

aerospace
valley



PÔLE DE COMPÉTITIVITÉ

AERONAUTICS / SPACE / EMBEDDED SYSTEMS



GOLD





Atelier Clean Sky

ENSMA Poitiers
Le 19 février 2020

Fabienne Daveran
Chargée de Mission Europe
Membre du PCN Transport France

Un peu d'histoire...

- Advisory Council for Aviation Research and innovation in Europe (ACARE) lancé en 2001 par la CE
- Strategic Research Agenda (SRA) for European aeronautics et Vision 2020
- Clean Sky 1 lancé en 2007
- 1er call for proposals Clean Sky en 2009
- En 2011, Flightpath 2050 et nouveau SRIA en 2012
- Clean Sky 2 lancé en 2014 jusqu'en 2025
- Objectifs Clean Sky :
 - Ultra Green Air Transport System: reducing the impact of air transport on the environment.
 - Highly cost-efficient Air Transport System: through innovative technological developments, Clean Sky will contribute to answering society's needs and securing European leadership in aeronautics

JTI: Joint Technological Initiative

- Objectif : créer dans des secteurs économiques essentiels, de grands programmes de recherche européens, orientés par les industriels
- Sur des technologies stratégiques qui dynamiseront la croissance et l'emploi dans des secteurs concurrentiels sur la scène mondiale.
- Sous la forme de **Partenariats Public-Privé** mis en œuvre dans le cadre H2020 : co-financement CE/Privé (industrie, labos, universités, etc.)
- Plusieurs programmes, plusieurs appels à projet

Les JTI d'Horizon 2020



Horizon Europe : 44 PPP en discussion

Liste provisoire des partenariats

- One Health/AMR
- Cultural Heritage
- Sustainable, Smart and Inclusive Cities and Communities
- Brain Health
- Climate

| Santé | Alimentation, Bioéconomie, Ressources naturelles, Agriculture et Environnement | Climat, énergie et mobilité |
|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| EU-Africa partnership on health security to tackle infectious diseases | Towards more sustainable farming: agro-ecology living labs and research infrastructures | Transforming Europe's rail system |
| Innovative Health Initiative | European Partnership on Animals and Health | Integrated Air Traffic Management |
| European partnership for chemicals risk assessment | Environmental Observations for a sustainable EU agriculture | Clean Aviation |
| Pre-clinical/clinical health research | Rescuing Biodiversity to safeguard life on Earth | Clean Hydrogen |
| Large-scale innovation and transformation of health systems in digital and ageing society | A climate neutral, sustainable and productive Blue Economy | Built environment and construction |
| Personalised Medicine | Safe and Sustainable Food System for People, Planet & Climate | Towards zero-emission road transport (2ZERO) |
| Rare Diseases | Circular bio-based Europe: sustainable innovation for new local value from waste and biomass | Mobility and Safety for Automated Road Transport |
| | Water4All: Water security for the planet | Batteries: Towards a competitive European industrial battery value chain |
| | | Clean Energy Transition |
| Amérique, Industrie et Espace | Autres piliers | Propositions d'EM pouvant aboutir |
| High Performance Computing | Innovative SMEs (Eurostars) | Smart and zero-emission waterborne transport |
| Key Digital Technologies | European Open Science Cloud | Sustainable and Liveable Cities and Communities |
| Smart Networks and Services | EIT Climate-KIC | European Cultural Heritage |
| AI, data and robotics | EIT InnoEnergy-KIC | Partnerships in the cluster dedicated to society |
| Photonics Europe | EIT Digital-KIC | Neurodegenerative diseases |
| Clean Steel - Low Carbon Steelmaking | EIT Health-KIC | AntiMicrobial Resistance (AMR) |
| European Metrology | EIT Food-KIC | Creating a Geological Service for Europe |
| Made in Europe | EIT Manufacturing-KIC | European Climate Change Science in support of the Paris Agreement |
| Carbon Neutral and Circular Industry | EIT Raw Materials-KIC | Forestry |
| Global competitive space systems | EIT Urban Mobility-KIC | |

(Extrait présentation DGE sept19)

Objectifs environnementaux de Clean Sky 2

Tackling key environmental challenges

Environmental Objectives*

| | |
|------------------|--------------------|
| -CO ₂ | -20% TO -30% |
| -NO _x | -20% TO -30% |
| Speaker icon | -20% TO -30% |

* vs today's best aircraft



(Extrait présentation Clean Sky Info Day Toulouse mai 2019)

While building industrial leadership and ensuring mobility

Areas of Intervention



- Breakthroughs in Propulsion Efficiency
- Advances in Wings and Aerodynamics
- Novel Aircraft Configurations
- Innovative Structures and Production Systems
- Future Cockpit and Flight Guidance Systems
- More Electric Aircraft & Systems
- Optimal Passenger Environment

*(Extrait présentation Clean Sky Info
Day Toulouse mai 2019)*



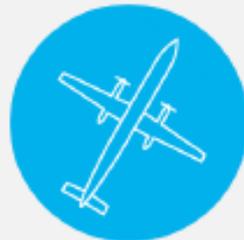
Clean Sky 2 Programme Set-up

EU Funding: ~1.8bn€
Private Members:
~2.2bn€

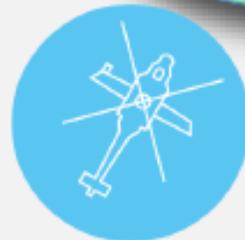
Innovative Aircraft Demonstrator Platforms (IADPs)



Large Passenger Aircraft



Regional Aircraft



Fast Rotorcraft

Integrated Technology Demonstrators (ITDs)



Airframe ITD



Engines ITD



Systems ITD



Eco-Design



Small Air Transport



Technology Evaluator

Transverse Activities (TAs)

(Extrait présentation Clean Sky Info Day Toulouse mai 2019)

Budget de Clean Sky 2

- Up to 40% of EU funding available for CS2 Leaders
Up to 30% allocated to Core Partners (calls completed)
At least 30% for CfP (i.e. *Partners*)
- **Over 500m€ will be awarded to Partners via CfP**

CfP11 en cours
Clôture 28/04/20

Enhancing and leveraging innovation capability across Europe, with a strong emphasis on SME participation

Leveraging private sector initiatives,
and building on MS national and regional efforts

(Extrait présentation Clean Sky Info
Day Toulouse mai 2019)

Clean Sky 2 : un vaste partenariat

16 ITD Leaders



+ 143 Core Members
Et +600 partners

1477 participations (over 800 unique entities)



334

INDUSTRY MEMBERS



420

SMEs



373

RESEARCH CENTRES



350

UNIVERSITIES



28

COUNTRIES



110

REGIONS



>466

GRANTS

Liste complète des Core Partners [ici](#)

(Extrait présentation Clean Sky Info Day
Toulouse Fev 2020)

Partners : définition et rôle

- Sélectionnés via les appels à projet (2 à 3 CfP par an)
- Engagement court/moyen terme
- Niveau et qualité de ressources ad hoc avec le topic concerné
- Scope et périmètre des activités définis dès le début et limités dans le temps
- Plusieurs types d'activités : étude, conception, simulation, développement, fabrication, intégration, etc.
- Activités définies et dirigées techniquement par le Topic Manager à l'initiative du call

CfP : des règles de participation favorables

- Ouvert à tous (entités publiques ou privées)
- Restriction de participation pour les leaders, les core partners et leurs affiliés
- Pays UE et pays associés
- Possibilité de candidater seul ou en consortium
- Possibilité de candidater en Franco-Français
- Attention aux Skills & Competences
- Taux de financement H2020
 - RIA (Research & Innovation Actions) - 100% funded
 - IA (Innovation Actions) - 70% funded
 - Académiques et NPO toujours financés à 100%
 - 25% d'Indirect Costs pour tous
- Time to Grant : max 8 mois
- L'innovation comme passerelle vers le business ou la coopération industrielle

CfP11 : Contenu de l'appel

| SPD Area | No. of topics | Ind. topic Funding (in M€) |
|-------------------------------|------------------|----------------------------|
| IADP Large Passenger Aircraft | 16 | 19.60 |
| IADP Regional Aircraft | 1 | 0.80 |
| IADP Fast Rotorcraft | 0 | 0 |
| ITD Airframe | 4 | 2.85 |
| ITD Engines | 0 | 0 |
| ITD Systems | 7 | 5.35 |
| Technology Evaluator | 3 | 1.50 |
| <u>TOTAL</u> | <u>31</u> | <u>30.10</u> |
| Thematic Topics | # of topics | Ind. topic funding (M€) |
| <u>TOTAL</u> | <u>4</u> | <u>15</u> |

List of Topics for Calls for Proposals (CFP11) – Part A

| Identification Code | Title | Type of Action | Value (Funding in M€) | Topic Leader |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|--------------------------|
| JTI-CS2-2020-CfP11-LPA-01-88 | Development of New digital Microphone-MEMS-Sensors for wind tunnels with open/closed test sections and flight tests | IA | 1.40 | Airbus |
| JTI-CS2-2020-CfP11-LPA-01-89 | Advanced characterization of friction and surface damage for gears running in loss of lubrication conditions | RIA | 1.10 | GE Avio |
| JTI-CS2-2020-CfP11-LPA-01-90 | Automated thermography for inspection of welded safety critical engine components | IA | 0.70 | GKN |
| JTI-CS2-2020-CfP11-LPA-01-91 | Development and validation of a method to predict non-linear aerodynamic characteristics of lifting surfaces with controls | RIA | 0.75 | Airbus |
| JTI-CS2-2020-CfP11-LPA-01-92 | Optimization of APU Exhaust Muffler Thermal Barrier and Air Intakes construction Technologies | IA | 0.90 | Airbus |
| JTI-CS2-2020-CfP11-LPA-01-93 | Engine bleed jet pumps continuous behaviour modelization | RIA | 0.70 | Liebherr |
| JTI-CS2-2020-CfP11-LPA-01-94 | Installed UHBR Nacelle Off-Design Performance Characteristics. | RIA | 3.00 | Rolls-Royce |
| JTI-CS2-2020-CfP11-LPA-01-95 | Passive Actuated Inlet for UHBR engine ventilation | IA | 0.80 | Airbus |
| JTI-CS2-2020-CfP11-LPA-01-96 | Analytical and experimental characterization of aerodynamic and aeroacoustic effects of closely operating propellers for distributed propulsion wing solutions. | RIA | 2.50 | Airbus Defence and Space |
| JTI-CS2-2020-CfP11-LPA-01-97 | Insulation Monitoring for IT Grounded (Isolation Terra) Aerospace Electrical Systems | IA | 0.70 | Rolls-Royce plc |
| JTI-CS2-2020-CfP11-LPA-02-33 | Tooling, Equipment and Auxiliaries for the closure of a longitudinal Barrel Joint: Butt strap integration and Lightning Strike Protection continuity | IA | 1.60 | Airbus |
| JTI-CS2-2020-CfP11-LPA-02-34 | Tooling, Equipment and Auxiliaries for the closure of a longitudinal Barrel Joint: Overlap joint and Frame Coupling integration | IA | 1.40 | Airbus |
| JTI-CS2-2020-CfP11-LPA-02-35 | Innovative disbond arrest features for long thermoplastic welded joints | IA | 0.75 | Fokker |
| JTI-CS2-2020-CfP11-LPA-02-36 | Large scale aircraft composite structures recycling [ECO] | IA | 1.80 | Airbus |
| JTI-CS2-2020-CfP11-LPA-02-37 | Thermoplastic fuselage repair process integrated on manufacturing line | IA | 0.80 | Airbus |
| JTI-CS2-2020-CFP11-LPA-03-19 | Concept for Pilot State Monitoring system operation in commercial aviation | IA | 0.80 | Honeywell International |
| JTI-CS2-2020-CFP11-LPA: 16 topics | | | 19.70 | |

| Identification Code | Title | Type of Action | Value (Funding in M€) | Topic Leader |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|--------------------------------------|
| JTI-CS2-2020-CFP11-REG-01-20 | Aerodynamics experimental characterization and new experimental testing methodologies for distributed electrical propulsion | RIA | 0.80 | Centro Italiano Ricerca Aerospaziale |
| JTI-CS2-2020-CFP11-REG: 1 topic | | | 0.80 | |
| JTI-CS2-2020-CFP11-AIR-01-46 | Evaluation of NDT Techniques for Assessment of Critical Process and Manufacturing Related Flaws and Defects for a Ti-alloy | RIA | 0.55 | SAAB |
| JTI-CS2-2020-CFP11-AIR-01-47 | Additive Manufacturing demonstration on test article for a trailing edge application with a sliding pad concept | IA | 0.50 | ASCO Industries |
| JTI-CS2-2020-CFP11-AIR-03-10 | Innovative light metallic and thermoplastic airframe section full scale testing | IA | 1.30 | Hellenic Aerospace Industries |
| JTI-CS2-2020-CFP11-AIR-03-11 | Development and execution of new test methods for thermoset panel manufactured in an automated tape layup of dry unidirectional fibres (UD) or non-crimped fabrics (NCF) and subsequent infusion | IA | 0.50 | University of Stuttgart |
| JTI-CS2-2020-CFP11-AIR: 4 topics | | | 2.85 | |
| JTI-CS2-2020-CfP11-SYS-01-22 | Oxygen Absorbing Metal-Air-Batteries for Long Term Cargo Compartment Inertisation | RIA | 0.80 | Diehl Aviation Gilching GmbH |
| JTI-CS2-2020-CfP11-SYS-01-23 | Development of a multi-position valve with associated actuator for cargo fire protection | IA | 0.50 | Safran |
| JTI-CS2-2020-CFP11-SYS-02-62 | Thermoplastic wheel for electrical Environmental Control System | IA | 0.75 | Liebherr |
| JTI-CS2-2020-CFP11-SYS-02-63 | Decentralised HVDC power conversion module for innovative optimised aircraft electrical network distribution | IA | 0.75 | Airbus |
| JTI-CS2-2020-CFP11-SYS-02-64 | Human Safe HVDC Interconnection components | IA | 0.80 | Airbus |
| JTI-CS2-2020-CFP11-SYS-03-25 | Investigation and modelling of hydrogen effusion in electrochemically plated ultra-high-strength-steels used for landing gear structures | RIA | 1.00 | Liebherr |
| JTI-CS2-2020-CFP11-SYS-03-26 | Replacement of cobalt in Environmental Control System bleed valves | IA | 0.75 | Liebherr |
| JTI-CS2-2020-CFP11-SYS: 7 topics | | | | |
| JTI-CS2-2020-CfP11-TE2-01-12 | Airport level assessment | | | |
| JTI-CS2-2020-CfP11-TE2-01-13 | Airport and ATS Level | | | |
| JTI-CS2-2020-CfP11-TE2-01-14 | Reduction of the aviation via optimisation and flight network | | | |
| JTI-CS2-2020-CFP11-TE: 3 topics | | | | |

List of Topics for Calls for Proposals (CFP11) – Part B

| Identification Code | Title | Type of Action | Value (Funding in M€) |
|---------------------------|----------------------------------------------------------------------------------------------------|----------------|-----------------------|
| JTI-CS2-2020-CFP11-THT-11 | High power density/multifunctional electrical energy storage solutions for aeronautic applications | RIA | 1.20 |
| JTI-CS2-2020-CFP11-THT-12 | Advanced High Power Electrical Systems for High Altitude Operation | RIA | 1.00 |
| JTI-CS2-2020-CFP11-THT-13 | Sustainability of Hybrid-Electric Aircraft System Architectures | RIA | 1.60 |
| JTI-CS2-2020-CFP11-THT-14 | Scalability and limitations of Hybrid Electric concepts up to large commercial aircraft | RIA | 0.80 |

Thematic Topics

List of Topics for Calls for Proposals (CFP11) – Part B

| Identification Code | Title | Type of Action | Value (Funding in M€) |
|---------------------------|----------------------------------------------------------------------------------------------------|----------------|-----------------------|
| JTI-CS2-2020-CFP11-THT-11 | High power density/multifunctional electrical energy storage solutions for aeronautic applications | RIA | 1.20 |
| JTI-CS2-2020-CFP11-THT-12 | Advanced High Power Electrical Systems for High Altitude Operation | RIA | 1.00 |
| JTI-CS2-2020-CFP11-THT-13 | Sustainability of Hybrid-Electric Aircraft System Architectures | RIA | 1.60 |
| JTI-CS2-2020-CFP11-THT-14 | Scalability and limitations of Hybrid Electric concepts up to large commercial aircraft | RIA | 0.80 |

Thematic Topics



- Topics launched outside the complementary framework of one IADP/ITD/TA
- Not directly linked to the action implemented by the Clean Sky 2 Members under specific ITD/IADP/TA
- Contribute to the achievement of the High Level Objectives (HLGs) of the Clean Sky 2 Regulation
- Different special conditions of admissibility apply to the thematic topics.

- Problem-oriented statements allowing research / technology routes to be selected and proposed by applicants
- Allow for retention of multiple projects against a topic, where justified
- Avoid duplication with H2020 calls in terms of both topic scope [narrower] and descriptions [more focused yet broader than CfP topics to date]

CfP11 : calendrier

- Publication officielle de l'appel : 14 janvier 2020
- Clôture de l'appel : 28/04/20 à 17H (Brussels time)
- Phase d'évaluation : mai/juin 2020
- Clôture des FAQ : 13 mars 2020
- *Publication des recueils de FAQ : 14 janvier / 20 février / 26 mars
- *Auditions techniques et négo contractuelles : Q3/Q4 2020
- *Démarrage des activités : Q4 2019 / Q1 2021

*(*dates estimatives)*

Call and topics

- L'appel est constitué de plusieurs topics
- Chaque topic décrit en détail :
 - Les activités à mener et les résultats à obtenir
 - Le montant de la subvention (valeur indicative en M€)
 - Les capacités, compétences et certifications requises pour réaliser le projet
 - Le calendrier de réalisation
 - Les livrables et jalons du projet

I. JTI-CS2-2019-CfP10-LPA-01-72: Development of a distributed CFD platform for collaborative design

[E]

| | | | |
|-----------------------------------------|--------|-------------------------------------------|--------------------------|
| Type of action (RIA/IA/CSA): | IA | | |
| Programme Area: | LPA | | |
| (CS2 JTP 2015) WP Ref.: | WP 1.1 | | |
| Indicative Funding Topic Value (in k€): | 600 | | |
| Topic Leader: | Airbus | Type of Agreement: | Implementation Agreement |
| Duration of the action (in Months): | 36 | Indicative Start Date (at the earliest)*: | > Q1 2020 |

| Topic Identification Code | Title |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| JTI-CS2-2019-CfP10-LPA-01-72 | Development of a distributed CFD platform for collaborative design |
| Short description | |
| Development of an open-source CFD simulation platform and methodology to enable co-design between an airframe manufacturer and an engine manufacturer, while maintaining IP and IT security. This includes code-to-code coupling, communication between different simulation platforms, post processing of the simulation, and demonstration on industrial configuration. | |

| Links to the Clean Sky 2 Programme High-level Objectives ⁷ | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------|--------------------------|
| This topic is located in the demonstration area: | | Advanced Engine/Airframe Architectures | | |
| The outcome of the project will mainly contribute to the following conceptual aircraft/air transport type as presented in the scene setter: | | Advanced Long-range Ultra-advanced Long-range Advanced Short/Medium-range Ultra-advanced Short/Medium-range | | |
| With expected impacts related to the Programme high-level objectives: | | | | |
| Reducing CO ₂ emissions | Reducing NO _x emissions | Reducing Noise emissions | Improving EU Competitiveness | Improving Mobility |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

EXEMPLE

1. Background

High Performance Electrical Components for Bleed Control studies present significant opportunities of weight reduction and optimized maintenance through the suppression of the need for pressurized fluid for actuation.

With the development of full electrical architectures in order to support the needs of More Electric Aircraft and future Non propulsive Energy Generation system, it is necessary to consider enhanced electrical bleed control valve and inlet guide vane actuators, in terms of reliability (targeted MTBF: 50 000 h), with weight, volume and costs competitive with hydraulic / pneumatic technologies.

The introduction of EMA technology on previous Power On Demand Systems has enabled the demonstration of the feasibility of an electrical actuated bleedflow control, offering electrification of the bleed control function.

2. Scope of work

| Tasks | | |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Ref. No. | Title - Description | Due Date |
| T2.1 | Initial Requirements Capture – define requirements and interfaces through discussion with stakeholders | T0+1 |
| T2.2 | Component selection – perform initial performance analyses to enable baseline selection of components to meet the main performance requirements. | T0+3 |
| T2.3 | Components architecture definition | T0+6 |
| T2.4 | Functional modelling and failure mode analysis (FMEA) | T0+9 |
| T2.5 | Module Functional definition | T0+9 |
| T2.6 | Supply chain identification and industrialization assessment | T0+10 |

3. Major Deliverables/ Milestones and schedule (estimate)

*Type: R=Report, D=Data, HW=Hardware

| Deliverables | | | |
|-------------------------------|---------------------------------------------|-------|----------|
| Ref. No. | Title – Description | Type* | Due Date |
| D2.1 | Preliminary Requirements Specification | R | T0+3 |
| D2.2 | Module Architecture Report | R | T0+6 |
| D2.3 | Industrialisation Assessment Report | R | T0+12 |
| D2.6 | Test report | R | T0+27 |
| D2.7 | Two components shipsets for integration | HW | T0+27 |
| D2.8 | Final report (incl. reliability prediction) | R | T0+30 |
| Milestones (when appropriate) | | | |
| Ref. No. | Title – Description | Type* | Due Date |
| D2.4 | Preliminary Design Review | D | T0+12 |

4. Special skills, Capabilities, Certification expected from the Applicant(s)

- Specialist in pneumatics systems & control systems
- Links with, or internal, design & industrial capacity in power electronics
- Mechanical design of actuators
- Knowledge of aeronautical constraints (environments)
- Test & analysis capability to support detailed behavioural characterisation of power components

Soumission électronique des propositions

- Formalités administratives à démarrer au plus tôt (non engageantes pour la suite) :
 - Compte ECAS - EC Authentication System
 - PIC - Participant Identification Code
 - 1 PIC par Legal Entity
 - PIC temporaire / PIC validé
- Soumission électronique de la proposition :
 - Formulaire administratifs en ligne
 - + docs à télécharger
- Save et Submit assez tôt puis mettre à jour
- Deadline absolue (Brussels Time)
- Contractualisation électronique
- Gestion électronique du projet (livrables, reporting, etc.)

Formulaire de candidature

Templates for submitting a valid proposal:

1. Part A *[Administrative Section (Coordinator ID, Legal LEAR etc.)]*
2. Part B.I *[Technical Section: 3 EVAL Criteria and technical and financial content linked to DoA]*
3. Part B.II *[Admin Section: members of consortium (participants, operational capacity, etc.), (potential) ethics and security issues identified by the applicant]*
4. Part D *[Declaration on the Participation of any Affiliated Entities to Private Members of CS2JU in this Proposal and Declaration(s) of Interests]*

→ 70-page limitation for non-thematic topics
30-page limitation for thematic topics

These templates (in pdf format) will be made available to potential applicants on the [Participant Portal](#) prior the official opening of the Submission System.



Part C : pour financement régional (option)

- Objectif : synergie des fonds dédiés à l'Innovation
- ESIF (European Structural & Investment Funds) = fonds régionaux
- Activités complémentaires pouvant être financées
- MOU Clean Sky signés par Occitanie et Nouvelle-Aquitaine
- WP ESIF : un projet 'stand-alone'
- Evaluation par l'autorité ESIF si projet Clean Sky top ranked
- En cas de réponse en consortium, plusieurs WP ESIF possibles
- Possibilité de rajouter un WP ESIF durant l'implémentation du projet financé



Financial Viability Check

- Uniquement pour les coordinateurs (pilotes de consortia)
- Et pour subv projet > 500 K€
- Sauf pour les public bodies et établissements enseignement supérieur
- Si subv > 750 K€, nécessité de fournir un bilan comptable certifié
- Si capacité financière faible, mesures de contingence (renforcement du pilotage, réduction du pré-financing, changement de coordinateur)
- Si capacité financière insuffisance, changement de coordinateur
- Guide et test FVC en ligne :

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/lev/h2020-guide-lev_en.pdf

Critères d'évaluation

- **1. Excellence**
 - 1.1 Objectives
 - 1.2 Relation to the Work Plan
 - 1.3 Concept and approach
 - 1.4 Ambition
- **2. Impact**
 - 2.1 Expected Impact
 - 2.2 Measures to maximise impact
 - 2.2.1 Dissemination and exploitation of results
 - 2.2.2 Communication activities
- **3. Implementation**
 - 3.1 DoA— Work packages, deliverables and milestones
 - 3.2 Management Structure and Procedures
 - 3.2.1 Capabilities
 - 3.2.2 Structure and procedures
 - 3.2.3 Risks
 - 3.3 Consortium/ Clusters as a whole (where applicable)
 - 3.4 Resources to be committed

3 critères notés de 0 à 5
Seuil par critère : 3/5
Seuil global : 10/15

ESR : Evaluation Summary Report

Ranking List mais 1 seul gagnant par topic

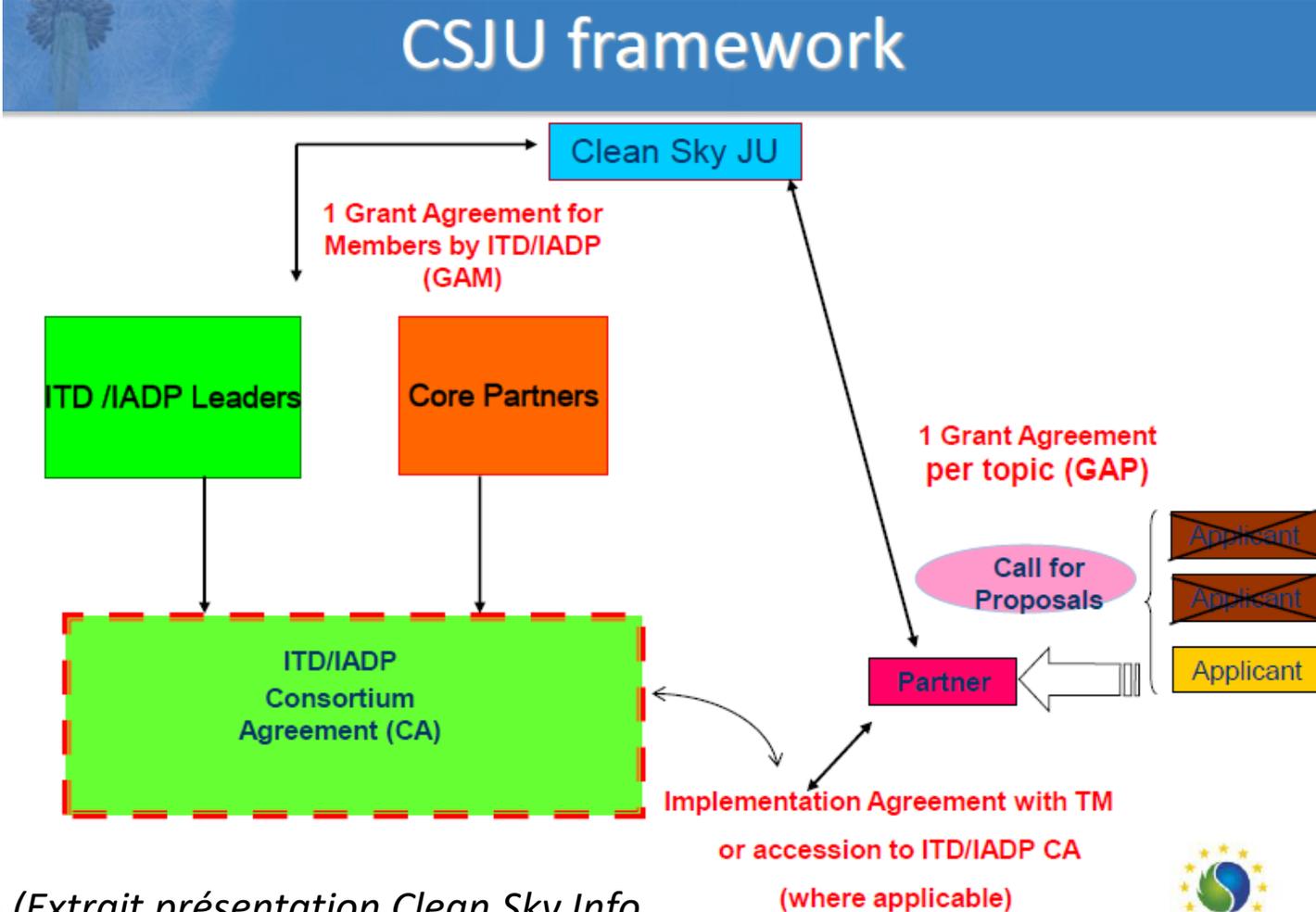
Pour le ranking des IA : Impact = x 1.5

Pour le ranking des Thematic Topics : Excellence = x 1.5

Processus d'évaluation

- Check éligibilité
- 3-4 experts évaluateurs/proposition
- Experts indépendants (BDD H2020)
- Rôle du Topic Manager dans l'expertise : technical advice only
- Timing de l'évaluation :
 - Phase 1: Individual evaluation → Individual Evaluation Report
 - Phase 2 : Consensus group → Consensus Report
 - Phase 3 : Panel review → Panel Report, Panel Ranked List et ESR
- Auditions potentielles de candidats “top ranked”
- 1 gagnant par topic : main list et reserve list
- Préparation du Grant : sessions techniques avec les Topic Managers
- Ethics review par la Clean Sky JU

Contractualisation des projets lauréats



(Extrait présentation Clean Sky Info Day Toulouse mai 2019)

Contractualisation des projets lauréats

- Grant Agreement avec la CE
- Implementation Agreement bilatéral avec le Topic Manager :
 - rights and obligations of the parties;
 - organisation and coordination of the work;
 - division of roles and responsibilities;
 - exploitation and dissemination of results;
 - liability;
 - settlement of disputes
- Template IA disponible en ligne
- IA conclus avant le GA ou 1^{er} livrable du projet
- Si projet en consortium, Consortium Agreement obligatoire avant signature du GA

Modalités de paiement

| | Time-to-Pay CSJU | From |
|--------------------------|------------------|--------------------------------------------------------------------------------------------------------|
| One Pre-financing | 30 days | From: entry into force or from 10 days before the starting date, whichever is the latest |

- **No standard amount** (or percentage) for the pre-financing payment; In principle, **120%**⁽¹⁾ of the average JU funding per period for actions with at least two reporting periods

| CfP10 | Number of RP | 1 | 2 | 3 | 4 | 5 | 6 |
|-------|--------------|-----|-----|-----|-----|-----|-----|
| | Prefin % | 80% | 60% | 40% | 30% | 24% | 20% |

⁽¹⁾This may be adjusted by the JU according to credit availability.

- Retention 5 % of maximum grant for the **Guarantee Fund**

Pour les projets en consortium, le coordinateur reçoit le pré-financement qu'il redistribue aux partenaires selon les termes du Consortium Agreement

(Extrait présentation Clean Sky Info Day
Toulouse mai 2019)

Modalités de paiement

The coordinator must submit the periodic report (technical and financial reports) within 60 days following the end of each reporting period.

| | Time-to-Pay CSJU | From |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------------|
| Interim Payments | 90 days | From reception of periodic report |
| The total amount of pre-financing and interim payments must not exceed 90% of the maximum grant amount set out in Article 5.1. The maximum amount for the interim payment will be calculated as follows: {90% of the maximum grant amount <i>minus</i> {pre-financing + previous interim payments}}. | | |
| Payment of the Balance | 90 days | From reception of final reports |
| The amount due as the balance is calculated by the <i>JU</i> by deducting the total amount of pre-financing and interim payments (if any) already made, from the final validated contribution. | | |



*(Extrait présentation Clean Sky Info Day
Toulouse mai 2019)*

Propriété Intellectuelle

Ownership

- Pour le bénéficiaire qui génère les résultats
- Joint-ownership uniquement dans des circonstances particulières (joint ownership agreement ou consortium agreement)

Access rights

- Spécificités Clean Sky : obligation pour les bénéficiaires de donner au Topic Manager accès à leur background requis pour l'implémentation du projet ainsi qu'aux résultats générés par le projet
- The access right mutuel/réciproque pour les bénéficiaires dans le cadre du projet

Visibility of the JU funding

- Des obligations d'affichage pour toutes les actions de dissémination du projet (logo Clean Sky, emblème EU, etc.)

Open Research Data

- Open Research Data Pilot
- Libre accès aux données de recherche digitales générées par le projet (statistiques, mesures, images, etc.)
- 2 types de données concernées par le pilot :
 - Publications scientifiques
 - Autres données propres au projet figurant dans le Data Management Plan
- Démarche non obligatoire (opt in / opt out)
- Si opt in, Data Management Plan à produire dans les 6 mois qui suivent le démarrage du contrat
- Opt out possible à tout moment durant l'implémentation du projet

Le support d'Aerospace Valley pour vos projets européens



- Veille sur les appels à projet européens
- Conseil, orientation



- Information générale et diagnostic personnalisé
- Accompagnement au montage



- Aide à la recherche de partenaires



- Relecture de propositions
- Lettres de soutien



Le décryptage Clean Sky par AV



- Anticipation de la publication des appels
- Lecture des topics par les ingénieurs AV
- Sélection de topics envoyée aux adhérents
- Information ciblée, diagnostic
- Accompagnement à la rédaction de proposition
- Accompagnement au montage de consortium
- Relecture de proposition
- Soutien de proposition, à la demande

Depuis 2013:

- 12 appels suivis
- + 80 adhérents contactés par appel
- + 50 propositions soumises

Evènements à venir

Ateliers d'écriture régionaux (réservés aux entités ayant l'intention de répondre à l'appel CfP11) :

- Le 03/03/20 chez AV Toulouse pour les entités d'Occitanie
Inscriptions [ici](#)
- Le 13/03/20 chez AV Talence pour les entités de Nouvelle-Aquitaine
Inscriptions [ici](#)

Ateliers organisés en partenariat avec les Régions Occitanie et Nouvelle-Aquitaine et le réseau EEN Sud-Ouest

Liens utiles

- Site Clean Sky : <https://www.cleansky.eu>
- Portail de la Commission Européenne : <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>
- Portail H2020 sur le site du MESRI : www.horizon2020.gouv.fr
- PCN Transport : pcn-transport@recherche.gouv.fr
- PCN PME : pcn-pme@recherche.gouv.fr

Merci pour votre attention!
Place à vos questions...

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