

## Horizon 2020's opportunities and challenges The biomedical research perspective



## Horizon 2020 -Europe's flagship programme for research and innovation

Leverage excellence and foster cross border collaboration

Boost the European health and wealth

Close the gap between research and market



- Represents 24 biomedical societies
- Supports *European* vision of innovation
- Participates in the improvement of funding opportunities for research



# Call upon decision makers to fully support Horizon 2020

This is an opportunity to build together on this framework programme





## The scientific community's perspective:

## Results from a user's survey on Horizon 2020



#### Survey:

- 1. Demographics
- 2. Call
- 3. Application
- 4. Evaluation (Summary Report)
- 5. Implementation
- 6. Evaluators
- 7. General



#### Data

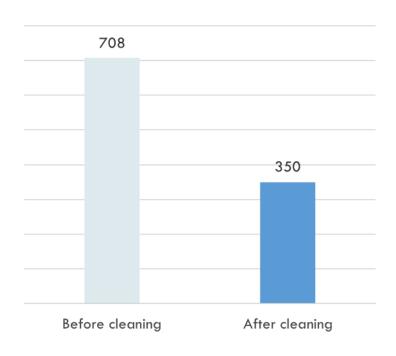
#### Population:

 biomedical researchers with (some) experience with H2020

#### Sample:

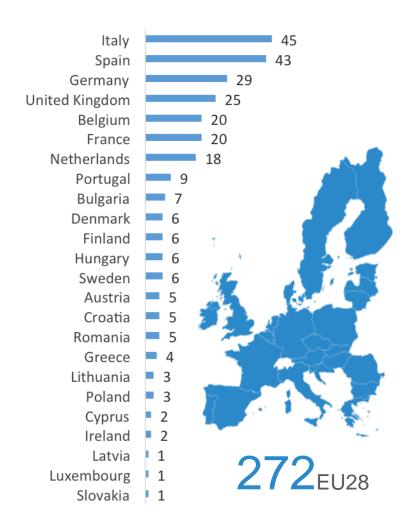
 responding and eligible members of member societies of the Biomed Alliance

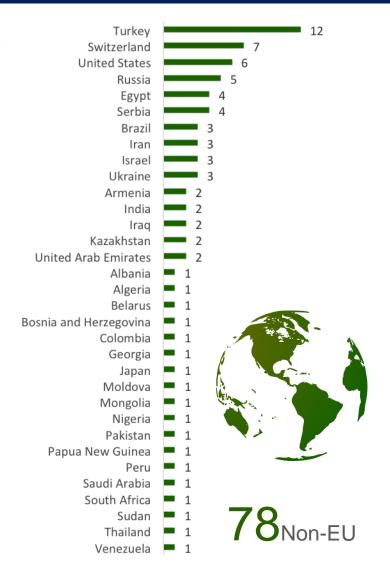
#### Response:





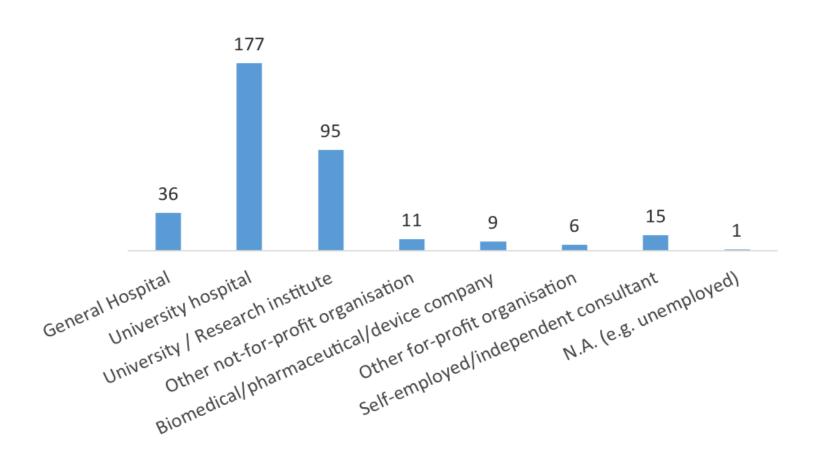
#### Demographics - geographical distribution







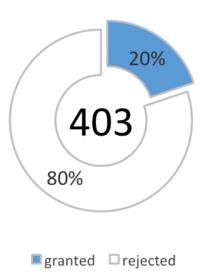
#### Demographics - distribution of types of organizations





#### Rejected projects

#### overall



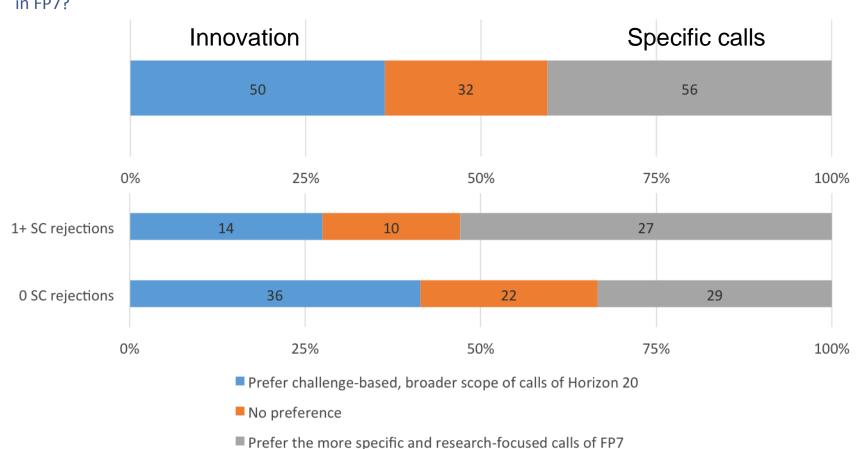
#### by instrument





#### The scope of the calls

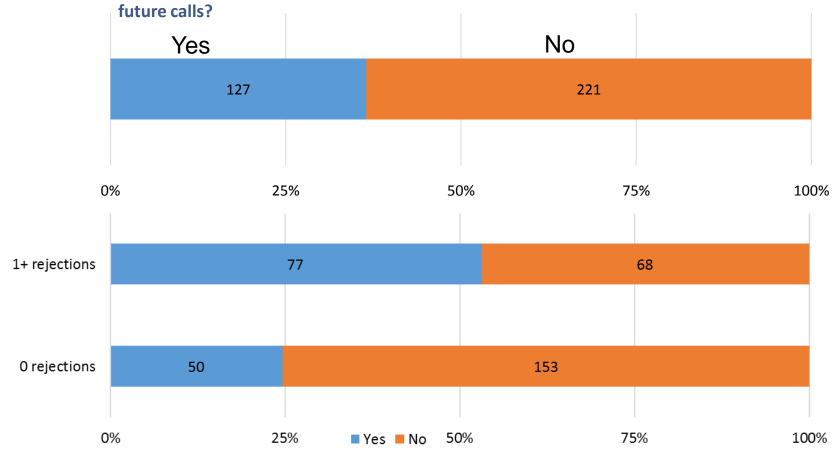
Do you prefer the Horizon 2020 challenge-based approach (with an emphasis on **innovation**), or do you prefer the more prescriptive approach (with **specific call topics**) as in FP7?





#### The call

Do or did reports of over-subscription to certain calls in Horizon 2020 (e.g. European Research Council, Health calls of the Societal Challenge) dissuade you from applying for





#### The Call

If you could make improvements to the Horizon 2020 "Societal challenges" programme section call for proposals/submission process, what would they be?

Calls to focus less on innovation and allow more scope for basic and/or clinical research

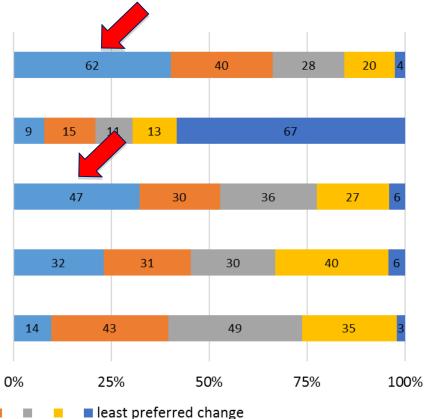
Call deadline dates should be written in letters (not in numbers)

Reduce the number of proposals going to 2nd stage

Avoid having call deadlines during the summer holidays e.g. during July and August

Increase the timing between the 1st stage and 2nd stage proposals

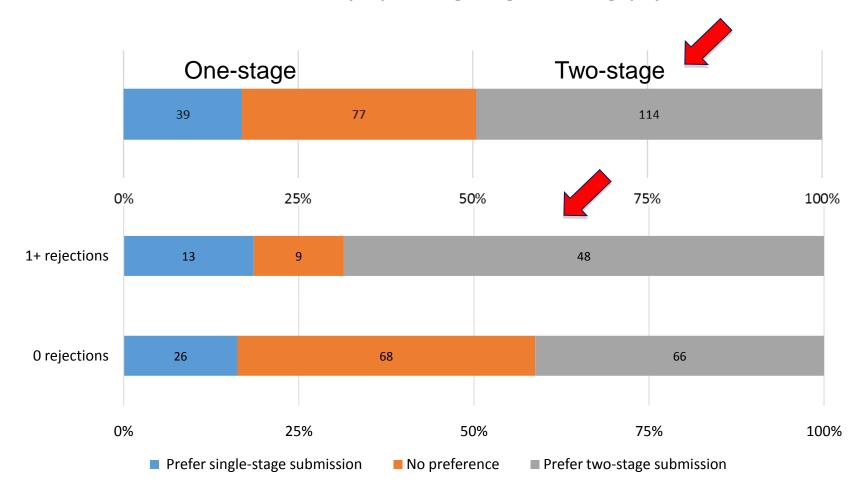
most preferred change





#### The Call

In Horizon 2020, overall, do you prefer single-stage or two-stage project submission?





- Oversubscription
- High number of proposals going to 2<sup>nd</sup> stage
- Number of funded projects <10% overall</li>
- Estimated costs for single applications:
  - Appr. 10.000 euro in stage 1
  - Appr. 75.000 euro in stage 2



#### Rejection rates revisited - analysis of resource waste, an example

CALL: PERSONALISING HEALTH AND CARE; Call identifier: H2020-PHC-2014-2015 - Only the 2 stage calls

	suggested EU contr						costs made without
	(EUR million) per					number of rejected	ROI (at 85,000 Euro
	Topic project	(EUR million)	within budget	Prop. Received	Invited to stage 2	projects in stage 2	per application)
PHC-01-2014	5	54	11	358	172	161	14
PHC-05-2014	5	24	5	121	37	32	3
PHC-06-2014	2,5	15	6	85	32	26	2
PHC-10-2014	5	48	10	462	138	128	11
PHC-13-2014	5	60	12	296	128	116	10
PHC-17-2014	5	48	10	136	55	45	4
PHC-23-2014	5	30	6	107	33	27	2
PHC-32-2014	2,5	24	10	116	31	21	2
Sub total	35	303	68	1681	626	558	47
Торіс							
PHC-02-2015	5	36	7	205	44	37	3
PHC-03-2015	5	30	6	355	108	102	9
PHC-04-2015	5	18	4	78	13	9	1
PHC-11-2015	5	49	10	348	97	87	7
PHC-14-2015	5	62	12	421	130	118	10
PHC-16-2015	5	36	7	312	33	26	2
PHC-18-2015	5	28	6	134	36	30	3
PHC-22-2015	5	17	3	184	34	31	3
PHC-24-2015	13,5	30	2	59	11	9	1
Sub total	54	306	57	2096	506	449	38
Total	89	609	126	3777	1132	1.006	86



Rejection rates revisited - analysis of resource waste, an example

CALL: PERSONALISING HEALTH AND CARE; Call identifier: H2020-PHC-2014-2015 - Only the 2

stage calls

suggested					
<b>EU</b> contr	<b>Indicative</b>	number of			number of
(EUR	Budget	projects			rejected
million) per	(EUR	within	Prop.	<b>Invited to</b>	projects in
project	million)	budget	Received	stage 2	stage 2

Takal	00	600	136	2777	4422	4 006
iotai	89	609	126	3///	1132	1.006

126 of 3777 = 3.3% of stage 1 applications funded 126 of 1132 = 11% of stage 2 proposals funded

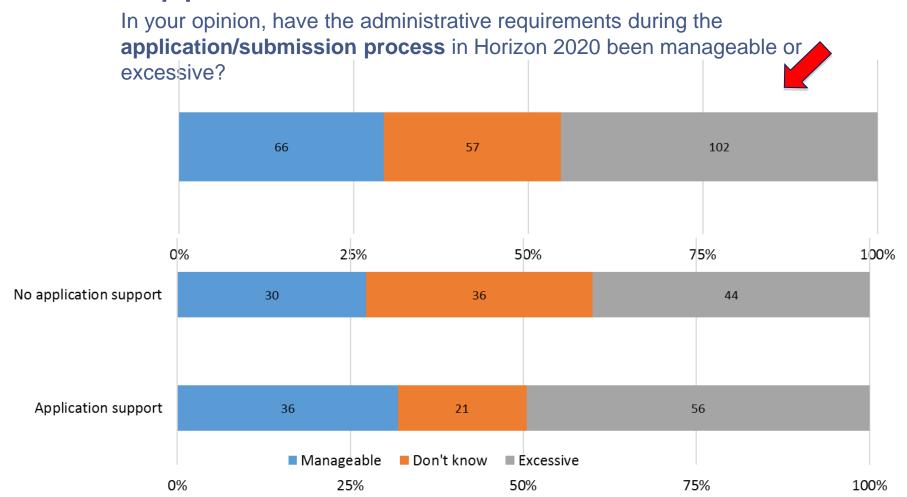
**Estimated costs for grant preparation:** 

3770 x 10.000 EUR for stage 1: 37.77 million EUR 1132 x 75.000 EUR for stage 2: 84.90 million EUR

**Indicative budget: 609 million EUR** 



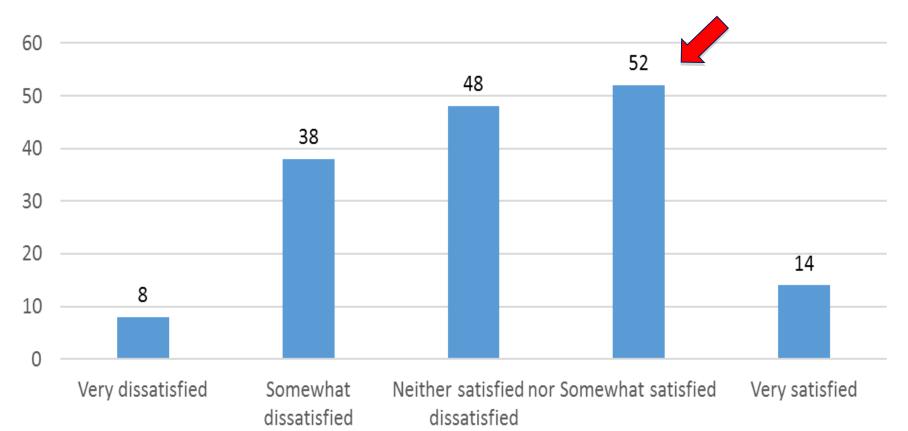
## The application





## The application

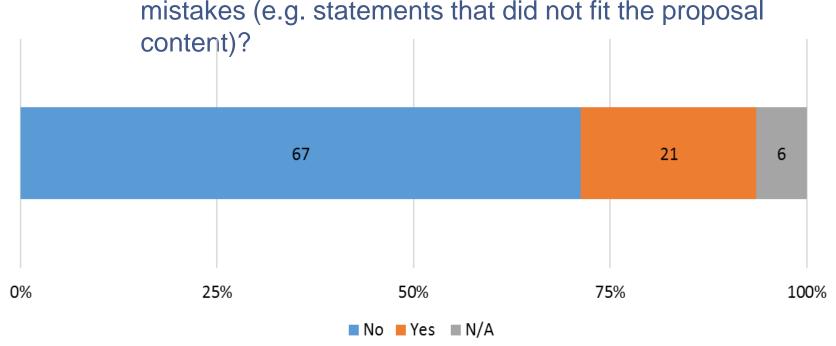
What is your experience with the Horizon 2020 Participant Portal and electronic IT submission tool?





#### The evaluation

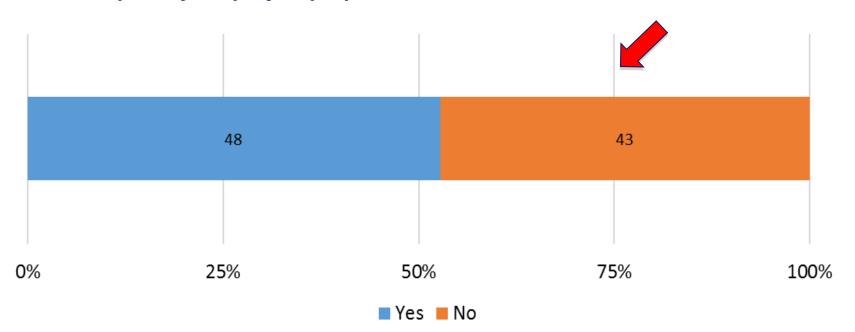
Have you, for an Horizon 2020 application, ever received an Expert Scientific Review that contained factual mistakes (e.g. statements that did not fit the proposal content)?





#### The evaluation

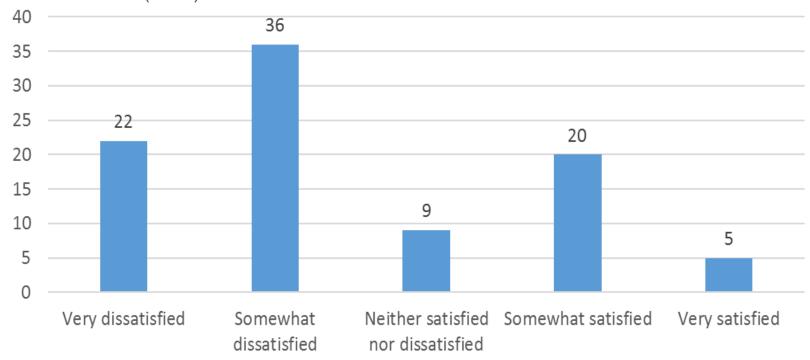
From the ESR, is it your impression that those that reviewed your Horizon 2020 application(s) have enough scientific expertise on the topic of your project proposal to be able to review it?





#### The evaluation

In general, have you been satisfied with the evaluation process for projects you have submitted in Horizon 2020, and specifically the level and quality of feedback received in the Evaluation Summary Report (ESR)?





## The implementation

25%

0%

In your opinion, have the administrative requirements during the project implementation in Horizon 2020 been manageable or excessive? 22

50%

■ Don't know ■ Excessive

Manageable

75%

100%

## **European Respiratory Society**



#### Pros:

- 65 % prefer the challenge-based, broader scope of calls
- 60% keen to continue to participate despite oversubscription to calls
- Greatest satisfaction with European Research Council in terms of instruments
- 60% prefer the two-stage submission but only if stage 1 really selects rigorously.
- 55% positive experience with electronic submission tool
- 60% consider admin requirements in application phase are manageable
- 60% prefer faster time-to-grant and no grant negotiation

#### Cons:

- 80% experience lower or same success rate as compared to FP7
- 40% have never heard about the National Contact Points
- 30 % have no access to support to fulfil administrative requirements for call participation
- 80% no opinion or negative re quality of Evaluation Summary Report and feedback



## The two most preferred improvements to H2020 SC1 Health calls

- Reduce number of proposals going to 2nd stage
- 2. Calls to focus less on innovation i.e. Allow for greater scope for clinical research



#### **Conclusions:**

- High subscription rate H2020 is highly accepted in the biomedical community
- Less weight on innovation, broader scope of specific calls suggested
- Low success rate of applications (in 2nd stage)
- Considerable waste of ressources during application process – poor ratio of inkind money to funding
- Problems with reviewer selection
- Good IT and administration of funded calls was appreciated



#### Recommendations:

- H2020 is a success continue with full force!
- Blended call system (specific calls + innovation)
- Ensure high success rate of stage 2 applications (>> 10%, up to 20%), select rigorously in stage 1
- Avoid waste of ressources during application process
- Improve review quality
- Put efforts into surrogate markers for successful projects
- Build on good administration and IT



## Thank you!