

Towards a European Research Area in Industrial Biotechnology: ERA-IB -> ERA-IB-2

www.era-ib.net

How to direct the calls to increase the innovation aspects and increase SME involvement

1. Summary of the questionnaire (Q 9 + 10)
2. Case: ERA-IB (2)
3. How to direct the calls to increase the innovation aspects and increase SME involvement?

Initiative	Increase innovation aspects – does your ERA-net have focus on innovation/funding of private companies?	Mandatory industrial participation in joint calls?
EuroTransBio	**Focus of ETB** is …. **supporting research intensive SMEs** and their strategic partner…	**Yes**
WoodWisdom-Net+	(…in the **call text** it was stated as follows: … The **participation of commercial and industrial**…stakeholders…**strongly recommended** ...normal national funding rules apply, therefore **in some cases the involvement of industrial partners was mandatory**.“	**No (yes when required by national funding rules)**
FACCE SURPLUS	“…We have **one specific topic called "Developing markets"**, which is clearly related to the industry participation.”	**No**
CORE Organic Plus	“…no requirement for SME/farmers/private partners, but **highly appreciated** in many countries…**table with the possibilities for funding** of private companies for each country…”	**No**
BESTF	“SME involvement usually requires > 50% intervention isn’t always good enough…everyone receives 50%, but in reality … research organisations get 100% etc. Under the term of the BESTF2 call **the consortium had to be made up of at least 51% industrial partners** although there was no specific requirement for a consortia to include SMEs	**Yes**
ICT-AGRI	“...increasing focus on private companies…drivers for the uptake of ICT by farmers…**difficult to get private to take the lead**. Some **funders cannot support** projects, which are too close to the market… **Private partners encouraged**…“	**No**

Case: ERA-IB (2)

Partner structure of ERA-IB-2

- 18 ERA-IB partners from 14 countries
- 5 ERA-IB observers

Israel

Overview of work packages

WP1: Management (FNR)

WP2: Coordination & networking (FNR)

WP3: Communication & dissemination (EWI)

WP4: Preparing joint calls (MINE

WP5: Im **calls** (JUELICH)

-> no WP dedicated to industrial participation, but…some activities

WP6: Monitoring projects & evaluating joint calls (Innovate UK)

WP7: Monitoring and Evaluatiojn of ERA-IB-2, and network sustainability (FCT)

How to direct the calls to increase the innovation aspects and increase SME involvement?

1. Make industrial participation mandatory:

-> Call text 6th ERA-IB call

3. Funding recipients / consortium partners

…….The participation of at least one industrial partner in the consortium is mandatory.

ERA-IB joint calls

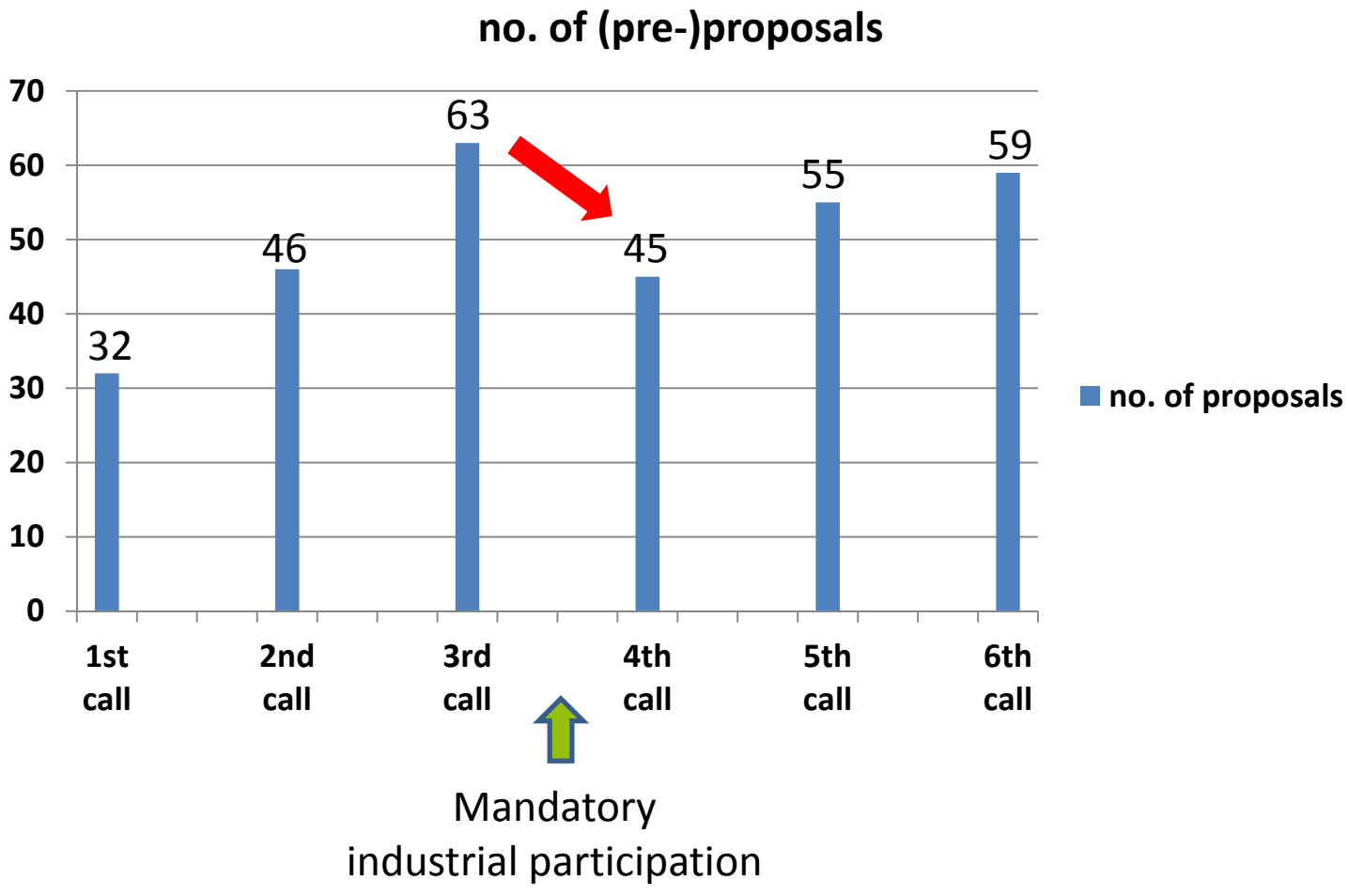


call	year	no. of (pre-) proposals	no. of full proposals	no. of granted projects	funding volume total	available funding	Industr. Partici-pation mandatory
1	2008	32	-	8	9,7	11,3	No
2	2010	46	24	10	11,1	12,5	No
3	2012	63	33	12	17,3	20,8	No
4	2013	45	16	9	13,8	25,9	Yes
5	2014	55	27	10	15,1	26,8	Yes
6	2015	59	28			19,4	Yes

67M€

How does this influence the number of proposals?

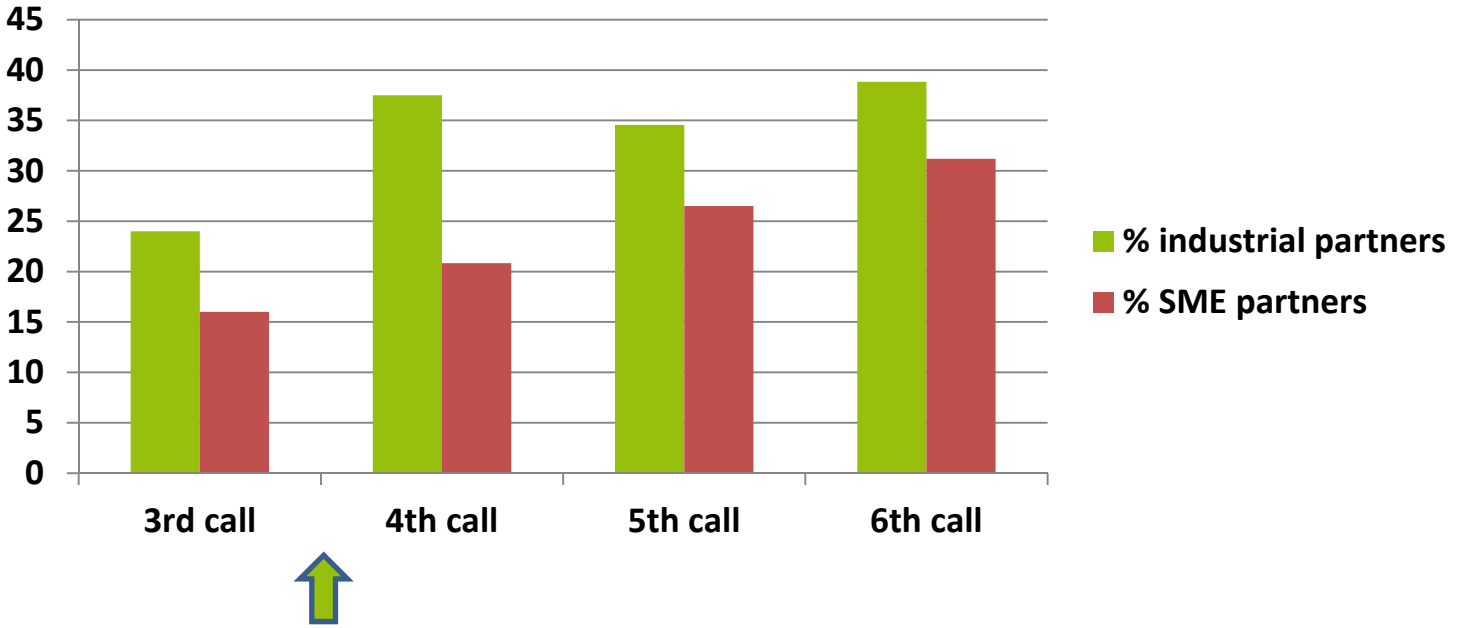




How does this influence the industrial participation?



pre-proposals: % industrial participation



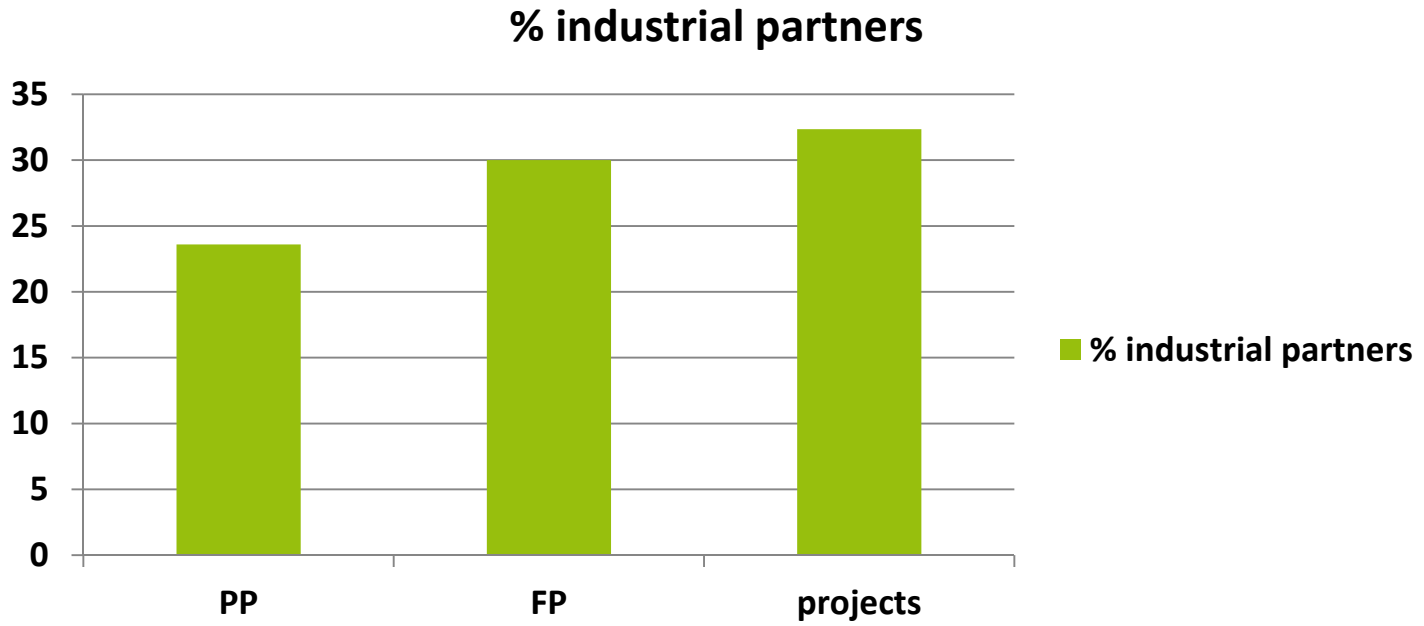
Mandatory industrial participation

-> number of industrial / SME partners raised significantly on the pre-prop. level after mandatory industrial participation

How does this influence the numbers and structure of the proposals?



3rd Call example: no mandatory industrial participation



-> Proposals with industrial partners are more successful in the evaluation



How to direct the calls to increase the innovation aspects and increase SME involvement?

2. Evaluation: put adequate emphasis on economic potential and exploitation:

Evaluation criteria (Full Proposals):

Scientific and technological quality (weighting factor **3x**)
Economic and social perspective (weighting factor **3x**)
Administrative and financial assessment (weighting factor 1x)

How to direct the calls to increase the innovation aspects and increase SME involvement?

3. Clearly request products/markets to be addressed in the proposals:

Call topics

(based on the discussion on the expert workshop in October 2013 in The Hague)

Funding is available for innovative, industry relevant Industrial Biotechnology projects on the following topics:

1. Conversion of industrial by-products and biomass into value-added products
2. Novel systems for new or more sustainable processes e.g. the use of enzymes, micro-organism and cell-free biosynthesis systems
3. New compounds from existing, but not well studied biological systems, through a greater understanding of their metabolic pathways
4. Modelling and optimisation of biological processes
5. Process development, intensification and/or integration in existing industrial processes e.g. upstream or downstream design, scale-up of biotechnological processes.

*Projects should clearly address the **product and market** to be addressed, produced by biotechnological processes, e.g.*

1. Bio-based materials
2. Platform chemicals e.g. bio-monomers, oligomers and polymers
3. Pharmaceuticals, functional food/feed ingredients

How to direct the calls to increase the innovation aspects and increase SME involvement?

4. Select evaluators from industry:

Expert panel



Selection of expert panel members (no "external peer review")**:**

1. Experts suggested by funding organisations:
   - max. 2 per funding organisation
   - at least 1 from industry
   -> List of potential evaluators

2. Selection of 6 experts from the list by each funding organisation:
   - at least 3 from industry

3. Invitation of the selected experts (by no. of votes)

Expert panel



call	year	Evaluators from industry	Evaluators from academia	Number of panel members
1	2008	3	9	12
2	2010	7	5	12
3	2012	5	5	10
4	2013	4	6	10
5	2014	7	4	11
6	2015	6	5	11

How to direct the calls to increase the innovation aspects and increase SME involvement?

5. Support applicants with respect to consortium agreement and IPR issues:

   - **ERA-IB Consortium Agreement Guideline with Principles of IPR (-> ERA-IB website)**

   - **DESCA model (http://www.desca-2020.eu/**
     -> model consortium agreements provided by the EC:
     DESCA (Development of a Simplified Consortium Agreement) is a comprehensive Model Consortium Agreement
     The DESCA Model Consortium Agreement was specifically designed for Horizon 2020 "Research and Innovation Actions" and "Innovation Actions".

How to direct the calls to increase the innovation aspects and increase SME involvement?

6. Support of partnering by partnering meeting e.g. related to industrial conferences / web-based partnering tool:

   - **ERA-IB partnering meeting (1st call: 81 participants)**
     ETB: good experience over some years

   - **ERA-IB partnering tool (basically not used by the applicants)**

   - **Refer to available databases (e.g. EuropaBio)**



How to direct the calls to increase the innovation aspects and increase SME involvement?

7. Join forces with other ERA-Nets that bring in industry / SMEs:

ERA-IB: 4th, 5th and 6th Joint call in collaboration with EuroTransBio (ETB) - EUROpean program for TRANSnational R&D&I cooperations of SMEs in the field of BIOtechnology

„win-win“ situation:
ETB received only very few proposals (< 10%) in the field of industrial biotechnology -> IB participation increased up to 50% after the joint IB-ETB call
ERA-IB wanted to increase SME participation

How to direct the calls to increase the innovation aspects and increase SME involvement?

8. Keep close contact to industrial boards / initiatives; increase visibility e.g. by surveys directed to industry:

   - ERA-IB survey “Current and Future Use of Biotechnology by Manufacturers” (2008)
   - Involvement of SusChem and EuropaBio in call developments (e.g. selection of call topics)
   - “platform of IB related ERA-Nets”: ERA-IB invites related ERA-Nets and other related initiatives (e.g. JPI, BBI Joint Undertaking, SusChem etc.)

How to direct the calls to increase the innovation aspects and increase SME involvement?

-> if you cannot/do not want to make industrial participation mandatory…

- How to deal with a combination of excellent basic research and industry involvement?
- How to combine it in 1 call?
- how to evaluate these proposals adequately?

How to deal with a combination of excellent basic research and industry involvement?

Possible solution: 2 lines within 1 call:

- Line 1: “low TRL” (basic research)
- Line 2: “high TRL” (applied research)

Application (e.g. proposal content): the same for both lines

Evaluation: different weight on the criteria, but the same maximum point score for both lines



How to deal with a combination of excellent basic research and industry involvement?

Evaluation: different weight on the criteria, but the same maximum point score for both lines -> **1 ranking list**

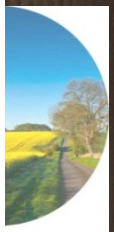
	Low TRL	High TRL
Scientific and technological quality	Weighting factor 3x	Weighting factor 2x
Economic and social perspective	Weighting factor 2x	Weighting factor 3x
Administrative and financial assessment	Weighting factor 1x	Weighting factor 1x
Maximum point score	18	18

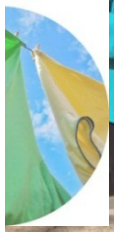
Summary: how to direct the calls to increase the innovation aspects and increase SME involvement?



1. Make industrial participation mandatory
2. Put adequate emphasis on economic potential and exploitation in the proposal evaluation
3. Request products/markets to be addressed in the proposals
4. Involve evaluators from industry
5. Support applicants with respect to consortium agreement / IPR
6. Support partnering by partnering meetings “attached” to industrial conferences
7. Collaborate with other ERA-Nets that bring in industry / SMEs
8. Keep close contact to industrial boards / initiatives to increase visibility
9. How to deal with a combination of excellent basic research and industry involvement: 2 lines/subcalls within 1 call

Thank you very much for your attention!





ERA IB
European Research Area
Industrial Biotechnology

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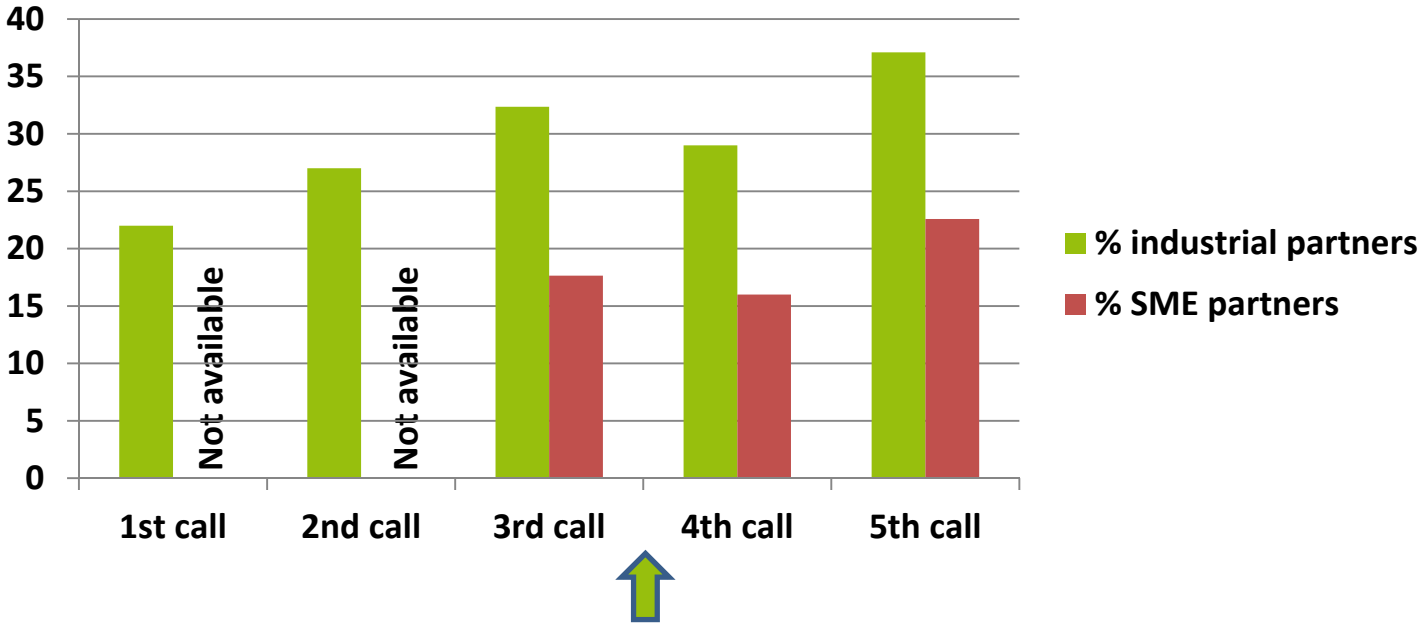
SEVENTH FRAMEWORK
PROGRAMME

How does this influence the industrial participation?



Funded projects: % industrial participation



Mandatory
industrial participation

-> Proposals with industrial partners are more successful in the evaluation