Propositions à un call H2020 : Vues par un expert

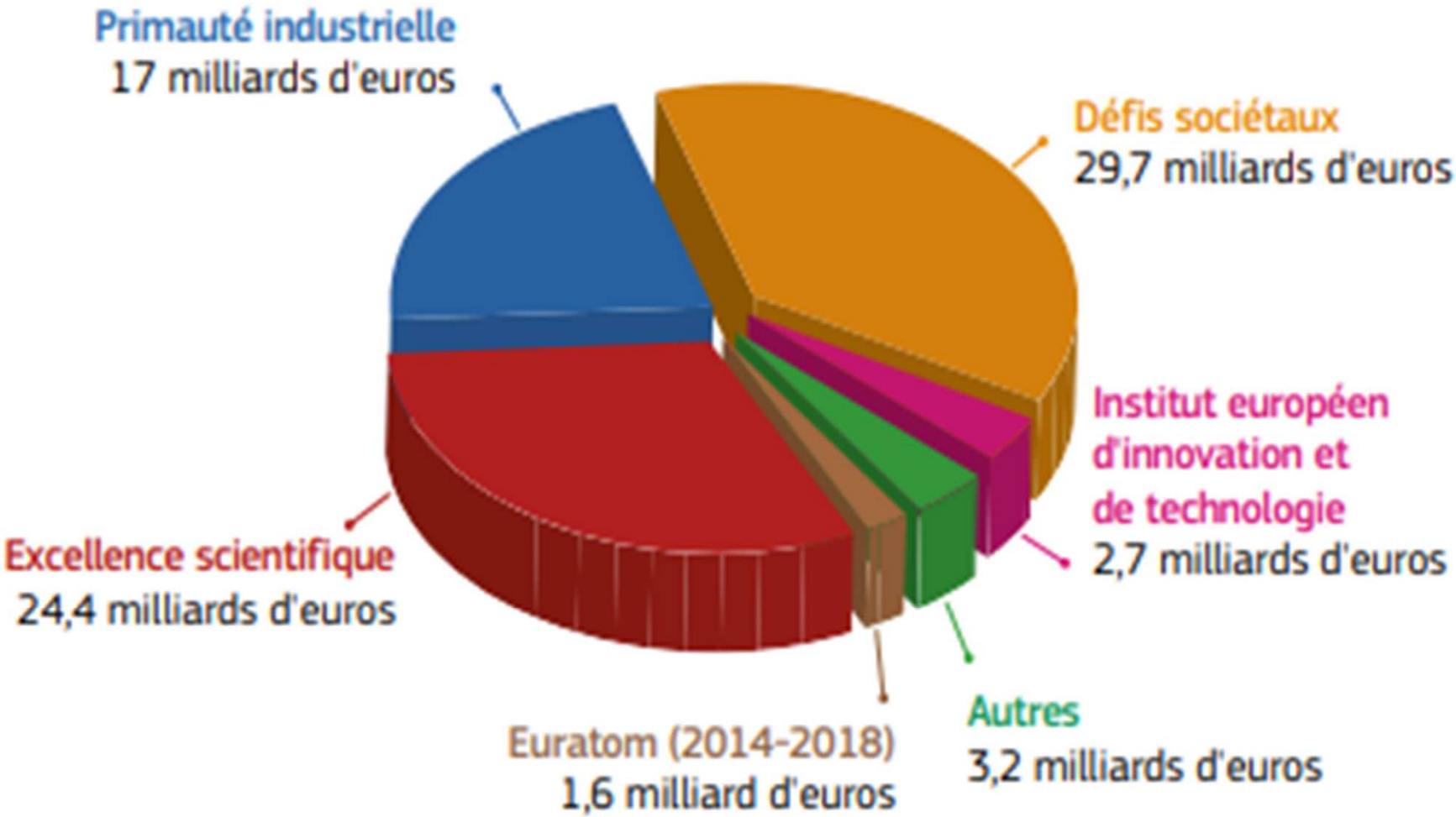
Daniel HERNANDEZ

Septembre 2018

- L’union européenne est devenue depuis le FP6 un acteur important du Spatial. Le budget recherche était/est de :
  - FP 5 (1998 – 2002) : 14,96 milliards €
  - FP 6 (2002 – 2006) : 17,833 milliards €
  - FP 7 (2007 – 2013) : 50,5 milliards €
    - Dont Espace (1 430)
  - Horizon 2020 (2014 – 2020) : 79 milliards €

  Nota : Il prend la suite du Septième programme-cadre de recherche[1,2,3] et du programme pour la compétitivité et l’innovation (CIP 2007 2013) ; il intègre aussi Euratom et l'IET (Institut européen d'innovation et de technologie).

Budget du programme Horizon 2020 (prix courants 2013)



Horizon 2020
Work Programme 2018-2020

- Voir http://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-leit-space_en.pdf

	Budget line(s)	2018 Budget (EUR million)	2019 Budget (EUR million)	2020 Budget (EUR million)
Calls				
H2020-SPACE-2018-2020		104.00	83.00	39.00
	from 02.040201	*104.00*	*83.00*	*39.00*
H2020-SPACE-EGNSS-2019-2020			20.00	20.00
	from 02.040201		*20.00*	*20.00*
H2020-LEIT-Space-2018-2020-continued				63.00
	from 02.040201			*63.00*
H2020-SPACE-EGNSS-2019-2020-continued				
Contribution from this part to call H2020-EIC-FTI-2018-2020 under Part 17 of the work programme		3.37	3.37	3.37
	from 02.040201	*3.37*	*3.37*	*3.37*
Other actions				
Contribution agreement with an implementing entity (indirect management)		45.00	20.00	18.00
	from 02.040201	*45.00*	*20.00*	*18.00*
Financial Instrument		6.00	7.00	7.00
	from	*6.00*	*7.00*	*7.00*

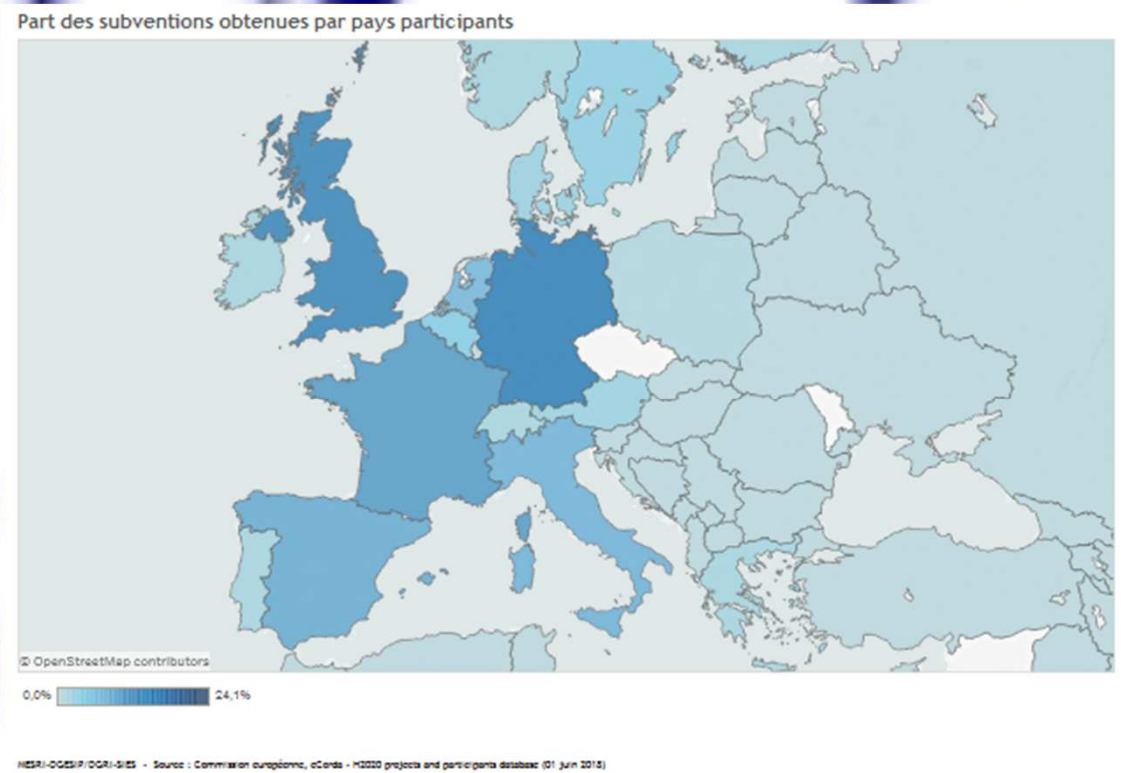
	02.040201			
Grant to Identified beneficiary		0.60	15.00	
	from 02.040201	*0.60*	*15.00*	
Specific Grant Agreement			22.90	47.70
	from 02.040201		*22.90*	*47.70*
Public Procurement		1.30	3.51	3.20
	from 02.040201	*1.30*	*3.51*	*3.20*
Indirect Management by ESA		36.00	31.00	10.00
	from 02.040201	*36.00*	*31.00*	*10.00*
Expert Contracts		1.16	1.46	1.78
	from 02.040201	*1.16*	*1.46*	*1.78*
Contribution from this part to Prize under Part 17 of the work programme				5.00
	from 02.040201			*5.00*
Estimated total budget		197.43	207.24	218.05

Contrats signés au 01 juin 2018

H2020	
participations	89.920
subventions allouées (M€)	32.950,37
projets	19.010

France	
participations	8.683
subventions obtenues (M€)	3.509,8
projets	4.239
projets coordonnés	1.763

Poids de la France dans H2020	
participations / total H2020	9,7%
subventions / total H2020	10,7%
projets / total H2020	22,3%
coordinations / total H2020	9,3%



L'Espace dans Horizon 2020

Objectifs

Assurer la compétitivité et l'indépendance de l'Europe et promouvoir l'innovation dans le secteur spatial européen

C'est l'indépendance de l'Europe dans les technologies spatiales, l'innovation dans le spatial et l'innovation terrestre fondée sur les technologies spatiales.

Permettre des avancées dans le domaine des technologies spatiales

C'est faire passer les technologies et les concepts opérationnels avancés, du stade de l'idée à celui de la démonstration en milieu spatial.

C'est aussi la protection des équipements spatiaux contre les débris et les éruptions solaires.

Permettre l'exploitation des données spatiales

C'est ouvrir une fenêtre sur les données provenant des satellites européens scientifiques, publics ou commerciaux.

C'est aussi une coordination des processus de traitement, une validation et une normalisation des données, dans le cadre d'initiatives mondiales telles que GEO, Galileo.

Promouvoir la recherche européenne

C'est soutenir les partenariats internationaux dans le domaine spatial regroupant la surveillance de l'espace, les projets scientifiques, l'exploration spatiale et les technologies de pointe dans le cadre de partenariats internationaux.

Outils

Les appels à propositions

Ils pourront s'inscrire dans un ensemble d'actions cohérentes appelées SRC (Strategic Research Cluster) dont l'un des objectifs est d'accompagner la montée en maturité des technologies développées avec quelquefois au final, une démonstration en vraie grandeur.

L'identification de ces SRC a également pour objet de permettre à tous les acteurs européens (ESA, agences nationales, monde académique) de faciliter leurs programmations et d'éviter les redondances et la dispersion de leurs efforts.

Certaines activités seront déléguées à un tiers :

- La GSA (Global navigation satellite system Supervisory Agency) se verra confier la plupart des activités relatives à GALILEO ;
- L'ESA (European Space Agency) sera probablement sollicitée, mais les intentions de la Commission européenne ne sont pas très claires à ce jour.

Activités

La Commission européenne compte structurer ses appels à propositions autour des thèmes suivants (avec l'inscription SRC si une démarche de ce type est envisagée) :

- la navigation : le module de sécurité du signal PRS, les applications du GNSS (Global Navigation Satellite System) et les évolutions du système,
- l'observation de la terre : les technologies, les applications et l'accès aux données,
- la compétitivité du secteur industriel :
  - la protection des infrastructures : la gestion des débris (SRC), le SST, la météorologie spatiale, les géocroiseurs ;
  - les futures technologies : les technologies à bas TRL, les technologies critiques (SRC), la validation en orbite, la propulsion (électrique) spatiale (SRC), l'accès à l'espace (SRC) et les technologies robotiques (SRC) ;
  - Les sciences spatiales et l'exploration : la présence de l'homme dans l'espace, l'exploitation des données et le développement des outils.
    La science dans le contexte des missions spatiales.

A noter : Horizon 2020 a vocation à prendre le relais des travaux du programme EGEP (European GNSS Evolution Programme) souscrit à la ministérielle de l'ESA en 2012 et qui ne porte que sur la période 2013-2015.

Organisation

- La Commission européenne est la **branche exécutive** de l'Union européenne. **Politiquement indépendante**, elle est chargée d'élaborer des propositions législatives et met en œuvre les décisions du Parlement européen et du Conseil de l'Union européenne.
- La Commission fixe les priorités budgétaires de l'UE, en collaboration avec le Conseil et le Parlement.
- Elle établit les budgets annuels, qui doivent être approuvés par le Parlement et le Conseil.
- Elle contrôle la façon dont les fonds sont utilisés, sous la surveillance de la Cour des comptes.

Organisation

- Le collège des commissaires représente le faîte de cette architecture et assume la responsabilité politique collégiale de l'action de la Commission. L'exécution opérationnelle est déléguée aux directeurs généraux et aux chefs de service, qui sont à la tête de la structure administrative de la Commission
- la Commission est tenue de rendre des comptes au Parlement européen.
- La Commission européenne est l'organe exécutif de l'Union Européenne. Les directeurs généraux sont responsables de la bonne gestion financière des ressources.
- La Commission peut aussi déléguer la mise en œuvre de certains programmes à des agences exécutives.

- **REA : Agence exécutive pour la recherche**

L'Agence exécutive pour la recherche est un organisme de financement de la recherche et de l'innovation. Elle gère des subventions de recherche de l'UE.

The Research Executive Agency currently employs about 700 colleagues from different backgrounds and nationalities across the world. We are the largest executive agency of the Commission, and continue to grow. In 2018, we will welcome more dedicated staff to assist the Commission in achieving the objective of fostering growth by supporting research and innovation.

- **Experts Independent**
- If you have high level of expertise in your field and would like to evaluate project proposals that are competing for research funding, you can become an independent expert.
- Some of our expert evaluators and monitors have explained the work they carry out and the benefits from this experience.
- Become an independent expert:

Join the database of independent experts. The European Commission appoints independent experts to assist with assignments that include the evaluation of proposals, monitoring of projects, and evaluation of programmes, and design of policy.

- **Experts indépendants :**
- Chaque année prés de 20 000 experts prennent part dans l’évaluation et le suivi de projets de Horizon 2020

2018-2020

Self-evaluation form

Form 1: Research and innovation actions
Innovation actions

Form 2: Coordination & support actions

Version 1.0
27 October 2017

Scoring

Scores must be in the range 0-5. Evaluators will be asked to score proposals as they were submitted, rather than on their potential if certain changes were to be made. When an evaluator identifies significant shortcomings, he or she must reflect this by awarding a lower score for the criterion concerned.

Interpretation of the scores

0 — The **proposal fails to address the criterion** or cannot be assessed due to missing or incomplete information.
1 — **Poor**. The criterion is inadequately addressed, or there are serious inherent weaknesses.
2 — **Fair.** The proposal broadly addresses the criterion, but there are significant weaknesses.
3 — **Good.** The proposal addresses the criterion well, but a number of shortcomings are present.
4 — **Very Good.** The proposal addresses the criterion very well, but a small number of shortcomings are present.
5 — **Excellent.** The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

Thresholds & weighting

The standard threshold for individual criteria is 3. The standard overall threshold, applying to the sum of the three individual scores, is 10.

Scores are normally NOT weighted. Weighting is only used for some type of actions (see below) — and only for the *ranking* (not to determine *if* the proposal passed the thresholds.)

Specific cases:

Innovation actions (IA)

For the ranking, the score for the criterion 'impact' will be given a weight of 1.5.

1. Excellence

Note: The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the work programme:

- **Clarity and pertinence of the objectives**
- **Soundness of the concept, and credibility of the proposed methodology**
- **Extent that the proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models)**
- **Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge and gender dimension in research and innovation content**

Comments:

Score 1:
Threshold 3/5

2. Impact

Note: The following aspects will be taken into account:

- **The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic;**

- Any substantial impacts not mentioned in the work programme, that would enhance innovation capacity, create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society

- Quality of the proposed measures to:

  - exploit and disseminate the project results (including management of IPR) and to manage research data where relevant

  - communicate the project activities to different target audiences

Comments:

Score 2:
Threshold 3/5

3. Quality and efficiency of the implementation* *Note: The following aspects will be taken into account:* • Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables • Appropriateness of the management structures and procedures, including risk and innovation management • Complementarity of the participants and extent to which the consortium as whole brings together the necessary expertise	**Score 3:** *Threshold 3/5*
• Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role Comments:	
Total score (1+2+3) *Threshold 10/15*	

Experts

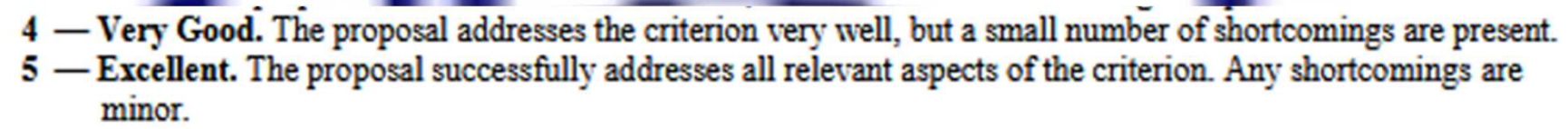
- Chaque année des anciens experts sont « éliminés » : expertises limitées dans le temps (< 3 ans par ex.), dans le nombre d'expertises …
- → recherche de nouveaux experts et particulièrement :
  - De femmes (l'idéal serait 50 %)
  - De « l'est » de l'Europe
  - De jeunes
- Régulièrement les axes des « calls » sont modifiés/mis à jour : nouveaux experts nécessaires

Déroulement des expertises

- Experts sélectionnés quelques « jours » avant l'expertise (date de clôture des « calls »)
- Chaque expert doit évaluer ~ 6 propositions (le nombre peut varier suivant les calls, la longueur des propositions …)
- Chaque proposition est évaluée par [3] experts
- Les évaluations faites –suivant cadre fourni- sont transmises à la REA
- Les experts sont réunis pour 4/5 jours à Bruxelles et invités à défendre/confronter leurs évaluations: pour chaque proposition réunion entre les 3 experts, un rapporteur (expert), un « officiel » REA et éventuellement des témoins …
- Un rapport de synthèse est rédigé qui fait foi
  - Nota: en cas de désaccord sérieux et persistant, on peut faire appel à un/deux experts supplémentaire qui découvrant la proposition sont invités à fournir un avis rapide.

Déroulement des expertises

- Les notes sont sur 15 (Cf. critères déjà cités) mais il faut en général > 14 (parfois 13 ou 13,5) pour avoir une chance en final: il faut donc en général avoir au moins 4 voire 5 pour être in fine retenu



4 — **Very Good.** The proposal addresses the criterion very well, but a small number of shortcomings are present.
5 — **Excellent.** The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

- Une réunion de synthèse permet d'interclasser toutes les propositions, dans chaque thématique: un budget indicatif est fourni par thématique qui permet de sélectionner les 1, 2, 3 meilleures propositions.
- Un rapport final de synthèse permet de donner une liste d'actions qu'il est proposé de financer (avec parfois dans certaines thématique une action optionnelle si le budget peut être accru)
- La décision finale est du ressort de la commission (et pas de la REA)

- Coût d'une proposition : ~ 10 à 50 k€ suivant le nombre de participants, la complexité …
- Taux de réussite : 10 % en moyenne mais certains experts annoncent des taux meilleurs comme par ex 30 %
- Ne pas hésiter à faire relire la proposition par une personne étrangère à la proposition (cabinet experts … ingénieur in house …) en utilisant les critères d'évaluation

Une proposition « gagnante » ?

- Bien lire le « Call »
- Pas de longueurs inutiles : CV à rallonge, explications techniques trop détaillées … Les experts ont très peu de temps pour faire leur évaluation et ne sont que rarement des experts « pointus » sur votre sujet précis!
- Pas d'incohérences : trop souvent chiffres différents d'une page à l'autre.
- Montrer qu'on « maîtrise » bien le sujet et qu'on mènera la proposition à bonne fin.

Une proposition « gagnante » ?

- Attention au nombre de partenaires : assez mais pas trop. Le « chef d'orchestre » ne peut pas réellement les contrôler
- Penser à la communication « externe »: site web, communiqués, ateliers …
- Le respect des « promesses » est essentiel pour le succès du projet.
- Avis extérieurs toujours appréciés: lettre de soutien, conseil « scientifique », mentions dans les roadmaps ESA/CNES …
- Perspectives de débouchés de plus en plus demandées: la demande ? La concurrence ? Perfo/prix ? Esquisse de business plan …

On line manual : see http://ec.europa.eu/research/participants/docs/h2020-funding-guide/index_en.htm

Appendix : présentation de la REA aux ISD

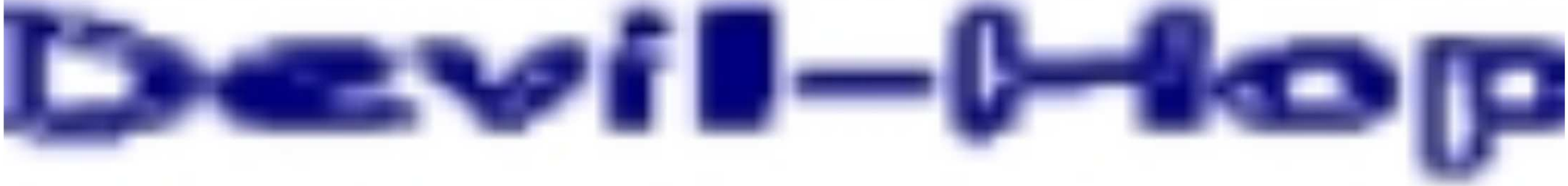
Demonstrate WHAT – WHY – HOW !

An excellent idea is the basis of a good proposal
but is not sufficient...

The expected impacts and implementation aspects
are as important !

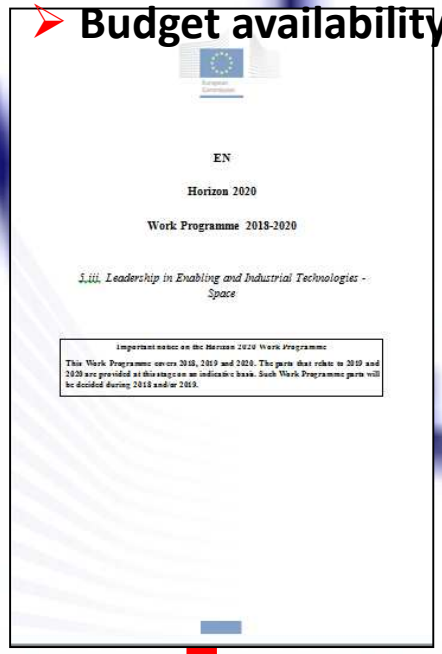
The proposal should excel in each single criterion !

Be specific in your objectives and expected impacts and clearly
demonstrate how you aim to implement and sustain them



Call Content

- Open or top-down Topics
- Budget availability



EN

Horizon 2020

Work Programme 2018-2020

5.iii. Leadership in Enabling and Industrial Technologies - Space

Important notice on the Horizon 2020 Work Programme

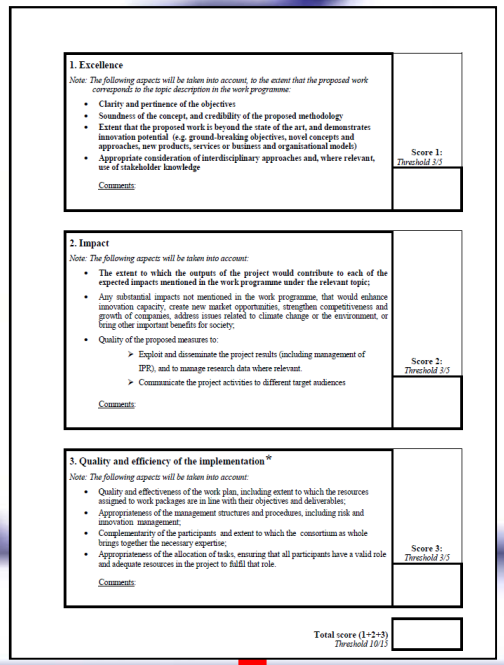
This Work Programme covers 2018, 2019 and 2020. The parts that relate to 2019 and 2020 are provided at this stage on an indicative basis. Such Work Programme parts will be decided during 2018 and/or 2019.

H2020 Rules

- Eligibility
- Admissibility

Grants Manual – Section on:
Proposal submission and evaluation

Evaluation criteria



1. Excellence

Note: The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the work programme:

- Clarity and pertinence of the objectives
- Soundness of the concept, and credibility of the proposed methodology
- Extent that the proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models)
- Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge

Comments:

Score 1: *Threshold 3/5*

2. Impact

Note: The following aspects will be taken into account:

- The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic;
- Any substantial impacts not mentioned in the work programme, that would enhance innovation capacity, create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society;
- Quality of the proposed measures to:
  - Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant.
  - Communicate the project activities to different target audiences

Comments:

Score 2: *Threshold 3/5*

3. Quality and efficiency of the implementation*

Note: The following aspects will be taken into account:

- Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables;
- Appropriateness of the management structures and procedures, including risk and innovation management;
- Complementarity of the participants and extent to which the consortium as whole brings together the necessary expertise;
- Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role.

Comments:

Score 3: *Threshold 3/5*

Total score (1+2+3) *Threshold 10/15*

Proposal structure

The EU Framework Programme for Research and Innovation

HORIZON 2020

2016-2017

Research and Innovation Actions (RIA)
Innovation Actions (IA)

Administrative forms (Part A)
Research proposal (Part B)

Version 2.0
13 October 2015

The EU Framework Programme for Research and Innovation

HORIZON 2020

Coordination and Support Actions (CSA)

Administrative forms (Part A)
Research proposal (Part B)

Version 1.3
4 December 2014

Carefully read the Call topics text and additional documents:

Proposal should answer scope and expected impacts of the Call topic

The 'problem'

Identifies the aspects of the challenge that needs to be tackled.

WP text does not outline the expected solutions to the problem, nor the approach to be taken by the applicant ("non-prescriptive" approach)

The 'problem in detail'

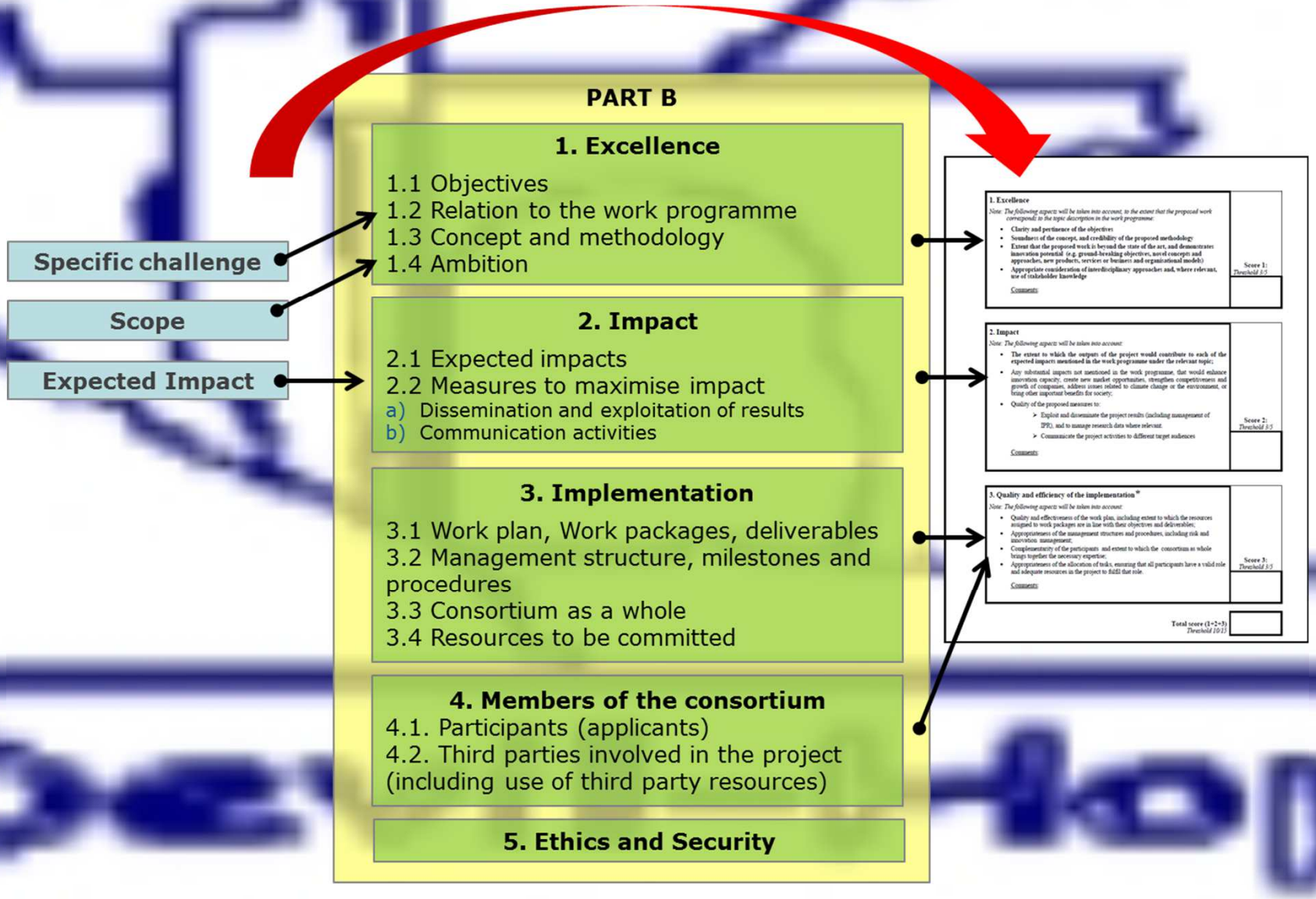
Provides **more details on the specific challenge** by specifying a perimeter to the problem described

The 'change' to be achieved

Provides a broad **description of what is the impact to be achieved through the project(s) to be funded.**

The **dissemination and exploitation** of future research results are vital for the impact

Topic – Proposal – Evaluation



PART B - 1. Excellence

1.1 Objectives
clear, measurable, realistic and achievable within project duration

1.2 Relation to the work programme
explain how your proposal addresses the **specific challenge and scope of the work programme topic**

Criterion 1.1 - Clarity and pertinence of the objectives

PART B - 1. Excellence

1.1 Objectives –
clear, measurable, realistic and achievable within project duration

1.2 Relation to the work programme
explain how your proposal addresses the specific challenge and scope of the work programme topic

1.3 Concept and methodology

(a) Concept

- Describe and explain the **overall concept** + main ideas, models or assumptions involved.
- **Technology Readiness Levels**
- **Links with other projects/activities**
- Identify any inter-disciplinary considerations and, where relevant, use of stakeholder knowledge;

(a) Methodology

- Describe and explain the **overall methodology**

Criterion 1.2 - Soundness of the concept and credibility of the proposed methodology

BE CAREFUL with TRL ≥5 + plan well the activities needed to reach it

PART B - 1. Excellence

1.1 Objectives –
clear, measurable, realistic and achievable within project duration

1.2 Relation to the work programme
explain how your proposal addresses the specific challenge and scope of the work programme topic

1.3 Concept and methodology

(a) Concept
- Describe and explain the overall concept + main ideas, models or assumptions involved.
- Technology Readiness Levels
- Links with other projects/activities
- Identify any inter-disciplinary considerations and, where relevant, use of stakeholder knowledge;

(a) Methodology
- Describe and explain the overall methodology

1.4 Ambition
- **Advance beyond the state-of-the-art**
- Extent of the proposed work is ambitious
- Describe the **innovation potential**

Criterion 1.3 - Extent that proposed work is beyond the state of the art and demonstrates innovation potential e.g.
- *ground-breaking objectives, novel concepts and approaches – **RIA***
- *new products, services or business and organisational models – **IA / RIA (higher TRL)***

PART B - 1. Excellence

1.1 Objectives –
clear, measurable, realistic and achievable within project duration

1.2 Relation to the work programme
explain how your proposal addresses the specific challenge and scope of the work programme topic

1.3 Concept and methodology

(a) Concept
- Describe and explain the overall concept + main ideas, models or assumptions involved.
- Technology Readiness Levels
- Links with other projects/activities
- Identify any **inter-disciplinary considerations** and, where relevant, **use of stakeholder knowledge**;

(a) Methodology
- Describe and explain the overall methodology

1.4 Ambition
- advance beyond the state-of-the-art
- extent the proposed work is ambitious
- Describe the innovation potential

Criterion 1.4 - Appropriate consideration of interdisciplinary approaches and where relevant, use of stakeholder knowledge and gender dimension in research and innovation content.

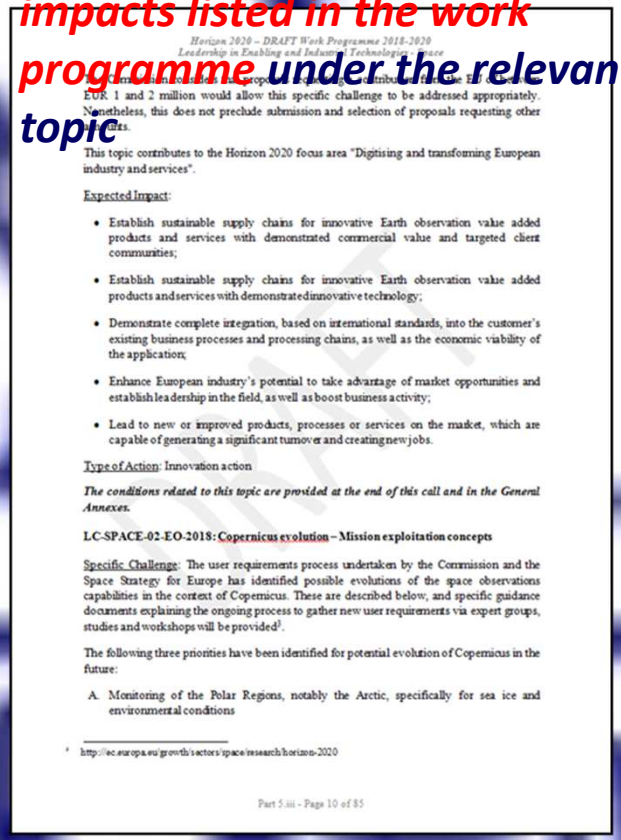
Who are your Stakeholder (e.g. USERS, CUSTOMERS)? How do you plan to use their knowledge ?

PART B - 2. Impact

2.1 Expected impacts

- **each of the expected impacts** mentioned under the relevant topic
- any substantial impacts not mentioned in the work programme
- Describe any barriers/obstacles, and any framework conditions

Criterion 2.1 - The extent to which the outputs would contribute to the expected impacts listed in the work programme under the relevant topic



Horizon 2020 – DRAFT Work Programme 2018-2020
Leadership in Enabling and Industrial Technologies – Space

EUR 1 and 2 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

This topic contributes to the Horizon 2020 focus area "Digitising and transforming European industry and services".

Expected Impact:

- Establish sustainable supply chains for innovative Earth observation value added products and services with demonstrated commercial value and targeted client communities;
- Establish sustainable supply chains for innovative Earth observation value added products and services with demonstrated innovative technology;
- Demonstrate complete integration, based on international standards, into the customer's existing business processes and processing chains, as well as the economic viability of the application;
- Enhance European industry's potential to take advantage of market opportunities and establish leadership in the field, as well as boost business activity;
- Lead to new or improved products, processes or services on the market, which are capable of generating a significant turnover and creating new jobs.

Type of Action: Innovation action

The conditions related to this topic are provided at the end of this call and in the General Annexes.

LC-SPACE-02-EO-2018: Copernicus evolution – Mission exploitation concepts

Specific Challenge: The user requirements process undertaken by the Commission and the Space Strategy for Europe has identified possible evolutions of the space observations capabilities in the context of Copernicus. These are described below, and specific guidance documents explaining the ongoing process to gather new user requirements via expert groups, studies and workshops will be provided[3].

The following three priorities have been identified for potential evolution of Copernicus in the future:

A. Monitoring of the Polar Regions, notably the Arctic, specifically for sea ice and environmental conditions

[3] http://ec.europa.eu/growth/sectors/space/research/horizon-2020

Part 5.iii - Page 10 of 85

PART B - 2. Impact

2.1 Expected impacts

- each of the expected impacts mentioned under the relevant topic
- any substantial impacts **not mentioned in the work programme**
- Describe any **barriers/obstacles, and any framework conditions**

Criterion 2.2 - Any substantial impacts not mentioned in the WP, that would enhance innovation capacity; create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society

PART B - 2. Impact

2.1 Expected impacts

- each of the expected impacts mentioned under the relevant topic
- any substantial impacts not mentioned in the work programme
- Describe any barriers/obstacles, and any framework conditions

2.2 Measures to <u>maximise impact</u>

a) Dissemination and exploitation of results

- **draft 'plan for the dissemination and exploitation** of the project's results'
- Business plan where relevant
- Outline the strategy for knowledge management and protection (incl IPR)
- Open Research Data -> information on how the participants will manage the research data generated and/or collected during the Project

a) Communication activities

- **promoting the project and its findings**

-> tailored to different target audiences, including groups beyond the project's own community

Criterion 2.3 - Quality of proposed measures to
- exploit and disseminate project results (including IPR, manage research data where relevant)

Communicate the project activities to different target audiences

Dissemination, Communication

Dissemination – about project results to **audiences that may use the results in their own work** e.g. presentation to conferences, publication in peer review journal, etc. (Grant Agreement art. 29)

Communication – about project activities and results to **multiple audiences beyond the project's own community** (including media and public) to Inform and r society, show the benefits of research (Grant Agreement art. 38.1)

Communication plan: *Tailored to the needs of various audiences, including the public* ɔolicy perspective of EU research and innovation *funding*

Use of stakeholder knowledge – (Excellence 1.4.) How the project gets relevant **feedback for its activities**
e.g. organising workshop with users, discussing with customers, participating in relevant working groups etc.

2. IMPACT

PART B - 2. Impact

2.1 Expected impacts

- each of the expected impacts mentioned under the relevant topic
- any substantial impacts not mentioned in the work programme
- Describe any barriers/obstacles, and any framework conditions

2.2 Measures to <u>maximise impact</u>

a) Dissemination and exploitation of results

- **draft 'plan for** the dissemination and **exploitation** of the project's results'
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a) Communication activities

- promoting the project and its findings

-> tailored to different target audiences, including groups beyond the project's own community

Criterion 2.3 - Quality of proposed measures to exploit and disseminate project results (including IPR, manage research data where relevant)

communicate the project activities to different target audiences

Exploitation

Dissemination and Communication ≠ Exploitation

Exploitation plan:

- At which technical readiness level (TRL) do you start and how will you reach the TRL you aim for as expressed in the objectives of your proposal?
- What are the needed business model and marketing activities and how will they be decided amongst partners?

Common mistakes in Exploitation:

- Lack of clear exploitation strategy (especially relevant for IAs)
- Lack of clear indication which results which will be exploited, in which way, by whom
- IPR issues (access to background, results exploitation) left to the Consortium Agreement only

Management of Intellectual Property

Demonstration of specific measures in scope ownership, access/use, etc. *during* and *after* the project:

1. Identify your **own background** *(data, know-how and/or information held or identified by participants prior to their accession to the action)*
2. Verify if **background of third parties** is needed. If yes, what are their access rights? Need for authorisation to use and exploit the results?
3. Check the state-of-the-art: **existing patents**? E.g. via database provided by the European Patent Office: *Espacenet*

1. Specify the **ownership of the results**: Who owns what? Any transfers? On which conditions?
2. Is there a need to **protect the results**? If yes, assign cost. Ensure appropriate access and usage right for key IP during AND after the project (results & background)

A short reference to the IPR "to be developed in the Consortium Agreement" is not sufficient

PART B - 2. Impact

2.1 Expected impacts

- each of the expected impacts mentioned under the relevant topic
- any substantial impacts not mentioned in the work programme
- Describe any barriers/obstacles, and any framework conditions

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a) Communication activities

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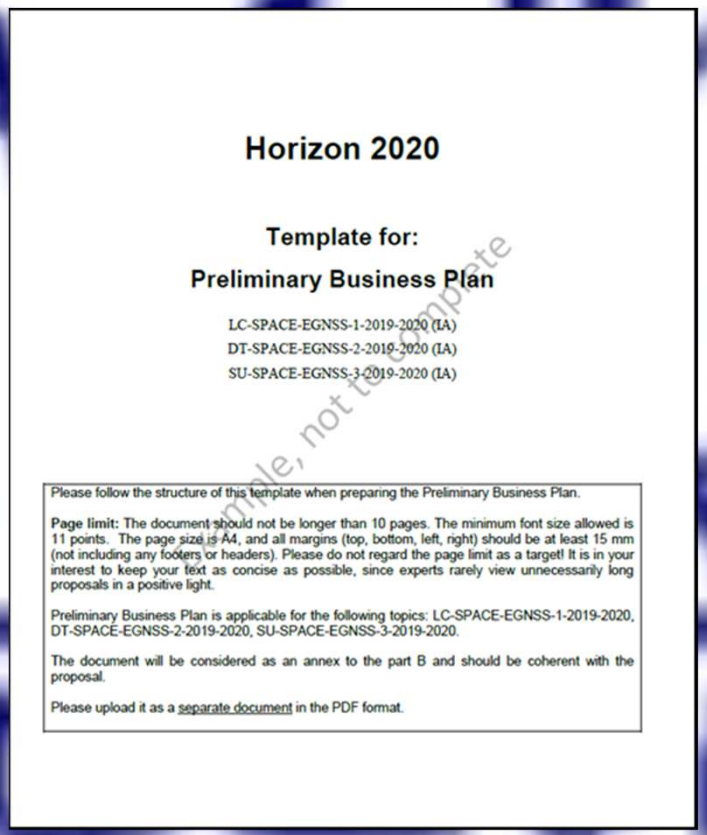
Criterion 2.3 - Quality of proposed measures to exploit and disseminate project results (including IPR, manage research data where relevant)

⚠ **BUSINESS PLAN – IA**

communicate the project activities to different target audiences

Preliminary

The purpose of the preliminary business plan is **to demonstrate the commercial potential of the product and/or service** (offering) and **describe how this potential will be realised.**



Horizon 2020

Template for:

Preliminary Business Plan

LC-SPACE-EGNSS-1-2019-2020 (IA)
DT-SPACE-EGNSS-2-2019-2020 (IA)
SU-SPACE-EGNSS-3-2019-2020 (IA)

Please follow the structure of this template when preparing the Preliminary Business Plan.

Page limit: The document should not be longer than 10 pages. The minimum font size allowed is 11 points. The page size is A4, and all margins (top, bottom, left, right) should be at least 15 mm (not including any footers or headers). Please do not regard the page limit as a target! It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long proposals in a positive light.

Preliminary Business Plan is applicable for the following topics: LC-SPACE-EGNSS-1-2019-2020, DT-SPACE-EGNSS-2-2019-2020, SU-SPACE-EGNSS-3-2019-2020.

The document will be considered as an annex to the part B and should be coherent with the proposal.

Please upload it as a separate document in the PDF format.

- **Define the proposed offering**: the product and/or service and its value proposition; target market sector.
- **Review the market sector**, its: structure; size; drivers; market and technology trends.
- **Assess the competition**: main players, their current offerings and market share.
- **Describe the innovation** of the proposed offering in the context of the competition and the sector's needs.
- Summarise **potential business model(s)** together with possible entry price(s) and costs.
- **Assess the key risks to market** entry and possible options for **risk mitigation**.
- Outline, graphically, the **roll-out of the offering**: timescale; sales growth; market share.

Open Access to

- Open research data sharing applies to the **data needed to validate the results presented in scientific publications** + Additionally, projects can choose to **make other data available** open access
- Proposals need to describe their approach in a **Data Management Plan** (DMP), included as a deliverable in the project
- Costs related to data management and data sharing are eligible for reimbursement during the project duration
- Now by **default obligatory** for all new topics **except if they decide to opt-out** for example for commercial or security reasons (see WP Annex L). Projects can opt-out at any stage.
- Proposals will not be evaluated more favourably for participating or penalised for opting out.

≠ *Open Access to scientific publications*

is an **obligation under H2020** => **online access at no charge to the user** to peer-reviewed scientific publications

- **Self-archiving**: 'traditional' publication plus deposit of manuscripts in a repository ('Green OA')
- **OA publishing**: immediate OA provided by publisher ('Gold OA')

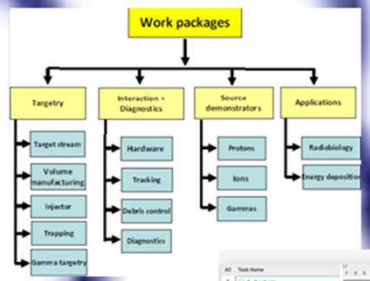
3. IMPLEMENTATION

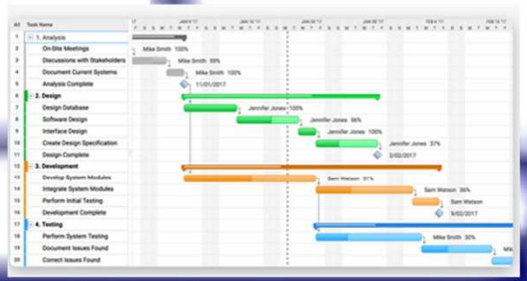
PART B – 3. IMPLEMENTATION

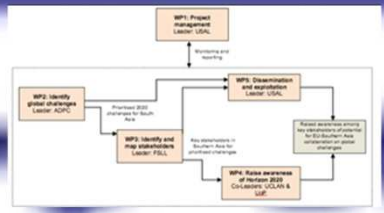
3.1 Work plan — Work packages, deliverables

- **overall structure** of the work plan
- timing of the different work packages **Gantt chart**
- detailed work description (**WP, deliverables**, etc.)
- Pert chart or similar (**inter-relation of the WPs**)

Criterion 3.1 Quality and effectiveness of the work plan, including extent to which resources assigned in work packages are in line with objectives/ deliverables







3. IMPLEMENTATION

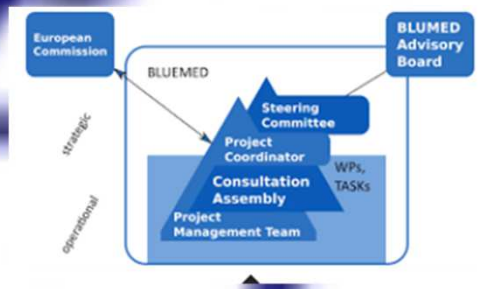
PART B – 3. IMPLEMENTATION

3.1 Work plan — Work packages, deliverables

- overall structure of the work plan
- timing of the different work packages Gantt chart
- detailed work description (WP, deliverables, etc.)
- Pert chart or similar (inter-relation of the WPs)

3.2 Management structure, milestones and procedures

- **organisational structure** and the **decision-making mechanisms** + why they are appropriate to the complexity and scale of the project.
- where relevant, **innovation management**
- Describe **any critical risks**, relating to project implementation + **mitigation measures**



Criterion 3.2 - Appropriateness of management structures and procedures, including risk and innovation management

3. IMPLEMENTATION

PART B – 3. IMPLEMENTATION

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- overall structure of the work plan
- timing of the different work packages Gantt chart
- detailed work description (WP, deliverables, etc.)
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- organisational structure and the decision-making mechanisms + why they are appropriate to the complexity and scale of the project.
- where relevant, innovation management
- Describe any critical risks, relating to project implementation + mitigation measures

3.3 Consortium as a whole
- Describe the **consortium**
- Describe the **contribution of each partner**
- If a participant requesting EU funding is based in a country or is an international organisation that is not automatically eligible for funding, **explain why the participation of the entity in question is essential to carrying out the project**

Criterion 3.3 - Complementarity of the participants which the consortium as a whole brings together expertise

Third country or international organisation not eligible for funding

3. IMPLEMENTATION

PART B – 3. IMPLEMENTATION

3.1 Work plan — Work packages, deliverables
- overall structure of the work plan
- timing of the different work packages Gantt chart
- detailed work description (WP, deliverables, etc.)
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- If a participant requesting EU funding is based in a country or is an international organisation that is not automatically eligible for funding, explain why the participation of the entity in question is essential to carrying out the project

3.4 Resources to be committed
- table showing **number of person/months required**
- table showing '**other direct costs**' for participants where those costs exceed 15% of the personnel costs

Criterion 3.4 - Appropriateness of allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to ful at role

AVOID EMPTY SHELLS !

3. IMPLEMENTATION

PART B – 4. Members of the consortium

4.1. Participants (applicants)

- a description of the legal entity and its main tasks
- a curriculum vitae + profile of the persons
- a list of up to 5 relevant publications, and/or products, services
- a list of up to 5 relevant previous projects or activities
- a description of any significant infrastructure and/or any major items of technical equipment

4.2. Third parties involved in the project (including use of third party resources)

- Does the participant plan to **subcontract** certain tasks (please note that core tasks of the project should not be sub-contracted)
- Does the participant envisage that part of its work is performed by linked third parties
- Does the participant envisage the use of contributions in kind provided by third parties (Articles 11 and 12 of the General Model Grant Agreement)

Criterion 3.3 - Complementarity of the participants which the consortium as a whole brings together expertise

Criterion 3.4 - Appropriateness of allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role

Subcontract/Contract/

Subcontracting (article 13 GA)

- Subcontracts concern the implementation of action tasks
- Procedure ensuring the best value for money and avoiding conflict of interests
- the eligible cost is the price charged to the beneficiary, no indirect cots

-> Explain well the reason for subcontractors, especially if the related costs are high, and be careful with predefined subcontractors !

≠ Contracts to purchase goods, works or services (article 11 GA)

Similar to subcontracting (Procedure ensuring the best value for money and avoiding the conflict of interests), but concern rather small services and not project tasks (ex. renting, CFS, website) and are budgeted under other direct costs (25% indirect costs)

Very High Other Direct Costs

For example this is NOT sufficient for the experts to judge if the costs are "reasonable, justified and comply with the principle of sound financial management, in particular regarding economy and efficiency"(*Art 6.1)*:

Other goods and services	€650,000	EEE (€400,000) Parts (€50,000) Mechanics (€100,000) Testing (€100,000)

5. Ethics & Security

- Each applicant is responsible for:
  - ✓ **identifying any potential ethics issues**
  - ✓ detailing how they plan to address them in sufficient detail already **at the proposal stage** so to conform to national, European and international **regulations**

  Part A in SEP – ethics self-assessment + Part B section 5

Does this research have the **potential for military applications**?

- Exclusive civilian focus of the research must be demonstrated.

Do you need export licenses (for dual use items)?
e.g., GNC, TPS etc.

- Risk mitigation strategies for:
  - **Mission creep**: change of focus toward military
  - Leak of "sensitive" information (**misuse**)

- Does the participation of **Third Countries**, i.e. non-EU, beneficiaries, raise ethical issues? Export/Import Control?

The Regulation: Council Regulation (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of

EUROPEAN COMMISSION
Directorate-General for Research & Innovation

Guidance

How to complete your ethics self-assessment

Version 3.0

3 February 2015

Innovation

1. Excellence

Note: The following aspects will be taken into account, to the extent that the proposed work corresponds to the topic description in the work programme:

- Clarity and pertinence of the objectives
- Soundness of the concept, and credibility of the proposed methodology
- Extent that the proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models)
- Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge

Comments:

Score 1: *Threshold 3/5*

2. Impact

Note: The following aspects will be taken into account:

- The extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic;
- Any substantial impacts not mentioned in the work programme, that would enhance innovation capacity, create new market opportunities, strengthen competitiveness and growth of companies, address issues related to climate change or the environment, or bring other important benefits for society;
- Quality of the proposed measures to:
  - Exploit and disseminate the project results (including management of IPR), and to manage research data where relevant.
  - Communicate the project activities to different target audiences

Comments:

Score 2: *Threshold 3/5*

3. Quality and efficiency of the implementation*

Note: The following aspects will be taken into account:

- Quality and effectiveness of the work plan, including extent to which the resources assigned to work packages are in line with their objectives and deliverables;
- Appropriateness of the management structures and procedures, including risk and innovation management;
- Complementarity of the participants and extent to which the consortium as whole brings together the necessary expertise;
- Appropriateness of the allocation of tasks, ensuring that all participants have a valid role and adequate resources in the project to fulfil that role.

Comments:

Score 3: *Threshold 3/5*

Total score (1+2+3) *Threshold 10/15*

Innovation potential : e.g. ground-breaking objectives, novel concepts and approaches, **new products, services or business and organisational models**

Enhancing innovation capacity : (Any substantial impacts not mentioned in the WP, that would enhance innovation capacity; create new market opportunities, strengthen competitiveness and growth of companies …)

- Addressing **barriers/obstacles**, and any **framework conditions** such as **regulation and standards**;
- of the participating organisations/research community by enabling **new processes or partnerships** beyond the project consortium.

Innovation management = is a **process** which requires an understanding of both market and technical problems, with a goal to **successfully transfer the innovations developed.**

- *Is innovation management clearly assigned?*
- *How will innovation management be taken care of?*
- *Are concrete innovation tools identified? …*

Optimise Your Chance for

Understand the domain and its challenges
R&D but also market, IPR and regulations, competition

Be clear and explicit
Evaluators must assess only what they read and not on the proposal potential. They have limited time

Do a mock evaluation
Ask a colleague to conduct a self-assessment of the proposal against each evaluation sub-criterion. If you don't find the right answer easily in the text, the evaluators won't find it either!

Optimise available time to prepare your proposal
- Last minute preparations are often reflected in a lower quality which largely reduces the changes in success;
- Start a draft early + Submit on time
- Incomplete submission is not an Obvious Clerical Error
- Late submission in IT system = inadmissible proposal. Deadlines are strict!

Resubmission
- Check carefully the call topic as it may have slightly changed from previous call
- See if your proposal is still up to date as 2-3 years is a long time in science / technology

<u>Do not be afraid of letting the Commission see the abstract of your proposal in order to help us identify the best possible expert.</u>

References

Call pages: http://ec.europa.eu/research/participants/portal/desktop/en/opportunities

Grants Manual - Section on: Proposal submission and evaluation
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/pse/h2020-guide-pse_en.pdf

Guidance for evaluators of Horizon 2020 proposals
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/pse/h2020-evaluation-faq_en.pdf

Templates for mock evaluations: http://ec.europa.eu/research/participants/data/ref/h2020/call_ptef/ef/h2020-call-ef-ria-ia-csa_en.pdf

H2020 reference documents:
http://ec.europa.eu/research/participants/portal/desktop/en/funding/reference_docs.html

Communication guidelines for projects: http://ec.europa.eu/research/participants/data/ref/h2020/other/gm/h2020-guide-comm_en.pdf

Guide on beneficiary registration, validation and financial viability check Manual:
http://ec.europa.eu/research/participants/docs/h2020-funding-guide/index_en.htm

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/open-access_en.htm

ETHICS

How to complete your ethics Self-Assessment:

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/h2020_hi_ethics-self-assess_en.pdf

Ethics Issues Table template:

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/ethics/ethics-eit_en.pdf

Thank you for listening
Devil-Hop

Devil-Hop