

DG GROW
Réunion entre le Commissaire Thierry Breton et
[REDACTED] **l'Association Européenne des Industries**
Aérospatiales, de Sécurité et de Défense
11 décembre 2019, Bruxelles

BRIEFING NOTE (Commission Internal)

Contexte

Vous allez rencontrer [REDACTED], [REDACTED] l'Association européenne des industries aérospatiales, de sécurité et de défense (ASD) [REDACTED]
[REDACTED].

L'Union européenne et l'ESA décident, en ce moment et en parallèle, de leurs budgets spatiaux respectifs. Les négociations entre le Parlement Européen et le Conseil ont abouti au "Common understanding" pour le Programme spatial de l'Union européenne pour le prochain budget à long terme de l'UE, soit le Cadre Financier Pluriannuel (MFF) 2021-2027, avec un budget proposé de 16 milliards d'euros. Ce programme contient les composantes Galileo / EGNOS, Copernicus et les nouvelles composantes "Space Situational Awareness" (SSA) et GOVSATOM. Les négociations finales du budget se tiendront en 2020. La Commission a proposé un budget total de 100 milliards d'euros pour "Horizon Europe", programme de Recherche pour les années 2021-2027, mais sans cibler un budget spécifique pour l'espace.

La dernière conférence ministérielle de l'ESA (Séville, 26 et 27/11/2019) a confirmé l'importance de l'espace pour les États européens avec un engagement budgétaire sans précédent de l'ordre de 14,4 milliards euros. (Pour plus de détails, merci de se reporter aux informations dans le background).

Line to take

Espace

- La Commission européenne est bien consciente de l'importance majeure du nouveau règlement relatif au programme spatial pour l'industrie spatiale européenne. Elle offrira une perspective claire et positionnera l'UE comme acteur clé, en soutenant la compétitivité et en renforçant la non-dépendance technologique de l'Europe.
- La nouvelle Commission négociera les derniers éléments du règlement relatifs au programme spatial, tels que le budget.

- Les 16 milliards d'euros proposés par la Commission sont nécessaires pour assurer la continuité des programmes existants, mais aussi pour de nouvelles initiatives au croisement de l'espace, de la sécurité et de la défense. Ce message va dans le sens de ceux que nous recevons de l'industrie.
- Sachant qu'il n'existe pas de budget dédié à l'Espace dans "Horizon Europe" (sauf ajout pendant les négociations à venir), il sera nécessaire de mettre en exergue l'importance de la Recherche & Innovation en matière spatiale pour les programmes européens mais aussi pour la compétitivité de l'industrie.
- L'UE devrait agir en tant que client de référence pour des solutions de lancement fiables et efficaces économiquement, afin de soutenir la recherche technologique en vue de solutions de lancement innovantes (comme des solutions réutilisables), et de soutenir les infrastructures d'essais et de lancement stratégiques.

Défense

- La Commission est très déçue par la proposition de la présidence finlandaise pour le budget du Fonds européen de la défense (EDF).
- Pour opérer un changement dans le paysage industriel européen en matière de défense, une masse financière critique est indispensable.
- Dans le cas contraire, les fragmentations et les inefficacités perdureront et les investissements en matière de R&D seront trop faibles pour permettre à l'industrie européenne de rester compétitive et innovante.
- L'industrie aéronautique civile est l'un des succès européens les plus éclatants. Mais nous faisons face aux défis tels que: la concurrence mondiale qui augmente en présence de

concurrents qui bénéficient de soutiens nationaux ; l'innovation qui s'accélère dans des domaines tels que la cybersécurité, la transformation numérique et l'automatisation.

- Le secteur de l'aviation a besoin de réduire l'empreinte carbone s'il souhaite maintenir sa croissance actuelle. La Commission reste très engagée dans le soutien de l'industrie face à ces défis.

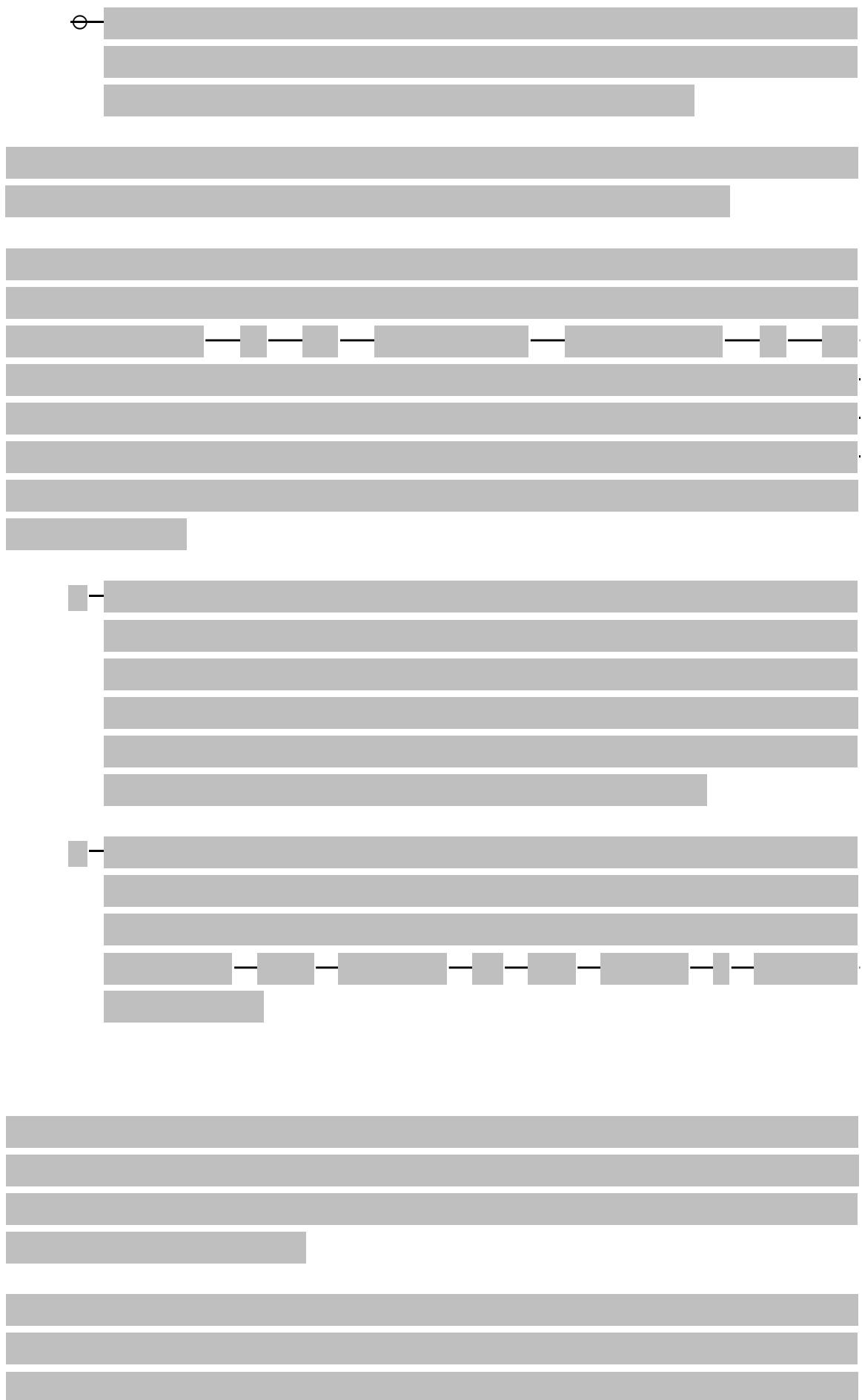
Centre européen de compétence en cybersécurité

- Le centre et le réseau de compétences en matière de cybersécurité constitue la réponse de l'Europe pour soutenir l'innovation et la politique industrielle dans le domaine de la cybersécurité et donc notre souveraineté technologique.
- Un autre objectif est d'accroître les synergies entre les aspects civils et militaires de la cybersécurité, grâce à une meilleure coordination entre les communautés et les programmes respectifs.
- L'un de ses principaux atouts serait sa position unique à le faire tout au long de la chaîne de valeur, de la recherche jusqu'au déploiement des technologies clés. Le réseau de centres nationaux de coordination en matière de cybersécurité sera essentiel pour permettre des investissements stratégiques communs.
- Il est également prévu que le Centre gère la mise en œuvre de l'initiative EuroQCI.

Digitising European Industry

- Les technologies numériques, en particulier l'intelligence artificielle (IA), transforment le monde à un rythme sans précédent. Le futur de l'Europe est numérique.
- Le secteur du numérique est le principal moteur de l'innovation dans le monde d'aujourd'hui. C'est l'objectif de la stratégie de numérisation de l'industrie DEI (Digitising European Industry) : rester compétitif et souverain.
- Les technologies numériques avancées, ainsi qu'une bonne base de connaissances et un bon écosystème intersectoriel en matière d'intelligence artificielle et de calcul intensif, sont à la base d'une industrie de défense performante et compétitive.
- Dans le programme Digital Europe ou "Europe numérique", les pôles européens d'innovation numérique joueront un rôle central dans la transformation numérique des PME.









Background information

Horizon Europe

- The Commission's proposal for a EUR 100 billion research budget for Horizon Europe is still subject to long-term budget 2021-2027 agreement.
- Horizon Europe allocation of budget is still only defined down to the level of Clusters. Space Research and Innovation (R&I) is part of Cluster 4 (Digital, Industry and Space) for which a budget of EUR 15 billion is proposed but there is no earmarked Space budget.
- Recital 13a to Annex I to the Regulation states: "Without prejudice to the overall MFF negotiations, Horizon Europe will contribute to space objectives at a level of spending that is at least commensurate proportionally with that under the previous framework programme Horizon 2020 established by Regulation (EU) No 1291/2013 of the European Parliament and Council, agreed in Partial General Approach (PGA)."
- This may seem to safeguard a portion of the budget for Space. However, the Commission's ambition is to have only one work programme per cluster with common call topics and only one common budget for the cluster.

It can be argued that most of the work in Cluster 4 "contribute to space objectives" at some level, e.g. IT, EEE components, robotics, AI, big data tools, materials, manufacturing etc.

- In line with the overall Horizon Europe "strategic plan", DG GROW is, in cooperation with stakeholders, developing a Strategic Research and Innovation Agenda (SRIA) for Space research encompassing R&I for the Space programme components and R&I for competitiveness and access to space.
- This will be the basis for the space priorities of the first 2-year work programme of Horizon Europe Cluster 4 to be adopted before the end of 2020.

Launchers/Access to Space

In recent years, access to space has become fundamental for the EU's ambition in space, particularly for the implementation of the EU flagships Galileo and Copernicus, but also for research projects funded by the Union Research Framework Programmes.

The Commission's approach has been enshrined in the Space Strategy for Europe[1]. Access to space is key enabler and indispensable element in the overall space value chain without which, there is no space policy.

Over the next 10 to 15 years, the EU will have launched more than 30 satellites notably in the class of the new European-made launchers – Ariane 6 and Vega C -for its Galileo and Copernicus space infrastructures.

Ensuring independent, reliable and cost-effective access to space is a political imperative for the EU. EU must indeed ensure and maintain its autonomy of decision and not be dependent on conditions imposed by others. The EU should act as a smart customer of reliable and cost-effective European launcher solutions, foster research and innovation in technology, support European critical and strategic test and launch infrastructures.

ESA budget adopted at the last ministerial 26-27 November 2019: EUR 14,4 billion (EUR 12,5 for the next 3 years + EUR 1,9 additional for mandatory programmes for the 2 years following the first 3 years)



European Defence Fund

a) Funding cooperative defence research: ongoing Preparatory Action on Defence Research (2017-2019)

The Preparatory Action has entered its final year.

[1] COM(2016) 705 final

Running projects: Seven collaborative projects are already running, for a total EU budget of EUR 50.3 million, including the large demonstrator project Ocean 2020 (EU budget of EUR 35.5 million). One project Generic Open Soldier System Reference Architecture (GOSSRA) is almost finalised.

Expectations: Over the full lifetime of the Action, it is expected that up to 18 projects will be funded with a total budget of EUR 90 million in the areas of maritime surveillance with unmanned systems, command, control and communications, force protection and soldier systems and effects. Projects are covering critical defence technologies as well as future disruptive technologies, standardisation and interoperability as well as strategic technology foresight.

State of play calls of third (and final) year: The last calls closed end of August 2019 and evaluation is ongoing. Evaluation will end in spring 2020; awarding of grant agreements is planned for summer 2020.

- European Defence Agency (EDA) manages three of the calls: [REDACTED].
- The Commission, for the first time, manages one call. This allows the Commission to learn in-house about the call on disruptive research, which will also be an important theme in the future EDF. [REDACTED]

b) Funding cooperative development of defence capabilities: ongoing European Defence Industrial Development Programme (2019-2020)

The Work Programme for 2019-2020 has been adopted on 19 March 2019. The identified categories of projects target capabilities that involve multinational collaboration of undertakings and Member States throughout the Union. Some categories target large and complex capability development projects, such as the European Command and Control (C2) system or a European Galileo PRS navigation receiver. The Commission foresees to support two key projects that could receive direct awards:

- EURODRONE: EUR 100 million to support the development of the Medium Altitude Long Endurance Remotely Piloted Aircraft System (MALE RPAS).
- ESSOR: EUR 37 million to support the development of interoperable and secure defence communication systems for operations.

State of play 2019 Competitive calls (deadline for submission was 20 September 2019):

- 40 proposals have been received in answer to the nine competitive calls
- This includes around 15 proposals for the SME call
- This demonstrates a real appetite and commitment of the European industry
- Evaluation process is ongoing [redacted]
- First grant agreements are expected to be signed during summer 2020



Lessons learned from this first exercise will help improve and ease the process for the 12 competitive calls for 2020, which are currently under preparation together with member States and expected to be published early 2020.

c) European Defence Fund (2021-2027)

State of play: The European Parliament and Council reached partial agreement on 19 February 2019. COREPER II endorsed the agreement on 27 February and Parliament voted with 328 in favour, 231 against and 19 abstentions on 18 April.

Two issues remain open:

- The budget: to be decided in the negotiations on the next MFF.
- The participation of associated countries (article 5). The European Commission initially proposed to open the participation to the programme to the European Free Trade Association members, which are members of the European Economic Area. [redacted]

For the Commission, the priority is now to reflect and discuss funding priorities for the next seven years of EDF [REDACTED]

European Defence Fund provisions on the rules of participation of the entities in the programme:

The EDF explicitly foresees the possibilities for participation of third country entities and even the eligibility for funding of EU-based subsidiaries of third country groups in supported projects as long as specific conditions pertaining to the protections of the defence and security interests of the EU and its Member States are fulfilled.

EU-established subsidiaries of foreign groups will be eligible for EDF funding provided this does not contravene EU security and defence interests; and that conditions related to security of supply, security of information and absence of foreign control or restrictions are complied with. These conditions are the following:

- o Control over the entity should not be exercised in a way that restricts the ability to carry out the action supported by the EDF or to deliver results;
- o Access by a third country or a third country entity to sensitive information is prevented;
- o Ownership of the intellectual property arising from, and the results of, the action must remain with the beneficiary during and after the completion of the action. It can however be exported outside the EU with agreement of the Member State in which the beneficiary (subsidiary) is established.

The EDF does not hamper cooperation with third country entities. Provided the similar conditions are complied with, an entity established outside the EU (third country entity) may participate in an action supported by the EDF. However, such entity cannot receive EU funding; and the results of the action financially supported by the Fund cannot be subject to control or restriction by a third country or a third country entity.



Aeronautics

Several Commission policies affect directly the competitiveness of the European civil aeronautics industry (aviation safety, climate, R&I, trade, etc.).

¹ Organisation conjointe de coopération en matière d'armement agissant pour le compte et au nom de l'Allemagne, l'Espagne, la France et l'Italie.

² Next generation fighter.

The request for a greater and better coordinated involvement of the EU in supporting the European civil aeronautics industry has already been voiced to the Sky and Space Intergroup of the European Parliament (cfr Sky & Space Intergroup report “European aeronautics - A strategic proposal beyond 2020” and EESC Opinion 2019/C 62/01 on ‘Challenges and Industrial Change in the EU Aerospace Sector’).

DG GROW supported over the last 20 years the sustainable competitiveness of European aeronautics industries through the monitoring of the industry competitiveness, close involvement in ISC and policy initiatives, like the STAR 21 Report.



Centre européen de compétence en cybersécurité

Certains acteurs industriels de l'aéronautique et de la défense comme Airbus ou Thalès figurent également parmi les fournisseurs les plus

importants de produits et services de cybersécurité. En même temps, les industries de l'aéronautique et de la défense font également partie du côté de la demande du marché de la cybersécurité (par exemple la cybersécurité du trafic aérien ou des systèmes militaires).

La Commission s'est engagée dans une coopération structurée avec les acteurs de l'industrie, de la recherche et du secteur public dans le domaine de la cybersécurité dans le cadre d'un partenariat public-privé (2016-2020) avec l'Organisation européenne de cybersécurité (ECSO).

Il a été proposé que le soutien futur à la recherche, au déploiement et à la création de communautés (programmes Digital Europe et Horizon Europe, 2021-2027) soit assuré par un Centre européen de compétence en cybersécurité, en coopération avec un réseau de centres nationaux de coordination. Le Centre de compétences est également prévu pour gérer la mise en œuvre de l'initiative EuroQCI (quantum).



Digital Innovation Hubs

Only about 1 out of 5 companies across the EU are highly digitalised. Similarly, around 60% of large industries and more than 90% of SMEs lag behind in digital innovation. The digital revolution brings opportunities for big and small companies, but many of them still find it difficult to know in which technologies to invest and how to secure financing for their digital transformation. Within this context, Digital Innovation Hubs (DIHs) can help ensure that every company, small or large, high-tech or not, can take advantage of digital opportunities. DIHs are one-stop shops that help companies become more competitive with regard to their business/production processes, products or services using digital technologies. DIHs provide access to technical expertise and experimentation, so that companies can “test before invest”. They also provide innovation services, such as financing advice, training and skills development that are needed for a successful digital transformation.

Long-term budget 2021-2027

Together with the Member States, the European Commission will invest in Digital Innovation Hubs capacity through the Digital Europe Programme. These hubs will be called European Digital Innovation Hubs, and they can get a grant for investing in their facilities and employing people to deliver services that will stimulate the broad uptake of Artificial Intelligence, HPC and Cybersecurity by industry (in particular SMEs and midcaps) and public sector organisations.

The selection of hubs in DEP will follow a two-step process: First Member States will designate hubs, and then the European Commission will launch a restricted call for proposals.

Existing hubs, either funded to run experiments under Horizon 2020, or originating from a different source such as a local technology transfer institution, could qualify to become European DIHs, provided that they pass all the steps of the selection procedures, both at Member State and European level.

Current long-term budget

The Commission has been supporting digital transformation experiments and networking of DIHs with around EUR 100 million per year through Horizon 2020 projects. These projects typically cascade funding through open calls by engaging SMEs in innovative experiments with DIHs in a cross-border context. The RTOs and universities involved in these projects have usually teamed up with other organisations to offer the services of a Digital Innovation Hub to SMEs and as such, they have gained relevant experience. In 2019 and 2020 there will continue to be calls related to this experimentation for a total foreseen funding of EUR 120 million

Digitising European Industries

The measures under the DEI programme to digitise European industry will help companies, researchers and public authorities to make the most of new technologies.

The European Commission launched on 19 April 2016 the first industry-related initiative of the Digital Single Market package. Building on and complementing the various national initiatives for digitising industry, such as Industrie 4.0, Smart Industry and l'industrie du futur, the Commission took actions along 5 main pillars. These include use of policy instruments,

financial support, coordination and legislative powers to trigger further public and private investments in all industrial sectors and create the framework conditions for the digital industrial revolution.

Representatives from [REDACTED]

[REDACTED] talked about how to reinforce the offer of digital innovations across the EU, how to strengthen European industrial ecosystems of IoT, data, cloud, and AI in and across sectors, and how to reinforce the European network of Digital Innovation Hubs to support SMEs in their digital transformation.

[REDACTED] was very active in the Context of the I4MS initiative on how to help SMEs transform digital towards a manufacturing as a service provider.

Different Hubs already use [REDACTED] tools like CATIA, e.g. in the “Centro di progettazione, design & Tecnologie dei Materiali”, and give feedback on how to better address the demands of a circular economy in digital twins.

Contact(s): [REDACTED]

Drones

Dans le contexte de ses activités dans le domaine de la robotique, des systèmes cognitifs et de l'intelligence artificielle dans ses programmes de soutien à la recherche et à l'innovation (FP7 et Horizon 2020), la DG Connect a financé la recherche et le développement en matière de drones dans plus de 20 projets pour un montant de plusieurs dizaines de millions d'euros. Cette technologie a été soit l'objet principal des projets, soit combinée avec d'autres technologies dans le domaine d'application.

Du point de vue technologique, les projets se sont concentrés principalement sur trois aspects: la collaboration entre drones, la collaboration des drones avec d'autres robots et la manipulation avec un bras attaché à un drone. En ce qui concerne les champs d'application concernés, cette technologie a été développée et testée dans plusieurs domaines, notamment l'agriculture, l'inspection et l'entretien d'infrastructures, la recherche et le sauvetage. L'utilisation de drones permet ainsi non seulement un bénéfice économique, mais également de

soustraire les humains d'environnements dangereux (p. ex. toxicité, altitude, risques d'avalanches).

En plus des projets impliquant directement des drones, la recherche, le développement et aussi l'innovation se font également via les pôles d'innovation numérique et des projets pilotes.

Contact : [REDACTED]