	18	-
<i>Depreciation of intangible and tangible assets</i>	10	3
<i>Other individually immaterial</i>	2	-
Adjustment for budgetary items (item included in the budgetary result but not in the economic result)		
<i>Members' cash contributions collected in the year</i>	65 487	-
<i>Asset acquisitions (less unpaid amounts)</i>	(51)	(11)
<i>New pre-financing paid in the year and remaining open as at 31 December</i>	(61 791)	(17 714)
<i>Payment appropriations carried over to following year</i>	-	(1 542)
<i>Payment appropriations carried over on migration</i>	-	1 927
<i>Other individually immaterial</i>	1	(5)
BUDGET RESULT OF THE YEAR	1 110	5

4. Implementation of budget revenue

4.1. Implementation of budget revenue – Title A-1

EUR '000

		Income appropriations		Entitlements established				Revenue			
		Initial budget	Final budget	Current year	Carried	Total	Current year	Carried	Total	%	Outstanding
		1	2	3	4	5=3+4	6	7	8=6+7	9=8/2	10
A-1001	European Commission (incl. EFTA) contribution to administrative expenditures	1 999	1 999	1 499	–	1 499	1 499	–	1 499	75%	–
A-1002	European Commission (incl. EFTA) contribution to operating expenditures	61 791	61 791	61 791	–	61 791	61 791	–	61 791	100%	–
A-1003	Bio-based Industries Consortium contribution to administrative expenditures	2 193	2 193	2 193	–	2 193	2 193	–	2 193	100%	–
A-1005	JU revenues	–	–	4	–	4	4	–	4	0%	–
Total chapter A-10		65 984	65 984	65 487	–	65 487	65 487	–	65 487	99%	–
Total Title A-1		65 984	65 984	65 487	–	65 487	65 487	–	65 487	99%	–
GRAND TOTAL		65 984	65 984	65 487	–	65 487	65 487	–	65 487	99%	–

5. Implementation of budget expenditure

5.1. Breakdown & changes in commitment appropriations

5.1.1. Breakdown & changes in commitment appropriations – Title A-1

EUR '000

		Initial adopted budget	Budget appropriations of the year		Final budget adopted	Carryover	Additional appropriations		Total	Total approp. available
		1	Amending budgets	Transfers	4=1+2+3	5	Assigned revenue	6	7=5+6	8=4+7
A-1100	Staff costs	2 277	–	(102)	2 176	762	–	–	762	2 938
A-1110	Temporary staff	–	–	16	16	–	–	–	–	16
A-1120	Other services rendered	–	–	–	–	–	–	–	–	–
Total chapter A-11		2 277	–	(86)	2 192	762	–	–	762	2 954
A-1200	Sundry recruitment expenses	3	–	50	53	79	–	–	79	132
A-1201	Installation resettlement and daily subsistence allowances and removal and travel expenses	19	–	–	19	–	–	–	–	19
Total chapter A-12		22	–	50	72	79	–	–	79	150
A-1300	Mission expenses, duty travel expenses and other ancillary expenditure	118	–	–	118	–	–	–	–	118
Total chapter A-13		118	–	–	118	–	–	–	–	118
A-1400	Medical service	10	–	(1)	9	–	–	–	–	9
A-1401	Mobility costs and other social expenses for staff	6	–	–	6	–	–	–	–	6
A-1402	Training	35	–	34	69	30	–	–	30	99
Total chapter A-14		51	–	33	84	30	–	–	30	114
A-1500	Entertainment and representation expenses	6	–	2	8	13	–	–	13	21
Total chapter A-15		6	–	2	8	13	–	–	13	21
Total title A-1		2 473	–	(0)	2 473	884	–	–	884	3 357

5.1.2. Breakdown & changes in commitment appropriations – Title A-2

		EUR '000						
		Budget appropriations of the year			Additional appropriations			Total approp. available 8=4+7
		Initial adopted budget	Amending budgets	Transfers	Final budget adopted	Carryover	Assigned revenue	
		1	2	3	4=1+2+3	5	6	
							7=5+6	
A-2000	Rentals	215	–	38	253	13	–	266
A-2010	Charges	97	–	(90)	7	–	–	7
Total chapter A-20		312	–	(52)	260	13	–	273
A-2100	IT equipment & software purchase/development costs	38	–	13	51	37	–	88
A-2101	Other IT costs	88	–	(3)	85	–	–	85
Total chapter A-21		126	–	10	136	37	–	173
A-2200	Movable property and associated office equipment purchase costs	5	–	70	75	–	–	75
Total chapter A-22		5	–	70	75	–	–	75
A-2300	Stationery and office supplies	18	–	(2)	16	–	–	16
A-2303	Other current administrative expenditure	11	–	(10)	1	–	–	1
Total chapter A-23		28	–	(11)	17	–	–	17
A-2400	Telecommunications and postal charges	19	–	2	20	–	–	20
Total chapter A-24		19	–	2	20	–	–	20
A-2500	Expenditure on formal meetings	101	–	(28)	73	–	–	73
Total chapter A-25		101	–	(28)	73	–	–	73
A-2600	Audit costs	220	–	(30)	190	8	–	198
A-2601	Events & materials/brochures costs	32	–	3	35	166	–	202
A-2602	Website costs	43	–	20	63	–	–	63
Total chapter A-26		296	–	(7)	289	174	–	463
A-2700	Events & materials/brochures costs	105	–	17	122	–	–	122
Total chapter A-27		105	–	17	122	–	–	122
A-2800	Studies, consultancy and other services	728	–	–	728	–	–	728
Total chapter A-28		728	–	–	728	–	–	728
Total title A-2		1 720	–	–	1 720	224	–	1 944

5.1.3. Breakdown & changes in commitment appropriations – Title B-3

EUR '000

		Budget appropriations of the year			Additional appropriations			
		Initial adopted budget	Amending budgets	Transfers	Final budget adopted	Carryover	Assigned revenue	Total
		1	2	3	4=1+2+3	5	6	7=5+6
								Total apppr. available 8=4+7
B3-000	Implementing the research agenda of BBI JU	161 149	(161 149)	–	–	–	–	–
Total chapter B3-0		161 149	(161 149)	–	–	–	–	–
B3-100	Implementing the research agenda of BBI JU.	–	–	–	–	341	–	341
Total chapter B3-1		–	–	–	–	341	–	341
B3-200	Implementing the research agenda of BBI JU	–	161 149	–	161 149	27 505	–	27 505
Total chapter B3-2		–	161 149	–	161 149	27 505	–	27 505
Total title B-3		161 149	–	–	161 149	27 846	–	188 995
GRAND TOTAL		165 341	–	–	165 341	28 954	–	194 296

5.2. Breakdown & changes in payment appropriations

5.2.1. Breakdown & changes in payment appropriations – Title A-1

EUR '000

		Initial adopted budget	Budget appropriations of the year Amending budgets	Transfers	Final budget adopted	Carryover	Additional appropriations Assigned revenue	Total	Total appropr. available
		1	2	3	4=1+2+3	5	6	7=5+6	8=4+7
A-1100	Staff costs	2 277	–	(111)	2 166	800	–	800	2 966
A-1110	Temporary staff	–	–	16	16	–	–	–	16
A-1120	Other services rendered	–	–	10	10	–	–	–	10
Total chapter A-11		2 277	–	(86)	2 192	800	–	800	2 991
A-1200	Sundry recruitment expenses	3	–	50	53	34	–	34	87
A-1201	Installation resettlement and daily subsistence allowances and removal and travel expenses	19	–	–	19	–	–	–	19
Total chapter A-12		22	–	50	72	34	–	34	106
A-1300	Mission expenses, duty travel expenses and other ancillary expenditure	118	–	–	118	24	–	24	142
Total chapter A-13		118	–	–	118	24	–	24	142
A-1400	Medical service	10	–	(1)	9	3	–	3	12
A-1401	Mobility costs and other social expenses for staff	6	–	–	6	–	–	–	6
A-1402	Training	35	–	34	69	4	–	4	73
Total chapter A-14		51	–	33	84	7	–	7	91
A-1500	Entertainment and representation expenses	6	–	2	8	0	–	0	8
Total chapter A-15		6	–	2	8	0	–	0	8
Total title A-1		2 473	–	(0)	2 473	865	–	865	3 338

5.2.2. Breakdown & changes in payment appropriations – Title A-2

		EUR '000							
		Initial adopted budget	Budget appropriations of the year		Final budget adopted	Additional appropriations		Total	Total approp. available
			Amending budgets	Transfers		Carryover	Assigned revenue		
		1	2	3	4=1+2+3	5	6		
A-2000	Rentals	215	–	10	225	80	–	80	305
A-2010	Charges	97	–	(20)	77	–	–	–	77
Total chapter A-20		312	–	(10)	302	80	–	80	382
A-2100	IT equipment & software purchase/development costs	38	–	38	76	38	–	38	113
A-2101	Other IT costs	88	–	(17)	71	–	–	–	71
Total chapter A-21		126	–	21	147	38	–	38	184
A-2200	Movable property and associated office equipment purchase costs	5	–	70	75	60	–	60	135
Total chapter A-22		5	–	70	75	60	–	60	135
A-2300	Stationery and office supplies	18	–	–	18	5	–	5	23
A-2303	Other current administrative expenditure	11	–	–	11	–	–	–	11
Total chapter A-23		28	–	–	28	5	–	5	33
A-2400	Telecommunications and postal charges	19	–	–	19	8	–	8	27
Total chapter A-24		19	–	–	19	8	–	8	27
A-2500	Expenditure on formal meetings	101	–	(30)	71	28	–	28	99
Total chapter A-25		101	–	(30)	71	28	–	28	99
A-2600	Audit costs	220	–	(66)	154	78	–	78	232
A-2601	Events & materials/brochures costs	32	–	26	58	23	–	23	81
A-2602	Website costs	43	–	–	43	28	–	28	71
Total chapter A-26		296	–	(40)	256	129	–	129	384
A-2700	Events & materials/brochures costs	105	–	(11)	94	–	–	–	94
Total chapter A-27		105	–	(11)	94	–	–	–	94
A-2800	Studies, consultancy and other services	728	–	–	728	–	–	–	728
Total chapter A-28		728	–	–	728	–	–	–	728
Total title A-2		1 720	–	–	1 720	346	–	346	2 066

5.2.3. Breakdown & changes in payment appropriations – Title B-3

EUR '000

	Initial adopted budget	Budget appropriations of the year			Final budget adopted	Carryover	Additional appropriations		Total	Total appopr. available
		Amending budgets	Transfers				Assigned revenue			
	1	2	3	4=1+2+3	5	6	7=5+6	8=4+7		
B3-000 <i>Implementing the research agenda of BBI JU</i>	61 791	–	–	61 791	–	–	–	–	61 791	
Total chapter B3-0	61 791	–	–	61 791	–	–	–	–	61 791	
B3-100 <i>Implementing the research agenda of BBI JU.</i>	–	–	–	–	1	–	1	1	–	
Total chapter B3-1	–	–	–	–	1	–	1	1	–	
B3-200 <i>Implementing the research agenda of BBI JU</i>	–	–	–	–	–	–	–	–	–	
Total chapter B3-2	–	–	–	–	–	–	–	–	–	
Total title B-3	61 791	–	–	61 791	1	–	1	1	61 792	
GRAND TOTAL	65 984	–	(0)	65 984	1 213	–	1 213	1 213	67 196	

5.3. Implementation of commitment appropriations

5.3.1. Implementation of commitment appropriations – Title A-1

EUR '000

		Commitments made						Appropriations carried over to 2017			Appropriations lapsing			
		Total approp. availab.	From final adopt. budget	From carry overs	From assigned revenue	Total	%	Assigned revenue	By decision	Total	From final adopted budget	From carry overs	From assigned revenue	Total
		1	2	3	4	5=2+3+4	6=5/1	7	8	9=7+8	10	11	12	13=10+11+12
A-1100	Staff costs	2 938	1 244	304	—	1 548	53%	—	—	—	932	458	—	1 389
A-1110	Temporary staff	16	7	—	—	7	42%	—	—	—	9	—	—	9
A-1120	Other services rendered	—	—	—	—	—	0%	—	—	—	—	—	—	—
Total chapter A-11		2 954	1 251	304	—	1 555	53%	—	—	—	941	458	—	1 399
A-1200	Sundry recruitment expenses	132	43	64	—	106	81%	—	—	—	10	15	—	25
A-1201	Installation resettlement and daily subsistence allowances and removal and travel expenses	19	9	—	—	9	46%	—	—	—	10	—	—	10
Total chapter A-12		150	51	64	—	115	76%	—	—	—	21	15	—	35
A-1300	Mission expenses, duty travel expenses and other ancillary expenditure	118	55	—	—	55	46%	—	—	—	64	—	—	64
Total chapter A-13		118	55	—	—	55	46%	—	—	—	64	—	—	64
A-1400	Medical service	9	5	—	—	5	56%	—	—	—	4	—	—	4
A-1401	Mobility costs and other social expenses for staff	6	6	—	—	6	100%	—	—	—	—	—	—	—
A-1402	Training	99	51	13	—	64	64%	—	—	—	18	17	—	35
Total chapter A-14		114	62	13	—	75	66%	—	—	—	22	17	—	39
A-1500	Entertainment and representation expenses	21	8	—	—	8	37%	—	—	—	0	13	—	13
Total chapter A-15		21	8	—	—	8	37%	—	—	—	0	13	—	13
Total title A-1		3 357	1 426	381	—	1 807	54%	—	—	—	1 047	502	—	1 550

5.3.2. Implementation of commitment appropriations – Title A-2

EUR '000

	Total approp. availab.	From final adopt. budget	Commitments made		Total	%	Appropriations carried over to 2017			Appropriations lapsing			Total
			From carry overs	From assigned revenue			Assigned revenue	By decision	Total	From final adopted budget	From carry overs	From assigned revenue	
	1	2	3	4	5=2+3+4	6=5/1	7	8	9=7+8	10	11	12	13=10+11+12
A-2000 Rentals	266	250	13	–	263	99%	–	–	–	3	–	–	3
A-2010 Charges	7	–	–	–	–	0%	–	–	–	7	–	–	7
Total chapter A-20	273	250	13	–	263	96%	–	–	–	10	–	–	10
A-2100 IT equipment & software purchase/development costs	88	43	24	–	67	76%	–	–	–	8	13	–	21
A-2101 Other IT costs	85	84	–	–	84	99%	–	–	–	1	–	–	1
Total chapter A-21	173	126	24	–	151	87%	–	–	–	9	13	–	22
A-2200 Movable property and associated office equipment purchase costs	75	64	–	–	64	85%	–	–	–	11	–	–	11
Total chapter A-22	75	64	–	–	64	85%	–	–	–	11	–	–	11
A-2300 Stationery and office supplies	16	7	–	–	7	46%	–	–	–	9	–	–	9
A-2303 Other current administrative expenditure	1	1	–	–	1	100%	–	–	–	–	–	–	–
Total chapter A-23	17	8	–	–	8	49%	–	–	–	9	–	–	9
A-2400 Telecommunications and postal charges	20	16	–	–	16	78%	–	–	–	5	–	–	5
Total chapter A-24	20	16	–	–	16	78%	–	–	–	5	–	–	5
A-2500 Expenditure on formal meetings	73	37	–	–	37	51%	–	–	–	36	–	–	36
Total chapter A-25	73	37	–	–	37	51%	–	–	–	36	–	–	36
A-2600 Audit costs	198	145	8	–	153	77%	–	–	–	45	–	–	45
A-2601 Events & materials/brochures costs	202	24	150	–	174	86%	–	–	–	11	16	–	28
A-2602 Website costs	63	39	–	–	39	62%	–	–	–	24	–	–	24
Total chapter A-26	463	209	158	–	366	79%	–	–	–	80	16	–	96
A-2700 Events & materials/brochures costs	122	34	–	–	34	28%	–	–	–	87	–	–	87
Total chapter A-27	122	34	–	–	34	28%	–	–	–	87	–	–	87
A-2800 Studies, consultancy and other services	728	36	–	–	36	5%	–	–	–	692	–	–	692
Total chapter A-28	728	36	–	–	36	5%	–	–	–	692	–	–	692
Total title A-2	1 944	781	195	–	976	50%	–	–	–	939	29	–	968

5.3.3. Implementation of commitment appropriations – Title B-3

EUR '000

	Total approp. availab.	From final adopt. budget	Commitments made		Total	%	Appropriations carried over to 2017			Appropriations lapsing			Total
			From carry overs	From assigned revenue			Assigned revenue	By decision	Total	From final adopted budget	From carry overs	From assigned revenue	
	1	2	3	4	5=2+3+4	6=5/1	7	8	9=7+8	10	11	12	13=10+11+12
B3-000 Implementing the research agenda of BBI JU	–	–	–	–	–	0%	–	–	–	–	–	–	–
Total chapter B3-0	–	–	–	–	–	0%	–	–	–	–	–	–	–
B3-100 Implementing the research agenda of BBI JU.	341	–	341	–	341	100%	–	–	–	–	–	–	–
Total chapter B3-1	341	–	341	–	341	100%	–	–	–	–	–	–	–
B3-200 Implementing the research agenda of BBI JU	188 654	158 052	27 505	–	185 557	98%	–	–	–	3 097	–	–	3 097
Total chapter B3-2	188 654	158 052	27 505	–	185 557	98%	–	–	–	3 097	–	–	3 097
Total title B-3	188 995	158 052	27 846	–	185 898	98%	–	–	–	3 097	–	–	3 097
GRAND TOTAL	194 296	160 258	28 423	–	188 681	97%	–	–	–	5 083	532	–	5 615

5.4. Implementation of payment appropriations

5.4.1. Implementation of payment appropriations – Title A-1

EUR '000

		Payments made						Appropriations carried over to 2017				Appropriations lapsing			
		Total approp. availab.	From final adopted budget	From carry overs	From assigned revenue	Total	%	Automatic carry overs	By decision	Assigned revenue	Total	From final budget	From carry overs	From assigned revenue	Total
		1	2	3	4	5=2+3+4	6 = 5/1	7	8	9	10=7+8+9	11	12	13	14=11+12+13
A-1100	Staff costs	2 966	734	800	—	1 534	52%		—	—	—	1 432	—	—	1 432
A-1110	Temporary staff	16	7	—	—	7	42%		—	—	—	9	—	—	9
A-1120	Other services rendered	10	9	—	—	9	91%		—	—	—	1	—	—	1
Total chapter A-11		2 991	749	800	—	1 549	52%		—	—	—	1 442	—	—	1 442
A-1200	Sundry recruitment expenses	87	53	34	—	87	100%		—	—	—	0	—	—	0
A-1201	Installation resettlement and daily subsistence allowances and removal and travel expenses	19	9	—	—	9	46%		—	—	—	10	—	—	10
Total chapter A-12		106	61	34	—	96	90%		—	—	—	11	—	—	11
A-1300	Mission expenses, duty travel expenses and other ancillary expenditure	142	29	24	—	53	37%		—	—	—	89	0	—	89
Total chapter A-13		142	29	24	—	53	37%		—	—	—	89	0	—	89
A-1400	Medical service	12	2	3	—	5	40%		—	—	—	7	—	—	7
A-1401	Mobility costs and other social expenses for staff	6	4	—	—	4	70%		—	—	—	2	—	—	2
A-1402	Training	73	29	4	—	34	46%		—	—	—	40	—	—	40
Total chapter A-14		91	35	7	—	43	47%		—	—	—	49	—	—	49
A-1500	Entertainment and representation expenses	8	8	0	—	8	99%		—	—	—	0	—	—	0
Total chapter A-15		8	8	0	—	8	99%		—	—	—	0	—	—	0
Total title A-1		3 338	883	865	—	1 748	52%		—	—	—	1 590	0	—	1 591

5.4.2. Implementation of payment appropriations – Title A-2

EUR '000

		Payments made						Appropriations carried over to 2017				Appropriations lapsing			
		Total approp. availab.	From final adopted budget	From carry overs	From assigned revenue	Total	%	Automatic carry overs	By decision	Assigned revenue	Total	From final budget	From carry overs	From assigned revenue	Total
		1	2	3	4	5=2+3+4	6 = 5/1	7	8	9	10=7+8+9	11	12	13	14=11+12+13
A-2000	Rentals	305	183	80	—	263	86%		—	—	—	42	—	—	42
A-2010	Charges	77	—	—	—	—	0%		—	—	—	77	—	—	77
Total chapter A-20		382	183	80	—	263	69%		—	—	—	119	—	—	119
A-2100	IT equipment & software purchase/development costs	113	70	37	—	107	95%		—	—	—	5	1	—	6
A-2101	Other IT costs	71	70	—	—	70	100%		—	—	—	0	—	—	0
Total chapter A-21		184	141	37	—	178	96%		—	—	—	6	1	—	6
A-2200	Movable property and associated office equipment purchase costs	135	1	57	—	58	43%		—	—	—	74	3	—	77
Total chapter A-22		135	1	57	—	58	43%		—	—	—	74	3	—	77
A-2300	Stationery and office supplies	23	15	5	—	20	87%		—	—	—	3	—	—	3
A-2303	Other current administrative expenditure	11	—	—	—	—	0%		—	—	—	11	—	—	11
Total chapter A-23		33	15	5	—	20	60%		—	—	—	13	—	—	13
A-2400	Telecommunications and postal charges	27	5	8	—	13	48%		—	—	—	14	—	—	14
Total chapter A-24		27	5	8	—	13	48%		—	—	—	14	—	—	14
A-2500	Expenditure on formal meetings	99	9	28	—	37	38%		—	—	—	62	—	—	62
Total chapter A-25		99	9	28	—	37	38%		—	—	—	62	—	—	62
A-2600	Audit costs	232	32	78	—	110	47%		—	—	—	122	—	—	122
A-2601	Events & materials/brochures costs	81	58	23	—	81	99%		—	—	—	1	—	—	1
A-2602	Website costs	71	14	28	—	42	59%		—	—	—	29	—	—	29
Total chapter A-26		384	104	129	—	232	60%		—	—	—	152	—	—	152
A-2700	Events & materials/brochures costs	94	—	—	—	—	0%		—	—	—	94	—	—	94
Total chapter A-27		94	—	—	—	—	0%		—	—	—	94	—	—	94
A-2800	Studies, consultancy and other services	728	36	—	—	36	5%		—	—	—	692	—	—	692
Total chapter A-28		728	36	—	—	36	5%		—	—	—	692	—	—	692
Total title A-2		2 066	494	343	—	837	41%		—	—	—	1 226	3	—	1 229

5.4.3. Implementation of payment appropriations – Title B-3

EUR '000

		Payments made					Appropriations carried over to 2017				Appropriations lapsing				
		Total approp. availab.	From final adopted budget	From carry overs	From assigned revenue	Total	%	Automatic carry overs	By decision	Assigned revenue	Total	From final budget	From carry overs	From assigned revenue	Total
		1	2	3	4	5=2+3+4	6 = 5/1	7	8	9	10=7+8+9	11	12	13	14=11+12+13
B3-000	Implementing the research agenda of BBI JU	61 791	61 791	–	–	61 791	100%		–	–	–	–	–	–	–
Total chapter B3-0		61 791	61 791	–	–	61 791	100%		–	–	–	–	–	–	–
B3-100	Implementing the research agenda of BBI JU.	1	–	1	–	1	100%		–	–	–	–	–	–	–
Total chapter B3-1		1	–	1	–	1	100%		–	–	–	–	–	–	–
B3-200	Implementing the research agenda of BBI JU	–	–	–	–	–	0%		–	–	–	–	–	–	–
Total chapter B3-2		–	–	–	–	–	0%		–	–	–	–	–	–	–
Total title B-3		61 792	61 791	1	–	61 792	100%		–	–	–	–	–	–	–
GRAND TOTAL		67 196	63 168	1 209	–	64 377	96%		–	–	–	2 816	3	–	2 820

6. Commitments outstanding

6.1. Commitments outstanding – Title A-1

		Commitments outstanding at the end of prev. year				Commitments of the year			EUR '000
		Comm. carried forward from prev. year	Decommit. Revaluation Cancellations	Payments	Total	Comm. made during the year	Payment	Cancellation of comm. which cannot be carried forward	Total commitments
		1	2	3	4=1+2-3	5	6	7	8=5-6-7
									9=4+8
A-1100	Staff costs	–	–	–	–	1 548	1 534	–	15
A-1110	Temporary staff	–	–	–	–	7	7	–	–
A-1120	Other services rendered	12	(3)	9	–	–	–	–	–
Total chapter A-11		12	(3)	9	–	1 555	1 540	–	15
A-1200	Sundry recruitment expenses	9	–	9	–	106	78	–	28
A-1201	Installation resettlement and daily subsistence allowances and removal and travel expenses	–	–	–	–	9	9	–	–
Total chapter A-12		9	–	9	–	115	87	–	28
A-1300	Mission expenses, duty travel expenses and other ancillary expenditure	3	(1)	2	–	55	50	–	4
Total chapter A-13		3	(1)	2	–	55	50	–	4
A-1400	Medical service	7	(2)	5	–	5	–	–	5
A-1401	Mobility costs and other social expenses for staff	–	–	–	–	6	4	–	2
A-1402	Training	19	(14)	5	–	64	29	–	35
Total chapter A-14		26	(16)	9	–	75	33	–	42
A-1500	Entertainment and representation expenses	0	(0)	0	–	8	8	–	0
Total chapter A-15		0	(0)	0	–	8	8	–	0
Total Title A-1		50	(21)	29	–	1 807	1 719	–	89

6.2. Commitments outstanding – Title A-2

		Commitments outstanding at the end of prev. year				Commitments of the year				EUR '000
		Comm. carried forward from prev. year	Decommit. Revaluation Cancellations	Payments	Total	Comm. made during the year	Payment	Cancellation of comm. which cannot be carried forward	Commit. outstanding at year-end	Total commitments outstanding at year-end
		1	2	3	4=1+2-3	5	6	7	8=5-6-7	9=4+8
A-2000	Rentals	–	–	–	–	263	263	–	–	–
Total chapter A-20		–	–	–	–	263	263	–	–	–
A-2100	IT equipment & software purchase/development costs	80	(8)	62	11	67	45	–	22	33
A-2101	Other IT costs	–	–	–	–	84	70	–	13	13
Total chapter A-21		80	(8)	62	11	151	116	–	35	46
A-2200	Movable property and associated office equipment purchase costs	–	–	–	–	64	58	–	6	6
Total chapter A-22		–	–	–	–	64	58	–	6	6
A-2300	Stationery and office supplies	14	–	14	–	7	6	–	1	1
A-2303	Other current administrative expenditure	–	–	–	–	1	–	–	1	1
Total chapter A-23		14	–	14	–	8	6	–	2	2
A-2400	Telecommunications and postal charges	4	–	4	–	16	9	–	7	7
Total chapter A-24		4	–	4	–	16	9	–	7	7
A-2500	Expenditure on formal meetings	1	(1)	–	–	37	37	–	–	–
Total chapter A-25		1	(1)	–	–	37	37	–	–	–
A-2600	Audit costs	22	(14)	8	–	153	102	–	51	51
A-2601	Events & materials/brochures costs	1	–	1	–	174	80	–	94	94
A-2602	Website costs	7	–	7	–	39	35	–	5	5
Total chapter A-26		29	(14)	15	–	366	217	–	149	149
A-2700	Events & materials/brochures costs	–	–	–	–	34	–	–	34	34
Total chapter A-27		–	–	–	–	34	–	–	34	34
A-2800	Studies, consultancy and other services	–	–	–	–	36	36	–	–	–
Total chapter A-28		–	–	–	–	36	36	–	–	–
Total Title A-2		128	(22)	95	11	976	742	–	234	244

6.3. Commitments outstanding – Title B-3

										EUR '000
Commitments outstanding at the end of prev. year					Commitments of the year					Total commitments
	Comm. carried forward from prev. year	Decommit. Revaluation Cancellations	Payments	Total	Comm. made during the year	Payment	Cancellation of comm. which cannot be carried forward	Commit. outstanding at year-end		outstanding at year-end
	1	2	3	4=1+2+3	5	6	7	8=5-6-7		9=4+8
B3-000 <i>Implementing the research agenda of BBI JU</i>	212 330	(1 354)	61 791	149 186	–	–	–	–		149 186
Total chapter B3-0	212 330	(1 354)	61 791	149 186	–	–	–	–		149 186
B3-100 <i>Implementing the research agenda of BBI JU.</i>	–	–	–	–	341	1	–	340		340
Total chapter B3-1	–	–	–	–	341	1	–	340		340
B3-200 <i>Implementing the research agenda of BBI JU</i>	–	–	–	–	185 557	–	–	185 557		185 557
Total chapter B3-2	–	–	–	–	185 557	–	–	185 557		185 557
Total Title B-3	212 330	(1 354)	61 791	149 186	185 898	1	–	185 897		335 083
GRAND TOTAL	212 508	(1 397)	61 914	149 197	188 681	2 462	–	186 219		335 416

7. ANNUAL ACCOUNTS GLOSSARY

ABAC

This is the name given to the Commission's accounting system, which since 2005 has been enriched by accrual accounting rules. Apart from the cash-based budget accounts, the Commission produces accrual-based accounts which recognise revenue when earned, rather than when collected. Expenses are recognised when incurred rather than when paid. This contrasts with cash basis budgetary accounting that recognises transactions and other events only when cash is received or paid.

Accounting

The act of recording and reporting financial transactions, including the creation of the transaction, its recognition, processing, and summarisation in the financial statements.

Administrative appropriations

Administrative appropriations cover the running costs of the Institutions and entities (staff, buildings, office equipment).

Adjustment

Amending budget or transfer of funds from one budget item to another

Adopted budget

Draft budget becomes the adopted budget as soon as it is approved by the Budgetary Authority. Cf. Budget.

Agencies

EU bodies having a distinct legal personality, and to whom budget implementing powers may be delegated under strict conditions. They are subject to a distinct discharge from the discharge authority.

Amending budget

Decision adopted during the budget year to amend (increase, decrease, transfer) aspects of the adopted budget of that year.

Annuality

The budgetary principle according to which expenditure and revenue is programmed and authorised for one year, starting on 1 January and ending on 31 December.

Appropriations

Budget funding. The budget forecasts both commitments (legal pledges to provide finance, provided that certain conditions are fulfilled) and payments (cash or bank transfers to the beneficiaries). Appropriations for commitments and payments often differ — differentiated appropriations — because multiannual programmes and projects are usually fully committed in the year they are decided and are paid over the years as the implementation of the programme and project progresses. Non-differentiated appropriations apply to administrative expenditure, for agricultural market support and direct payments and commitment appropriations equal payment appropriations.

Assigned revenue External/Internal

Dedicated revenue received to finance specific items of expenditure. Main sources of external assigned revenue are financial contributions from third countries to programmes financed by the Union. Main sources of internal assigned revenue is revenue from third parties in respect of goods, services or work supplied at their request; (c) revenue arising from the repayment of amounts wrongly paid and revenue from the sale of publications and films, including those on an electronic medium. The complete list of items constituting assigned revenue is given in the Financial Regulation Art.21.2.

Authorising Officer (AO)

The AO is responsible in each institution for authorising revenue and expenditure operations in accordance with the principles of sound financial management and for ensuring that the requirements of legality and regularity are complied with.

Budget

Annual financial plan, drawn up according to budgetary principles, that provides forecasts and authorises, for each financial year, an estimate of future costs and revenue and expenditures and their detailed description and justification, the latter included in budgetary remarks.

Budget result

The difference between income received and amounts paid, including adjustments for carry-overs, cancellations and exchange rate differences. The resulting amount will have to be reimbursed to the funding authority as provided in the Financial Regulation for Agencies.

Budget implementation

Consumption of the budget through expenditure and revenue operations.

Budget item / Budget line / Budget position

As far as the budget structure is concerned, revenue and expenditure are shown in the budget in accordance with a binding nomenclature which reflects the nature and purpose of each item, as imposed by the budgetary authority. The individual headings (title, chapter, article or item) provide a formal description of the nomenclature.

Budgetary authority

Institutions with decisional powers on budgetary matters: the European Parliament and the Council of Ministers

Budgetary commitment

A budgetary commitment is a reservation of appropriations to cover for subsequent expenses.

Cancellation of appropriations

Unused appropriations that may no longer be used.

Carryover of appropriations

Exception to the principle of annuality in so far as appropriations that could not be used in a given budget year may, under strict conditions, be exceptionally carried over for use during the following year.

Commitment appropriations

Commitment appropriations cover the total cost of legal obligations (contracts, grant agreements/decisions) that could be signed in the current financial year. Art. 7 FR: Commitment appropriations cover the total cost in the current financial year of legal obligations (contracts, grant agreements/decisions) entered into for operations extending over more than one year.

De-commitment

Cancellation of a reservation of appropriations

Differentiated appropriations

Differentiated appropriations are used to finance multiannual operations; they cover, for the current financial year, the total cost of the legal obligations entered into for operations whose implementation extends over more than one financial year. Art. 7 FR: Differentiated appropriations are entered for multiannual operations. They consist of commitment appropriations and payment appropriations.

Earmarked revenue

Revenue earmarked for a specific purpose, such as income from foundations, subsidies, gifts and bequests, including the earmarked revenue specific to each institution. (Cf. Assigned revenue)

Economic result

Impact on the balance sheet of expenditure and revenue based on accrual accounting rules.

Entitlements established

Entitlements are recovery orders that the European Union must establish for collecting income.

Exchange rate difference

The difference resulting from currency exchange rates applied to the transactions concerning countries outside the euro area, or from the revaluation of assets and liabilities in foreign currency at the closure.

Expenditure

Term used to describe spending the budget from all types of funds sources.

Financial regulation (FR)

Adopted through the ordinary legislative procedure after consulting the European Court of Auditors, this regulation lays down the rules for the establishment and implementation of the general budget of the European Union. (OJ L 298, 26.10.2012)

Funds Source

Type of appropriations (e.g.: C1, C2, etc.)

Grants

Direct financial contributions, by way of donation, from the budget in order to finance either an action intended to help achieve an objective part of an EU policy or the functioning of a body which pursues an aim of general European interest or has an objective forming part of an EU policy.

Implementation

Cf. Budget implementation

Income

Cf. Revenue

Joint Undertakings (JUs)

A legal EU-body established under the TFEU. The term can be used to describe any collaborative structure proposed for the "efficient execution of Union research, technological development and demonstration programmes".

Lapsing appropriations

Unused appropriations to be cancelled at the end of the financial year. Lapsing means the cancellation of all or part of the authorisation to make expenditures and/or incur liabilities which is represented by an appropriation.

Legal base (basic act)

The legal base or basis is, as a general rule, a law based on an article in the Treaty giving competence to the Community for a specific policy area and setting out the conditions for fulfilling that competence including budget implementation. Certain Treaty articles authorise the Commission to undertake certain actions, which imply spending, without there being a further legal act.

Legal commitment

A legal commitment establishes a legal obligation towards third parties.

Non-differentiated appropriations

Non-differentiated appropriations are for operations of an annual nature. (Art. 9 FR). In the EU-Budget non-differentiated appropriations apply to administrative expenditure, for agricultural market support and direct payments

Operational appropriations

Operational appropriations finance the different policies, mainly in the form of grants or procurement.

Outstanding commitment

Legal commitments having not fully given rise to liquidation by payments. Cf. RAL.

Outturn

Cf. Budget result

Payment

A payment is a cash disbursement to honour legal obligations.

Payment appropriations

Payment appropriations cover expenditure due in the current year, arising from legal commitments entered in the current year and/or earlier years (Art. 7 FR).

RAL

Sum of outstanding commitments. Outstanding commitments (or RAL, from the French 'reste à liquider') are defined as the amount of appropriations committed that have not yet been paid. They *stem directly* from the existence of multiannual programmes and the dissociation between commitment and payment appropriations. (Cf. Outstanding commitments)

Recovery

The recovery order is the procedure by which the Authorising officer (AO) registers an entitlement by the Commission in order to retrieve the amount which is due. The entitlement is the right that the Commission has to claim the sum which is due by a debtor, usually a beneficiary.

Result

Cf. Outturn

Revenue

Term used to describe income from all sources financing the budget.

Rules of application

Detailed rules for the implementation of the financial regulation. They are set out in a Commission regulation adopted after consulting all institutions and cannot alter the financial regulation upon which they depend.

Surplus

Positive difference between revenue and expenditure (see Budget result) which has to be returned to the funding authority as provided in the Financial Regulation.

Transfer

Transfers between budget lines imply the relocation of appropriations from one budget line to another, in the course of the financial year, and thereby they constitute an exception to the budgetary principle of specification. They are, however, expressly authorised by the Treaty on the Functioning of the European Union under the conditions laid down in the Financial Regulation. The FR identifies different types of transfers depending on whether they are between or within budget titles, chapters, articles or headings and require different levels of authorization.

7.9. Materiality criteria

Not applicable yet.

7.10. Results of technical review

Not applicable yet.

7.11. List of acronyms

AAR	Annual Activity Report
AWP	Annual Work Plan
B2B	Business to Business
BBI JU	Bio-Based Industries Joint Undertaking
BIC	Bio-based Industries Consortium
CAS	Common Audit Service
cPPP	Contractual Public-Private Partnership
CSA	Coordination and Support Action
CSC	Common Support Centre
DEMOS-IA	Innovation Action for demonstrators
DG AGRI	Directorate-General Agriculture & Rural Development
DG GROW	Directorate-General Internal Markets, Industry, Entrepreneurship and SMEs
DG RTD	Directorate-General Research and Innovation
DPO	Data Protection Officer
EC	European Commission
ECA	European Court of Auditors
EESC	European Economic and Social Committee
EFTA	European Free Trade Association
FR	Financial Regulation of the European Union
EFIB	European Forum for Industrial Biotechnology and the Bioeconomy
GAP	Grant Agreement preparation
GB	Governing Board of the BBI JU
IAS	Internal Audit Service
IAs	Innovation Actions
ICF	Internal Control Framework
ICS	Internal Control Standard

ICT	Information and communication technology
IFIB	Italian Forum on Industrial Biotechnology and Bioeconomy
IKAA	in-kind contributions to additional activities
IKOP	In-kind contributions to operational activities
JU	Joint Undertaking
KPIs	Key Performances Indicators
LISO	Local Informatics Security Officer
NCPs	National Contact Points for Horizon 2020
PA	Payments
PPP	Public-Private Partnership
REA	Research Executive Agency
RfP	Rules for Participation in Horizon 2020
RIA	Research and Innovation Actions
R&D	Research and Development
SC	Scientific Committee of the BBI JU
SIRA	Strategic Innovation and Research Agenda
SOP	Standard Operating Procedures
SLA	Services Legal Agreement
SMART	Specific, Measurable, Accepted, Realistic and Time-related
SMEs	Small and Medium-Size Enterprises
SRG	States Representatives Group of the BBI JU
SPIRE	Sustainable Process Industry through Resource and Energy Efficiency
TTG	Time to Grant
TTI	Time to Inform
TTP	Time to Pay