



PART 3 - HOW "CLEAN SKY" WORKS



7. PRINCIPLES OF OPERATION AND GOVERNANCE RULES OF THE « CLEAN SKY » JTI

7.1 Principles of operation

“Clean Sky” consists of the project Platforms, brought together through the transverse activities and interactions described above. A corporate and operational structure must be created to reflect the need for a new approach to overcome market failure and to incorporate the principle of collaboration between the private and public sectors. At the heart of that structure will be a body corporate, the clean sky joint undertaking (“JU”). This JU will be a legal entity created as a Community organisation under art 171 of the EC treaty to implement and manage the “Clean Sky” project and to provide a single channel for the unique interface between the Commission and the “Clean Sky” project.

The core principles of the structure and operation of the JU are described below, followed by a more detailed description of how it is proposed to implement the principles. The validity of these principles will be a key driver of the effectiveness of the JU structure and organisation.

1. The structure of the JU performing the JTI must be designed to allow the participants to bring industrial processes to the management of Community-funded research of an unprecedented scale and scope.
2. The role of major industrial participants as Platform Leaders is central to the functioning and management of the JTI research programme. Through the contracts with the JU and other participants each Platform Leader can ensure the coherence and co-ordination of the work in its Platform.
3. The participants in each Platform will also become members of the JU body corporate.
4. The JU itself participates in the technical management of the Project Platforms.
5. The JU itself will take on part of the control functions of the Commission in relation to the JTI (the Commission will retain power to resume these functions, and nothing will affect the Court of Auditors’ authority over financial matters).
6. The JTI will benefit from Community funding, at the percentage levels applicable to FP7.
7. Results of the research programme (intellectual property and physical demonstrators) will belong to the participant that generates them.
8. The Commission is to confirm that the proposed framework complies with Community competition rules.



After a description of the further steps to be taken to create the JU, and of its constitutional documents, the following aspects of the legal structure are described in turn:

- Membership and categories of members
- Bodies and internal management
- Performance of the research and contracts with members
- Selection of new Partners
- Intellectual property principles
- Finance

7.2 Formation

The Community and a number of major European aerospace companies will set up a Joint Undertaking under Article 171 of the EC Treaty.

The first step in creating the JU is for the Platform Leaders to present to the Commission a MoU showing their intentions and the outline of their commitment over the duration of the JTI. The MoU will set out the general intentions of the Platform Leaders in relation to the corporate structure of the JU, and its operations, financing and intellectual property principles. The Commission will be invited to agree to the terms set out in the MoU, although this agreement obviously cannot be treated as a binding obligation of the Community, which requires the consent of the Council.

Following signature of the MoU the full documentation to create the JU must be prepared. This will comprise:

- (1) The Council Regulation creating the JU as an Article 171 joint undertaking.
- (2) The Statutes of the JU annexed to the Regulation. The Statutes will describe the internal management of the JU and its bodies.
- (3) A Stakeholders' Agreement between the Platform Leaders, other companies and the Commission (on behalf of the Community) to define in detail the way in which the activities of JU are carried out. This agreement will contain the commitments of the members and may also contain provisions supplementing the Statutes in areas where publication may be inappropriate for reasons of commercial or administrative confidentiality.
- (4) Supplementary documents (Financial Regulation, Rules of Procedure etc.).



7.3 Membership

The membership of the JTI will reflect its character as an interface between the public and private sectors. The public interest will be represented by the involvement of the Commission, and the Commission will maintain close links with the authorities of all interested Member States. In addition to the Commission (representing the European Community) there will be three categories of “Member”:

- (1) Platform Leaders
- (2) Associates
- (3) Partners.

The founding members will be the Commission, the Platform Leaders and the Associates that have already committed to the JTI and signed the Stakeholders’ Agreement.

7.3.1 *Categories of membership*

The **Platform Leaders** are AgustaWestland, Airbus, Alenia Aeronautica, Dassault Aviation, Eurocopter, Liebherr-Aerospace, Rolls-Royce, Safran and Thales. Each Platform Leader will take responsibility (alone or jointly) for the management of its Platform. Those operational responsibilities will be set out in a Platform Contract (as described in section 7.5 “Operations and Contracts” below).

Associates will be major European aerospace companies other than the Platform Leaders, and/or major European research institutes. Associates will be members of one or more Platform Steering Committees. Associate status will depend upon the company making a substantial strategic commitment in both financial and technical terms over the life of a Project Platform. The proposed financial investment threshold for industrial partners is 5% of the self-financed part of the Platform budget.

At the Clean Sky workshop on 1 June 2006, the process for becoming an Associate to a Platform was fully explained to more than 200 attendees. The process and application form are available on the ASD website. Responses must be received by 14 August 2006. Platform Leaders have already received a significant number of expressions of interest. Dialogue is continuing with these and other candidates. The Platform Leader will select the most suitable candidates with the approval of the other Platform Leaders.

Associates that have been pre-identified in this way will join the relevant Steering Committee at once and thereby have a part in the definition of the Platform. Those Associates will then join the Platform Leaders as founding members of the JU.

The operational responsibilities of the Associates will be set out alongside those of the Platform Leaders in the relevant Platform Contracts.



After formation of the JU Associate status may be offered to Partners which have made a commitment to the JTI comparable to those of the existing Associates. Decisions on offering Associate status will be taken by the relevant Steering Committee and approved by the Executive Board.

Partners may be industrial participants (including SMEs), universities, research institutes or any other person or entity able to carry out research in Europe within the scope of the JTI.

Partners will be introduced by the Platform Leaders after selection through an open and transparent competitive process. This process is described at section 7.6 “Selection of Partners” below.

The essential qualification for membership of the JU as a Partner is participation on a cost-sharing basis in programmes of work taking place as part of the JTI Platforms.

7.3.2 Involvement of Member States

The Commission has proposed the establishment of a Member State liaison group whose functions will include

- Updates on technical progress
- Reporting on Technology Evaluator
- Reporting on CFPs
- Co-ordination and leverage of national activities
- Respect of targets
- Considering special measures
- Organising events/special workshops
- Advising the Commission

The Commission’s representative on the Executive Board will be the central channel between this group and the JU, and will ensure that the interests of the Member States are properly represented. Platform Leaders may attend these meetings as invited to do so.

The visibility given by this liaison group will enable the Member States to align their national activities with those of the JTI. Access to the outputs of the Technology Evaluator will be a particularly powerful tool in this respect.



7.4 Bodies and internal management

7.4.1 Executive Board

The Executive Board will be the governing authority of the JU, with full powers over all of its activities, including administrative, financial and technical responsibility.

The Executive Board shall comprise:

- (1) A member and an alternate member appointed by the Commission;
- (2) A member and an alternate member appointed by each Platform Leader; and
- (3) A member and an alternate member appointed by Participants that have been formally recognised by the JU as making a financial commitment to the JTI of a minimum of 5% of the total resources introduced to the JTI Programme by Participants and as being able to bring complementary strategic industrial capacity to the JTI Programme.

The Director shall attend, but not vote at, meetings of the Executive Board.

The full Executive Board will meet regularly to review the progress of the JTI and ensure its alignment with the Stakeholders Agreement. Its role will include:

- Strategic orientation
- Adoption of the annual budget and accounts
- Appointment or removal of the Director
- Receiving annual reports from Platform Leaders and Director and reviewing progress of research
- Actions against defaulting Platform Leaders and settlement of disputes
- Admission of new Platform Leaders and Associates
- Entering into and amending Platform Contracts
- Approval of other major contracts
- Review and reopening of contested Partner selection decisions

The Executive Board will endeavour to reach consensus on all decisions. If consensus cannot be reached, any matter may be resolved by a qualified (2/3) majority vote. The votes of members of the Executive Board will be weighted according to their respective commitments to the JTI Programme. The necessary majority must be achieved both on the basis of these weightings and as a



proportion of the number of members of the Executive Board. In certain defined areas a unanimous vote of the Executive Board will be required. Those defined areas will include:

- Admission or withdrawal of Platform Leaders
- Proposals for amendment to statutes
- Changes to Outline Budget allocations
- Addition or removal of Members entitled to appoint Executive Board members
- Formation, amendment or release of Platform Contracts (other than changes to specification)
- Appointment of Director ¹⁷
- The ordinary scope of authority of the Director to act on behalf of the JU.

The representative of the Commission may veto any resolution of the Executive Board relating to matters of public interest. The first draft of a list of such matters is to be proposed by the Commission and will in due course be agreed between the Commission and the Platform Leaders.

7.4.2 Steering Committees

On the formation of the JU, the Executive Board will formally establish a Steering Committee for each Platform. The Steering Committee will act as a sub-committee of the Executive Board. The Steering Committee will comprise representatives of the Platform Leader (as its Chairman) and each Associate making a commitment to a Platform. In addition other Platform Leaders with an interest in the results of the Platform may be invited by the Steering Committee (subject to the approval of the Executive Board) to participate in its meetings.

The Steering Committee will assume responsibility for the technical functions of the JU in managing the Platform and will have full authority to make decisions on behalf of the JU on all technical matters specific to the relevant Platform.

The Steering Committee of a Platform will elaborate the technical definitions of the Platform.

It will participate with the Platform Leader(s) in the management of the Platform, in particular in relation to strategic orientation and the Call For Proposal and selection process. The Steering Committee will work closely with the Platform

¹⁷ In relation to the appointment of the Director the normal rule of 2/3 majority will apply, but each member of the Executive Board will have a veto which may be exercised only once on each occasion of a vacancy in the office of Director.



Leader(s) to ensure delivery of the Platform outcomes in accordance with the Platform Contract and the objectives of the JTI Programme.

Unless otherwise adopted in a particular Platform, decisions of Steering Committees will be taken by a simple majority with votes weighted according to rules of procedure established for each Steering Committee by the Executive Board to reflect the structure and requirements of each Platform. The Platform Leader will have a right of veto over any resolution of the Steering Committee.

Any disagreement or dispute between the Steering Committee and the Platform Leader shall be referred to the Executive Board for resolution.

The Platform Leaders and Associates will form “shadow” Steering Committees and start their work outside the legal framework of JU before the JU comes into existence. The work of the shadow Steering Committees is necessary to ensure that the feasibility and outline definition of the Platforms has been properly reviewed before the final obligations under the Platform Contracts and the Stakeholders’ Agreement come into force.

7.4.3 Director

The day to day management of the JU will be carried out by a Director. The Director will be the chief executive and legal representative of the JU and shall perform his/her duties with complete independence. His/her normal authority and powers will be defined by a unanimous resolution of the Executive Board.

The Director will report and be accountable to the Executive Board. He/she will be responsible for:

- Reporting on technical progress and financial situation of the Platforms
- Chairing the Steering Committee of the Clean Sky Technology Evaluator
- Communication and publicity for the Clean Sky JTI
- Administration of review process for contested Partner selection decisions
- Coordinating across all Platforms the participation of SMEs to ensure target levels of participation are met
- Preparing annual budgets
- Preparing annual reports and accounts
- Informing the Commission on any matters of significance.

The Director will be supported by a dedicated team including a focal point for SMEs and new Member States.

The Director and Executive Board will work closely with the relevant Technology Platform (ACARE). ACARE will play an advisory role on the alignment of the content with SRA.



7.4.4 General Assembly

A General Assembly will be established consisting of representatives of all Members of the JU (Platform Leaders, Partners and Associates), with each Member having one vote. The General Assembly will have a consultative role. It will oversee the annual budget prepared by the Executive Board and receive the annual reports and accounts of the JU before these are formally forwarded to the Commission. The General Assembly may make recommendations to the Executive Board.

7.5 Operations and contracts

7.5.1 Platform Contracts

Each Platform Leader and the relevant Associates will enter into one or more Platform Contracts with the JU to manage the Platforms and carry out their activities over the expected life of the JU.

Platform Contracts will include, *inter alia*, the following provisions:

- Identification of the members of the relevant Steering Committees
- Total Platform budget and financing
- Specification, allocation of work and primary responsibility for work packages to be undertaken by the Platform Leader and Associates
- Mechanisms for the evolution of specifications over the life of the Platform
- Obligations of the JU to fund the Platform as a whole and the work of each of the participants at the applicable reimbursement rates
- Obligations on the Platform Leader (supported by the Associates) to produce Platform management and quality plan
- Standard CFP procedures and Intellectual Property rules
- Obligation on Platform Leaders and Associates to perform work according to specification and deliver to JU
- Mechanisms for further Partners to join the Platform through Implementation Contracts
- Effective sanctions for non-performance and inadequate performance
- Provisions for financial control by the JU

The Platform Contracts will accordingly take the place of consortium agreements and grant agreements under the “classic” indirect actions. The detailed structure and terms of the Platform Contracts will reflect the differing requirements of the Platform Leaders in relation to the management of their respective Platforms. In



particular, the contractual structure may at the Platform Leader's option consist of separate grant agreements between the JU and each participant and a consortium agreement setting out the obligations of the participants to one another.

The Platform Contracts will not prejudice the Commission's right to intervene and exercise its supervisory functions, including powers of financial control, directly.

7.5.2 Implementation Contracts

Partners succeeding in the competitive process described below at section 7.6 will also enter into contracts with the JU to define their obligations in relation to implementation of the Platforms (“Implementation Contracts”). The Implementation Contract will include the grant agreement between the JU and the New Partner.

Implementation Contracts may take the form of agreements to become party to an existing Platform Contract, trilateral contracts between the New Partner, the JU and the Platform Leader or an Associate with responsibility for managing a relevant work package or any other form that is consistent with both the integrity of the relationship between the Participants and the JU and the programme management requirements of the Platform. Implementation Contracts may provide for the New Participant to owe delivery and performance obligations to the JU alone or to both the JU and the Platform Leader

In cases where the Platform Leader has established a consortium agreement with separate grant agreements the Implementation Agreement may take the form of a bilateral grant agreement with the JU, accompanied by accession to the consortium agreement.

7.5.3 Subcontracting

JU members may in certain cases place work with subcontractors, which will not become members of the JU. Foreground IP rights developed by subcontractors will belong in the first instance to the member hiring them, and subject to the JU's IP regime as if developed by such member.

Members will retain sole responsibility for the performance of the work and for compliance with the provisions of the Platform Contracts or Implementation Contract.



7.6 **Selection of Participants and Subcontractors**

Participation in the JTI Programme is open to any legal entity established in the Community and able and willing to perform JTI activities in Europe. Potential Partners will be required to demonstrate that they are eligible for Community funding in accordance with the principles laid down in the rules for participation applicable to FP7.

7.6.1 ***Identification of potential Partners***

The Platform Leaders and Associates will identify potential Partners in the Platforms managed by them. In identifying such Partners the Platform Leaders and Associates will draw on, *inter alia* :

- Existing R&T networks including partnerships with universities and institutes;
- Introductions and recommendations from the JTI, the Commission and Member States;
- Their own networks of suppliers and industrial partners;
- Other members of the JU.

The JU will encourage access to the research programme of SMEs and industrial participants in new Member States (for instance by organising workshops and promotional events and by facilitating access to loans from EIB, structural funds, publicly funded venture capital schemes, Cohesion funds, national and/or regional support). In addition, the JU will commit to place a percentage of the total JTI activity with SMEs, according to rules to be defined in the Stakeholders Agreement. At present, a commitment for SMEs of 12% of the total funding paid by the JU is projected.

7.6.2 ***Competitive process***

Partners in the Platforms will be selected on the basis of their suitability to carry out the work in question. In making such selection the JU (acting through the Steering Committee of the Platform) and the participant managing the selection process shall act with transparency and follow good industrial practices to achieve the best ratio of cost to quality over the entire Platform. A framework competitive procedure is set out in Annex [3].

The Commission will have powers of audit to verify the proper and equitable execution of the CFP process



7.6.3 Subcontractors

The members will adopt an open and transparent process in the selection of subcontractors. For major work packages an open tender process will normally be used. The member must normally grant the subcontract to the best bid offered taking into consideration price and quality and following any national legislation in force.

Members may consult the Steering Committee and/or the JTI Director on the processes they adopt generally or in relation to any particular subcontract.

7.6.4 Monitoring of selection of Partners

The Commission will monitor the compliance of the JU, the Steering Committee of the Platform and the CFP Manager with the principles of transparency and non-discrimination in the selection of Partners in the Platform through its involvement in the CFP Process itself as described at paragraph 7.6.2 above.

7.7 Intellectual Property

The intellectual property structure must protect the interests of the industrial participants and secure their competitiveness. Subject to this principle, the JU will base its intellectual property policy on that proposed for FP7.

The basic principle is that IP generated by the JTI programme (“Foreground IP”) remains in the ownership of its creator. The JTI will have a default rule that jointly developed Foreground IP may be used free of charge by each joint creator in its own business.

Background IP will only be available to other Members in the Platform if specifically identified and brought in by the owner.

For the purpose of performing their work in a Platform, all Members in the Platform will have user rights in both Background and Foreground IP of other Members in the Platform. These rights will be free of charge. Sublicensing is not permitted without the owner’s consent. Such consent is not to be unreasonably withheld in relation for sublicensing to subcontractors for the performance of work within the Platform.

Rights to exploit Background and Foreground IP will normally be available to the extent necessary to enable Members in the same Platform to exploit their own Foreground, subject to fair and reasonable conditions. Platform and Implementation Contracts may provide for these exploitation rights to extend to identify affiliates of Members. However, IP owners may refuse to grant such exploitation rights in their Foreground or Background IP if they can show it would prejudice their major business interests.



Access rights will only be available on written prior request of the owner. Requests may be made up to two years after completion of the relevant Platform.

Dissemination may be restricted to protect the legitimate interests of the IP owner. The JU will take on the “default” powers of the Commission to disseminate, and will exercise them only after consultation with the IP owner and the relevant Steering Committee.

Members placing JTI work with subcontractors must ensure that the Foreground IP created by such subcontractors is available to other participants in accordance with the foregoing principles.

7.8 Finance

7.8.1 *Funding*

The JU will be funded by an annual subscription from the Commission to support its activities including research by the Participants and administration of the JU.

The Platform Leaders and Associates will make an annual contribution towards the costs of the JU Director and small support staff. This contribution may be made in whole or in part in kind (for instance by the secondment of staff or the provision of office accommodation or other solution). Any additional staff or services required by the Commission will be funded by the Commission.

The Platform Leaders, Associates and Partners will in addition fund their own activities within the JTI Programme, as described below.

7.8.2 *Budget and financial support to Members*

An outline of the budget for the full 7-year term annexed to the Stakeholders Agreement will specify how the support from the JU's resources will be split among the Platforms. Within each Platform the split among the Platform Leaders and Associates will be set out, together with the targets for work to be placed by each Platform Leader or Associate through the Call for Proposal (CFP) process.

Research within the Platforms will normally be funded by the JU from its own resources by payments at the rate of 50% of eligible costs (75% for SMEs, Universities and Research Institutes, unless they are participating as Associates, in which case the rate is 50%).

The total amounts of the funding receivable by Platform Leaders and Associates will be fixed over the life of the JTI programme as part of the outline budget referred to above. The amounts of funding receivable by Partners will be determined as part of the competitive selection process described at section 7.6.

The Platform Leaders and Associates, and Partners with work packages of a duration exceeding 18 months, will normally receive financial support from the JU



on an annual basis.¹⁸ The contribution from the JU's funds will be pre-financed at a standard rate of 80% of the budgeted funding requirement for the coming year, with the balance payable on submission of verified financial statements at the end of the year.

Financing to Partners with work packages of shorter duration will reflect the nature of the work, but will typically include pre-financing for the entire work package at the same rate.

7.8.3 Financial control

The JU will have accounting rules and financial controls in place to ensure that final payments are only made in proper cases.

The JU will not be subject to taxation, and its financial activities will be subject to the jurisdiction of the European Court of Auditors. At the end of the programme the JU will be liquidated and any surplus will be paid to the Commission to support aeronautical research in the Community.

As Community financial regulations prohibit “flowing-down” of financial contributions, all grant agreements that provide for the conduct of JTI research will be entered into between the JU and the relevant member. Platform and Implementation Contracts will provide for financial collective responsibility within (but not across) Platforms to ensure the security of public funds within the JU.

¹⁸ Where a work package begins or ends during an accounting year an accounting period of between 6 and 18 months ending on 31 December may be used in respect of that work package.



8. RESOURCE ALLOCATION

8.1 Rationale

The platform leaders have estimated the gross budget required to meet the Clean Sky deliverables. These deliverables, described in chapters 6 & 7, will be defined in the statutes of the Joint Undertaking (JU). Means of improving the efficiency of the Clean Sky programme are under continuous review. Potential mechanisms identified so far include:

- An integrated rationalisation of the demonstrator vehicles to ensure all the contracted deliverables are met in the most efficient way
- Implementing the recommendations issued from the Technology Evaluator

All JU rationalisation decisions will be taken by the Executive Board. These decisions may affect the budget distribution of the platforms (see below) without compromising the contracted deliverables of the Joint Undertaking.

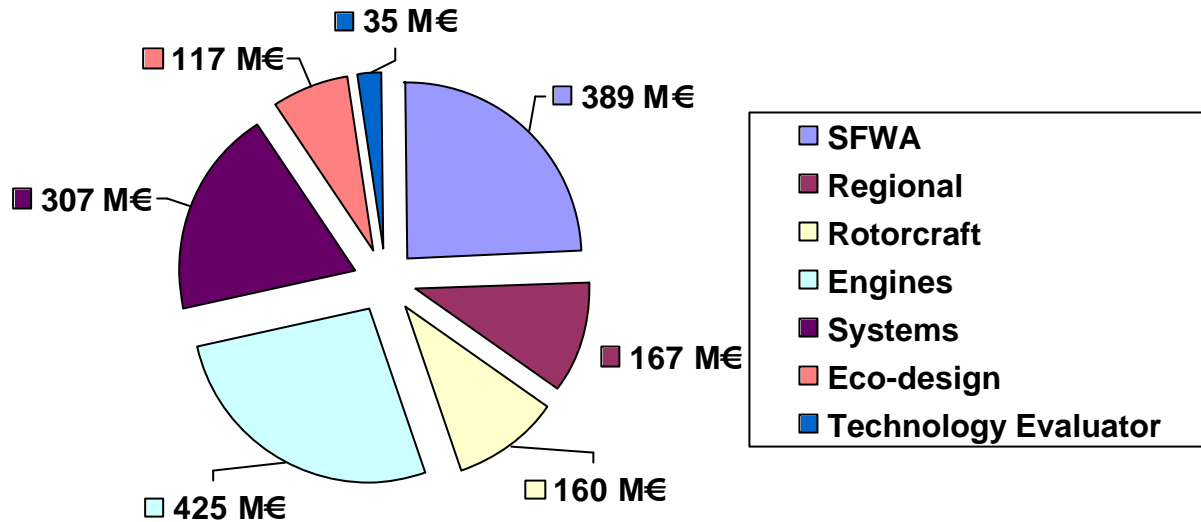
8.2 Budget breakdown

The platform leaders have engaged in extensive discussions to develop and justify each platform. The following criteria have been used in this process:

- Criteria laid down by the EC for the successful adoption of a JTI
- The environmental benefits likely to accrue from the products developed using JTI technologies
- The degree of innovation anticipated to deliver such benefits



Proposed Budget allocation between Platforms



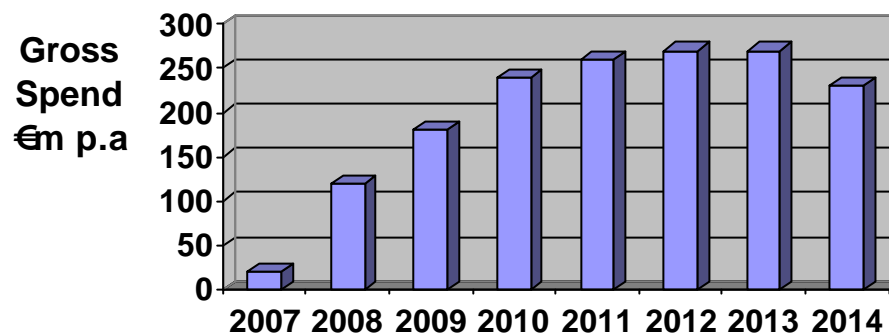
Prior to the selection of demonstrators for each Platform the Executive Board will conduct a review of the Outline Budget and the budgets and activities of the Platforms (the “Critical Review”). The final allocation of 20-30% of the JTI Programme budget will be made at the Critical Review. Any resolution to transfer budget from one Platform to another at the Critical Review must be made with the consent of the Platform Leaders of all affected Platforms and in the absence of such consent the budget allocation between Platforms will remain unchanged.



8.3 Spend profile

Based on the experience of large technology programmes the following spend is anticipated over the seven-year life of the JU.

Projected annual spend (gross)





PART 4 – LEARNING MORE ABOUT "CLEAN SKY"



9. COMMUNICATION

9.1 List of CLEAN SKY Task Force members

Company	Names	Title	Telephone number Fax number	e-mail address
AgustaWestland	Giuseppe Pagnano		+39 033 1229174 +39 033 1711511	G.Pagnano@it.agusta.com
Airbus	Dominique Ollinger	AIRBUS Central Entity - Head of European Union Affairs - Research and Future Projects	+33 5 61 93 44 86 +33 5 61 93 37 78	Dominique.ollinger@airbus.com
Alenia Aeronautica	Carmelo Latella	VP for Marketing	+39 081 8872021 +39 081 8872342	clatella@aeronautica.alenia.it
Dassault Aviation	Myriam Goldsztejn	International General Directorate - VP European Commission Business Development	+33 1 47 11 37 99 +33 1 47 11 53 90	myriam.goldsztejn@dassault-aviation.fr
Eurocopter	André Hugues	Research Programmes Manager	+33 4 42 85 61 61 +33 4 42 85 86 05	andre.hugues@eurocopter.com
Liebherr-Aerospace	Lester Faleiro	Research and Technology Co-ordination	+49 (8381) 464940 +49 (8381) 464573	lester.faleiro@liebherr.com
Rolls-Royce	Nick Peacock	Programme Executive	+44 1332 249441 +44 1332 249646	nick.peacock@rolls-royce.com
Safran	Valérie Guéron	European Research Programmes Manager	+33 1 40 60 83 54	valerie.gueron@safran.fr

Aeronautics & Air Transport “Clean Sky” JTI



			+33 1 40 60 80 89	
Thales	Joseph Huysseune	Manager of Advanced Studies	+33 5 61 19 77 35 +33 5 61 19 67 50	joseph.huysseune@fr.thalesgroup.com

9.2 Web sites

Some possibilities exist and can be used depending on the type of communication to be made.

ACARE web site:

As ACARE is composed of the EC, the Member States, the Industry, the Research Centres and Universities representatives, all messages concerning these entities, mainly for PPP, can be sent through the ACARE site.

ASD web site:

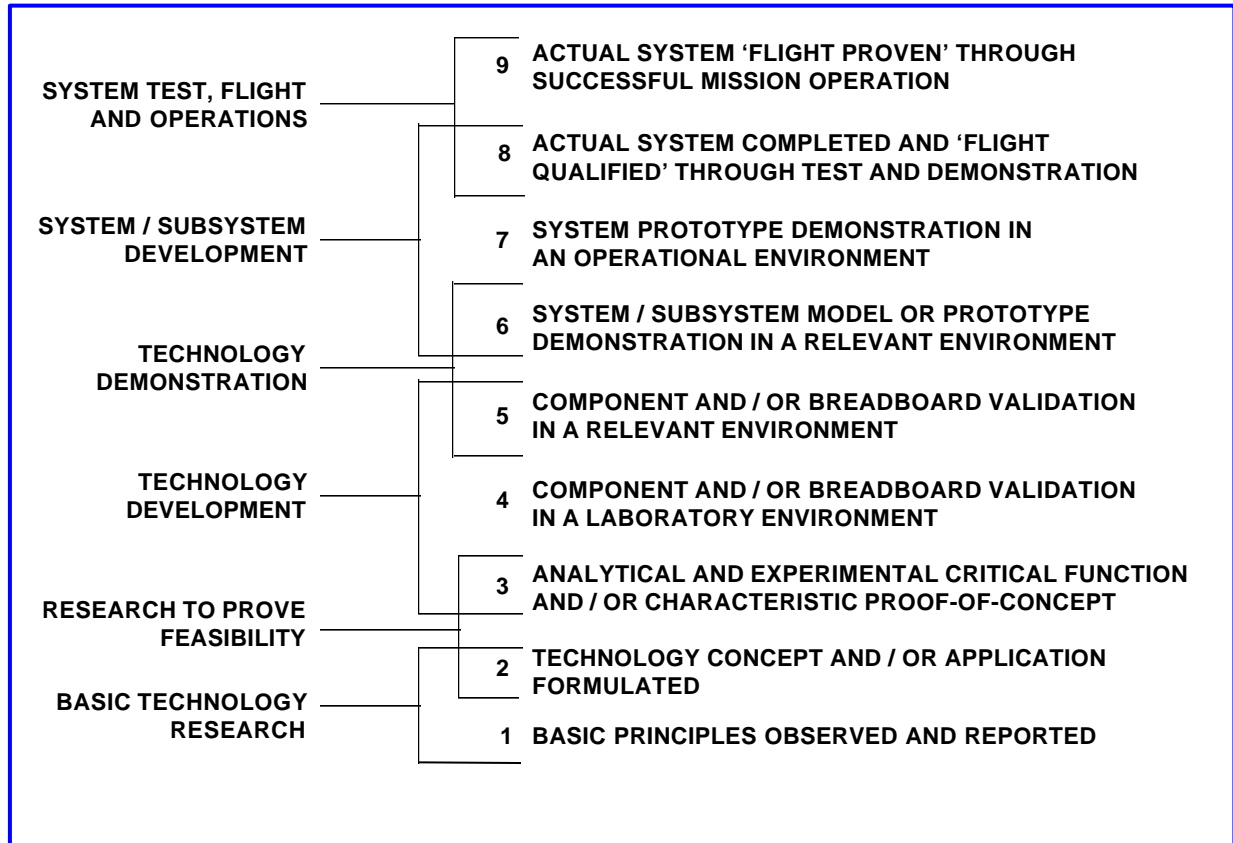
The ASD web site is hosting the Clean Sky web site (from end of March 2006) before the coming into force of the JU.

Platform leaders Web sites

EC web site : Cordis

ANNEX 1 – TECHNOLOGY READINESS LEVELS

A reference in use in this document is the following NASA Technology Readiness Level table. Technologies are referred to by their Readiness Level.



Technology Readiness Level Definitions

Technology Readiness Level		Description
1	Basic principles observed and reported	Lowest level of technology readiness. Scientific research begins with, to be translated into applied research and development. Example might include paper studies of a technology's basic properties.
2	Technology concept and/or application formulated	Invention begins. Once basic principles are observed, practical applications can be invented. The application is speculative and there is no proof or detailed analysis to support the assumption. Examples are still limited to paper studies.
3	Analytical and experimental critical function and/or characteristic	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
4	Component and/or breadboard validation in laboratory environment	Basic technological components are integrated to establish that the pieces will work together. This is relatively "low fidelity" compared to the eventual system. Examples include integration of 'ad hoc' hardware in a laboratory.
5	Component and/or breadboard validation in relevant environment	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so that the technology can be tested in a simulated environment. Examples include 'high fidelity' laboratory integration of components.
6	System/subsystem model or prototype demonstration in a relevant environment	Representative model or prototype system, which is well beyond the breadboard tested for TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high fidelity laboratory environment or in simulated operational environment.
7	System prototype demonstration in a operational environment	Prototype near or at planned operational system. Represents a major step up from TRL 6, requiring the demonstration of an actual system prototype in an operational environment, such as in an aircraft, vehicle or space. Examples include testing the prototype in a test bed aircraft.

Aeronautics & Air Transport “Clean Sky” JTI

8	Actual system completed and 'flight qualified' through test and demonstration	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended weapon system to determine if it meets design specifications.
9	Actual system 'flight proven' through successful mission operations	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation. In almost all cases, this is the end of the last "bug fixing" aspects of true system development. Examples include using the system under operational mission conditions.

ANNEX 2 – GLOSSARY

Aeronautics & Air Transport “Clean Sky” JTI

4D	Four Dimension
A&AT	Aeronautics and Air Transport
ACARE	Advisory Council for Aeronautic Research for Europe
AFC	Active Flow Control
ALC	Active Load Control
APU	Auxiliary Power Unit
ATM	Air Transport Management
ATS	Air Transport System
ANTLE	Affordable Near Term Low Emissions aero engine
ASVR	Aircraft Systems Validation Rig
CDA	Continuous Descent Approach
CLEAN	Component validator for Environmentally-Friendly Aero-eNgin
CMR	Carcinogenic, Mutagenous, Reprotoxy
CO2	Carbon dioxide
DRESS	Distributed and Redundant Electrical Nosegear Steering System
EpNdB	Equivalent Perceived Noise in Decibels
FP	Framework Programme
GNSS	Global Navigation Satellite System
GRA	Green Regional Aircraft (platform)
HLTC	High Level Target Concept
HP	High Pressure
HSE	Health Safety Environment
ICAO	International Civil Aviation Organisation
IPR	Intellectual Property Rights
JAA	Joint Aviation Authority
JTI	Joint Technology Initiative
JU	Joint Undertaking
KW	Kilo Watts
LP	Low Pressure
MOET	More Open Electrical Technologies
MoU	Memorandum of Understanding
NEWAC	New Aero Engine Concepts

Aeronautics & Air Transport “Clean Sky” JTI

NM	Nautical Miles
NOx	Nitrogen Oxide
OPTIMAL	Optimised Approach and Landing
POA	Power Optimised Aircraft
R&D	Research and Development
RNP	Required Navigation Performance
SAGE	Sustainable Aircraft Green Engine
SESAR	ATM Programme
SFWA	SMART Fixed Wing Aircraft (platform)
SME	Small and Medium Enterprise
SRA	Strategic Research Agenda
SILENCER	Significantly Lower Community Exposure to Aircraft Noise
UAV	Unmanned Air Vehicle
VITAL	Environmentally Friendly Engine

ANNEX 3 – PROCESS FOR CALLS FOR PROPOSAL AND COMPETITIVE SELECTION

Process for Calls for Proposals and Competitive selection

Partners will be selected for participation in the activities of the JTI Programme and membership of the JU according to open and transparent competitive procedures.

Each Platform Contract will set out targets for the percentage of the work to be allocated by competition. Separate targets may be assigned for competitions to be managed directly by the Platform Leader(s) and by each Associate in the Platform as part of their respective top-tier work packages.

According to the requirements of the Platform and the work package a one-stage or two-stage competition process may be followed. In cases where there is only a limited number of potential performers of the work the competition may, with the consent of the Executive Board, be restricted to those potential performers.

The steps in the competitive process will include the following steps:

1. Preparation of call for proposals

The call for proposal (“CFP”) documents including the specification are prepared by the Platform Leader or another participant responsible for the relevant work package (the “CFP Manager”). In a single-stage competition the specification will be more detailed than in a two-stage competition. The two-stage process may thus be particularly useful if a meaningful specification would require the inclusion of confidential information of the CFP Manager, as well as in cases where a very large number of responses is expected.

The CFP will include details of the assessment criteria. Criteria will be defined to select the best proposals having regard to all relevant factors including

- Technical excellence
- Cost and value for money
- Timetable
- Quality

The CFP may indicate in general terms the weight to be given to each factor and the hierarchy of factors.

In a two-stage competition the CFP may indicate the maximum number of candidates to be selected for the second stage.

2. Review of CFP

The CFP Manager circulates the draft CFP to the other members of the Platform’s Steering Committee and to the Commission and the JU Director for comment.

Advertising and collating responses

The JU staff advertise the CFP. The primary vehicle for CFP advertising will be the JU’s own web site, but the JU may on its own initiative or in consultation with the CFP Manager advertise in other media considered likely to reach suitable candidates. The JU staff send details of the CFP to the Member State national contact points.

All responses are submitted in the first instance to the JU.

3. (Two-stage competitions only) First sift

The JU's staff apply predetermined cost and/or other criteria set out in the CFP to produce the list of candidates for stage two.

At this stage the JU staff may also check the eligibility of the respondents. However, if they propose to eliminate a respondent on grounds of ineligibility alone that respondent must first be given the opportunity to demonstrate its eligibility.

4. (Two-stage competitions only) Revision of specification

The CFP Manager provides the full specification to the respondents selected by the JU in the first sift. If necessary the respondents may be required to sign confidentiality agreements at this stage.

The respondents provide their final proposals within the time specified in the CFP.

5. Expert evaluation

The proposals are evaluated by experts who may at the option of the CFP Manager be

- its own internal experts
- internal experts of other Steering Committee member(s); or
- external experts hired by the JU.

The experts produce a single report and shortlist ranking the best proposals and explaining the order of merit.

6. Steering Committee decision

The CFP Manager makes its proposal to the Steering Committee to award the participation to one of the shortlisted respondents. The Steering Committee votes on the proposal.

If the Steering Committee does not agree with the recommendation of the CFP Manager it will include in its formal resolution reasons for its decision.

The decision of the Steering Committee will be communicated to the JU Director and onward to the Commission.

7. Appeal process

A respondent which is dissatisfied with the decision in a competition may apply for a review.

The application is made in the first instance to the Director who will check that

- it is filed in time and complies with any formalities laid down by the JU
- it contains an allegation that the correct procedures have not been followed or that any relevant criteria have not been properly applied

If the Director determines that these conditions are complied with (s)he will convene an appeal board comprising representatives of the Commission and

other appropriate JU members. The complainant, the successful applicant and the CFP Manager have the right to be heard by this board.

If the appeal board finds that the claim is well-founded the selection process is repeated from stage 4 above, or such later stage as it may direct.

8. Commission rights of audit

The Commission may audit the CFP process to satisfy itself of the fairness and consistency with which it has been applied.

ANNEX 4 – DESCRIPTION OF THE PROCESS FOR THE SELECTION OF THE ASSOCIATES OF THE PLATFORMS

This document provides the description of the process and general rules applied for the selection of the Associates of the Platforms of the Joint Technology Initiative CLEAN SKY:

- Smart Fixed Wing Aircraft
- Green Regional Aircraft
- Green Rotorcraft
- Systems for Green operations
- Sustainable and Green Engine
- Eco-design

It provides some guidelines to help the applicants who wish to complement the Expression of Interest (Eol) they made in response to the call for Associates of the 1st June 2006

Complementary information to be sent in October to the following point of contact:

Platform	Point of contact	e-mail
Smart Fixed Wing Aircraft	Norbert Hinsinger and Paul Phillips, AIRBUS SAS	paul.phillips@airbus.com robert.hinsinger@airbus.com
Green Regional Aircraft	Achille Carbone, Alenia Aeronautica	acarbone@aeronautica.alenia.it
Green Rotorcraft	Giuseppe Pagnano, AgustaWestland André Hugues, Eurocopter	g.pagnano@it.agusta.com andre.hugues@eurocopter.com
Systems for Green operations	Joseph Huysseune, THALES Lester Faleiro, LIEBHERR	joseph.huysseune@fr.thalesgroup.com lester.faleiro@liebherr.com
Sustainable and Green Engine	Serge Eury, SAFRAN Nick Peacock, ROLLS-ROYCE	serge.eury@sneema.fr nick.peacock@rolls-royce.com
Eco-design	Myriam Goldstejn, Dassault-Aviation	myriam.goldsztejn@dassault-aviation.fr

Complementary Information should be sent either by post-mail or by e-mail to:

For any information concerning this document, please contact the persons above.

1- Roles of the associates:

The Associates will be strategic participants of the JTI Clean SKY. They will commit, together with the Platform Leaders, to a significant strategic investment (typically, 5% of the cost of a Platform), for the whole duration of the JTI (typically seven years).

They will take an active part in the management of the Platforms, notably in participating to the Steering Committees set up to manage these platforms.

2- Necessity to make a selection of associates

An invitation was made at the Clean Sky Forum held on the 1st June 2006 in Brussels to all European entities able and willing to become an Associate in one Platform to formally express their interest, by the 14th of August 2006.

As a result, a high number of Expressions of Interests were received, for each Platform, much more than needed for the execution of the work, and with some duplications between them. Consequently, it became obvious that a selection had to be made, based on a fair, open and transparent process.

On the other side, it was acknowledged that when submitting their Expression of Interest, it was not known at that time, and the applicants had not been informed, that there would be a selection, nor what the criteria for this selection would be.

A common process to select the Associates in the Platforms has been agreed:

- Selection of Associates will be made against a set of criteria.
- The applicant Associates will have access to relevant technical information and current proposed governance rules
- The applicant Associates may be invited to provide complementary Information (this information will not be sent back to the applicant).
- The Platform Leaders will intensify the exchange with the applicant Associates in October. Each applicant Associate will be consulted.
- The final selection of the Associates is planned for November 2006. Information about the results will be communicated to all applicants.

3- Definition of the criteria for selection

The principles which will guide the evaluation and selection of the Associates all stem from the objectives of achieving at best the objectives set to the JTI Clean Sky.

Seven criteria have been set:

- Eligibility for funding

- Commitment of 7 years continual involvement
- Consistency of budget commitment
- Level of technical contribution, innovation and relevance to deliver the platform objectives
- Ability in coordination/ management of complex research projects
- Contribution to increase European competitiveness
- Capacity to exploit the results in Europe

On top of these criteria, a particular attention will be paid to the ability of the team to build jointly an efficient project, in ensuring the complementarity of the contributions, and in avoiding the duplication of work.

These criteria are further detailed as follows:

- Eligibility for funding

Although the rules for participation for the FP7 are not yet finalised, they are expected to be close to the rules of the FP6. The criteria will be in practice the demonstration of the eligibility to be funded under FP6 rules.

- Commitment of 7 years continual involvement

This commitment will need to be formalised by an official letter signed by the relevant authority within the applicant entity, for the level of contribution and investment claimed.

- Consistency of budget commitment

The applicant Associate will commit typically at a level of 5% of a total Platform budget, consistent with the technical Proposal, based on 50% contribution from EC, and 50% self-funding. The financial strength and assets of the applicant should be compatible with its claim in contribution, in the relevant field of activity.

- Level of technical contribution, innovation and relevance to deliver the platform objectives

The applicant Associate should be able to demonstrate its capacity to bring innovative technical solutions to the challenges addressed by the Platform for which it applies. This demonstration will include: the participation in past private, national and international R&D programmes, and associated achievements.

- Ability in coordination/ management of complex research projects

The Associates in a Platform will not only participate to the management (Steering) committee, but will also have to take an active role in the management of a significant part of the Platform. This management role will be similar in its nature to the role of the coordinator of an Integrated Project of the 5th or 6th Framework Programme, or equivalent national programmes.

- Contribution to increase European competitiveness

The European Commission expects the JTI not only to solve environmental issues, but also to put Europe at the forefront of global research, and to improve the competitiveness of European stakeholders. Applicant Associates should demonstrate their ability to increase the knowledge in Europe.

- Capacity to exploit the results in Europe

The Associates are expected to exploit the results of the JTI, i.e. to provide services and/or develop products incorporating the results, thus contributing to the growth of Europe's wealth.

Applicant Associates should demonstrate their ability to exploit the results in Europe.

4- Complementary Information

The applicant associates must provide, if requested by the Platform Leaders, complementary information to support their application for being an associate. Relevant information covers:

Company structure and characteristics

- Ownership, subsidiaries, organisation chart
- Balance sheet and profit and loss accounts

Technical background and capability

- Technical background on proposed technologies
- Technical capabilities and records
- Quality assurance

Eligibility to be funded

Commitment on budget and long term involvement

Level of technical contribution, innovation and relevance to deliver the platform objectives

Ability in coordination/ management of complex research projects

Contribution to increase European competitiveness and capacity to exploit the results in Europe

The complementary information shall be sent at the date requested by each platform point of contact.

5- The evaluation and selection process

The evaluation and selection process have been defined with the following schedule:

- o Distribution of the information package to the applicants: 09/10/06
- o Deadline for submission of complementary information: October 06
- o Selection and feedback to each applicant November 2006

The evaluation and selection process

The evaluation and selection will be made by dedicated committees made up of the appropriate Platform Leaders and representatives of the Commission.

For each Platform, the evaluation and selection will proceed in 5 steps:

Step 1: Set up the evaluation committee:

Step 2: Briefing of the evaluation committee:

The evaluation committee is briefed orally or in writing before the evaluation by the Platform Leader(s), in order to inform/remind them of the evaluation guidelines and the objectives of the selection.

Step 3: Evaluation of proposals and consensus of the evaluation committee

Each expression of interest, complemented or not by complementary information, is evaluated against the applicable criteria by the members of the evaluation committee who prepares a consensus report.

Then the evaluation committee ranks the proposals, according to the criteria.

Step 4: Consolidation and decision

All Platform Leaders and representatives of the Commission review and consolidate the consensus reports produced by the evaluation committees of the different Platforms. A final list will be set up.

Step 5: Communication of results to all applicants.

Proposal marking

Members of the evaluation committees examine the individual issues comprising each evaluation criteria and in general mark the proposal on a six-point scale from 5 to 0. In this scheme, the scores indicate the following with respect to the criteria under examination:

5 - excellent

4 - very good

3 - good

2 - fair

1 - poor

0 - the applicant fails to address the issue under examination or can not be judged against the criterion due to missing or incomplete information

A threshold of 3 is applied for each individual criteria.

6- Next Step after selection

Immediately following the decision of the Platform Steering Committee for the selection, the selected Associate(s) will have to define in more detail their contribution to the Platform, to prepare the Platform contract.

The discussions will cover the technical and operational aspect on one side, and the financial aspects on the other side.

If the selection is dependent on the acceptance of some changes to the proposals, the discussions will be held until an agreement is reached with the selected applicants.

7- Contractual aspects

It is important to note that the publication of this document does not create any commitment for the companies producing it to accept an offer, nor to reimburse any cost borne by the applicant to respond to this invitation, and does not constitute any guarantee that the JTI proposal will be accepted by the Member States.

By responding to this invitation, the company accepts to bear entirely its costs associated to its responses.

All information exchanged during the selection process will be treated confidentially.

Between the selection of applicant and the creation of the Platform contracts, the Associates will have to sign the MoU.

Reference Documents

Information package (relevant technical information and current proposed governance rules)

Acronyms

Eol	Expression of Interest
FP	EC Framework Programme
JTI	Joint Technology Initiative