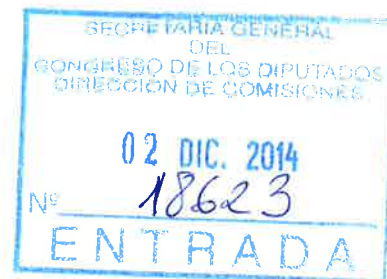




Congreso de los Diputados



**XVI Conferencia Interparlamentaria Europea del Espacio (CIEE)
Sesión plenaria
Paris, 19 a 21 de octubre de 2014.**

Los días 19 a 21 de octubre tuvo lugar en París, en la sede de la Asamblea Nacional francesa, la XVI sesión plenaria de la Conferencia Interparlamentaria Europea del Espacio, bajo la presidencia de turno francesa. Con motivo de esta ocasión, se desplazó a París la delegación del Espacio de la Comisión de Economía y Competitividad del Congreso de los Diputados, encabezada por la Vicepresidenta Segunda de la Comisión, doña Belén Juste Picón, en sustitución del Presidente, don Ovidio Sánchez, que no pudo acudir a la reunión, e integrada por don Félix Lavilla, del Grupo Parlamentario Socialista, doña Inma Riera i Reñé, del Grupo Parlamentario Convergència i Unió y doña Mónica Moreno Fernández-Santa Cruz, Letrada de las Cortes Generales. La delegación estuvo acompañada por don Jorge Lomba Ferreras, del CDTI.

Debe destacarse que la delegación española acudió a esta reunión con el propósito de confirmar la Presidencia por España de la Conferencia Interparlamentaria Europea del Espacio durante 2015, ya anunciada durante la Presidencia belga de 2013 y autorizada por la Mesa del Congreso de los Diputados en su reunión de 15 de julio 2014, dados los intereses que el segmento aeroespacial ofrece para las empresas españolas y la creación de puestos de trabajo que supone este sector.

La reunión interparlamentaria comenzó el domingo 19 de octubre de 2014 con una recepción en la Casa de Europa, durante la que las delegaciones asistentes tuvieron ocasión de realizar un primer intercambio de opiniones.

El lunes 20 de octubre comenzó propiamente la conferencia con las intervenciones iniciales de la Presidenta del Grupo del Espacio de la Asamblea Nacional Francesa, doña Chantall Berthelot, que transmitió a los asistentes el saludo del Presidente de la Asamblea Nacional; de doña Geneviève Fioraso, Secretaria de Estado para la Educación Superior y la Investigación; de don Jean-Yves Le Gall, Presidente del CNES y de don Jean-Jacques Dordain, Director General de la ESA, que introdujo el primer tema de debate: "El futuro del sector espacial y del crecimiento económico".

Ya propiamente en este primer tema de trabajo, "Del espacio al crecimiento (al servicio del crecimiento)", tomó la palabra el doctor Amadou I. Touré, Secretario General de ITU (International Telecommunication), tras cuya intervención tuvo



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lugar una Mesa redonda moderada por don Patrice Martin-Lalande, Vicepresidente de la Comisión de Internet y de la Comisión del Espacio de la Asamblea Nacional, sobre “El espacio para la conectividad”, en la que intervinieron:

-Magali Vaissiere, Directora de Telecomunicaciones y Aplicaciones Integradas, ESA.

-Jean-François Bureau, Director de Asuntos Institucionales e Internacionales, Eutelsat.

-Bertrand Maureau, Vicepresidente de la Línea de negocio para las telecomunicaciones de Thales Alenia Space (constelaciones).

-Jean-François Charrier, de Airbus.

-Christophe Allemand, Head CNES.

Tras sus intervenciones tuvo lugar un debate entre los asistentes, tras el cual se entró en la segunda parte de la reunión, dedicada al “Espacio para la observación terrestre”, moderada por Peter Hulsroj, Director, ESPI. Intervino en primer lugar Jean-Pascal Le Franc. Después Peter Breger, Alain Ratier, Philipp Pham y Patrik Mauté. Tras sus intervenciones tomó la palabra para presentar unas conclusiones sobre los temas debatidos Kai-Uwe Schrogl, Director del Departamento de relaciones con los Estados miembros, ESA, que se refirió a la importancia de los parlamentos nacionales en el sector y estrategias del espacio (se adjunta su intervención).

Seguidamente, a las 12:45 horas, tuvo lugar un almuerzo de trabajo y a las 14:00 horas se reanudó la reunión con la presentación del ganador del Galardón de la CIEE-ESA “El espacio al servicio de la sostenibilidad”, a cargo de Jean-François Clervey, astronauta de la ESA y presidente del Jurado. La entrega del premio estuvo presidida por el trío presidencial Bélgica-Francia-España, e intervinieron los dos galardonados presentando sus proyectos.

A las 14.30 horas se inició el segundo tema de trabajo: “¿Cómo fomentar y mejorar el crecimiento espacial en Europa?” Intervinieron:

-General Pierre Bourlot, Delegado general del GIFAS (presentación del sector espacial francés).

-Denis Redonnet, Director de Unidad, Dirección General de Comercio de la Comisión Europea, sobre la Asociación Trasatlántica de Comercio e Inversión (ATCI).



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-Denis Neiter, representante de la Hacienda de Francia

Tras sus intervenciones tuvo lugar una mesa redonda en la que participaron, Jean-Yves Le Gall, Presidente y Director General, CNES; Jean-Lin Fournereaux, Director Espace SAFRAN; François Auque, Director General, Defensa y Espacio, Airbus; Stéphane Israel, Presidente y Director General, Arianespace y Jean-Loïc Galle, Director General de Thales Alenia Space, moderados por Alain Ruello, periodista especializado en economía y defensa de Les Echos.

A las 16:30 tuvo lugar el discurso de clausura a cargo de Emmanuel Macron, Ministro de Economía.

Seguidamente se ofreció una cena en la sede del Senado, en el Palacio de Luxemburgo.

El martes 21 de octubre de 2014, a las 9:00 horas, tuvo lugar una sesión a puerta cerrada entre los miembros de la CIEE –sin la asistencia de la ESA-, bajo la presidencia de Chantal Berthelot, Copresidenta del Grupo Espacial Parlamentario de Francia y Copresidenta de la 16ª CIEE. Durante la misma se debatió y adoptó la Resolución que se adjunta.

Seguidamente la señora Berthelot cedió palabra a la Presidenta de la Delegación Española, doña Belén Juste, que anunció oficialmente la Presidencia de España de la Conferencia Interparlamentaria Europea del Espacio en 2015, recogándose su intervención en documento adjunto.

Finalmente se clausuró la Conferencia de la 16ª CIEE tras las palabras de agradecimiento de todos los asistentes, que quedaron emplazados para la próxima reunión en París.

Se adjunta programa y documentación de la reunión.

Palacio del Congreso de los Diputados, a 1 de diciembre de 2014.

La Letrada de la Comisión de Economía y Competitividad

Queridos colegas:

Permítanme empezar mi intervención agradeciendo a la presidencia francesa la excelente organización de esta Conferencia Interparlamentaria Europea del Espacio. Este foro, que reúne a miembros de Parlamentos de distintos países tiene una finalidad muy útil. De un lado asegurando que las oportunidades ofrecidas por el sector del espacio se tienen en cuenta en las normativas y en los programas nacionales. De otro lado asegurando que se establecen vínculos entre los distintos sectores industriales y promoviendo que las actividades del espacio y su impacto tienen el nivel de visibilidad apropiado.

La Resolución que acabamos de aprobar es otro paso en la exitosa contribución de los Parlamentos europeos para reforzar el sector del espacio europeo y por ello para España será un honor desempeñar la presidencia de la Conferencia Interparlamentaria Europea del Espacio en 2015.

El espacio es un sector estratégico para España y nuestro Gobierno ha identificado el sector espacial español como uno de aquellos capaces de contribuir al cambio de nuestro modelo económico, como recientemente destacó, con ocasión de la “Agenda para la reindustrialización de España”, el ministro de Industria en una acción conjunta con el ministro de Economía y Competitividad.

Todos nosotros somos conscientes de que el espacio se ha convertido en un importante agente para el crecimiento de nuestras economías. Como hemos discutido estos días, provee de servicios y productos que promueven la evolución hacia un sector de industria y servicios más efectivo y competitivo en Europa. Además ofrece posibilidades a nuevos mercados, de aquí la importancia de asegurar que estos impactos tan positivos son plenamente aprovechados por nuestras economías. Para alcanzar este objetivo, una de las principales actividades debe ser dotar a la sociedad del conocimiento de los beneficios del sector espacial para la economía. Este conocimiento debe también alcanzar todos los sectores industriales, incluyendo el sector público.

En el caso particular de España estamos orgullosos de compartir con ustedes la sobresaliente evolución de la industria espacial española en la última década, generando notables beneficios para nuestros ciudadanos.

Mientras que al principio de este siglo España jugaba un papel de proveedor de equipos, gracias al apoyo público y a la competitividad de nuestra industria hemos conseguido la capacidad necesaria para liberar programas espaciales completos.

Solo por citar algunos ejemplos, el 6 de noviembre celebraremos el 50 Aniversario de la Agencia Espacial Europea en Madrid, con la presencia del Presidente del Gobierno, Mariano Rajoy. En este marco tendrá lugar la firma de dos de los mayores contratos en el sector espacial liderados por la industria española:

- La misión **PROBA-3**, dedicada a testar nuevas tecnologías de vuelo. Esta será la primera vez que la industria española lidere una misión espacial europea completa y, para dar una idea de la importancia de este programa habrá 15 países participando en este programa.

- La misión **CHEOPS**, que contribuirá a una invaluable investigación en nuevos planetas. El contrato que va a firmarse ha sido premiado en un proceso competitivo, en el que participaron cuatro compañías internacionales y de las que España presentó la más atractiva.

Volviendo al encuentro interparlamentario europeo en 2015, estamos preparando ya el programa de las dos reuniones anuales, que tendrán lugar en Madrid y se centrarán en el tema “Gobernanza en el Espacio”. Más adelante les facilitaremos información más información y los detalles logísticos.

Permítanme terminar mi intervención agradeciendo y felicitando de nuevo a nuestros anfitriones por el trabajo que han realizado este año y por la hospitalidad con la que nos han obsequiado estos días.

Muchas gracias y espero que nos veamos pronto en España.

Intervención de España como presidencia de EISC para 2015.

“Dear colleagues,

I would like to start my address thanking the French Delegation for the excellent organization of this European Inter-parliamentary Space Conference.

I am here on behalf of the Chairman of the Spanish Delegation who wasn't able to come to Paris with us. He warmly transmits his best regards through my words.

This forum, which gathers Members of parliament from different countries, has an useful task. On the one hand, to assure that the opportunities offered by the Space sector are taken into account by national regulations and programs. On the other hand, to promote solid links between the different industrial sectors, giving space activities and their positive impact the appropriate level of visibility.

The Resolution we have just approved is another step in the successful contribution of European Parliaments to the reinforcement of the European Space Sector and, therefore, Spain is honoured to take over the Presidency of the European Inter-parliamentary Space Conference in 2015.

Space is a strategic sector for Spain and our government has identified the Spanish space sector as one of those which can contribute to the change of our economic model, as recently highlighted our Minister of Industry, during the presentation of the “Agenda for the reinforcement of the Spanish industry”, with a relevant contribution by the Ministry of Economy and Competitiveness.

All of us are well aware that Space has become an important asset for the growth of our economies. As we have debated these days, it provides services and products which encourage the evolution to a more effective and competitive industry and services sector in Europe. It also provides new products to open new markets. It is therefore important to ensure that these positive impacts are fully implemented in our economies. To reach that goal, one of the main activities must be to spread the knowledge of the benefits of space for the overall economy. This knowledge must also reach the different industrial sectors, including the public one.

In the particular case of Spain, on top of the huge benefits that space is providing to our citizens, we are proud to share with you the outstanding evolution of the Spanish space industry over the last decade.

While in the start of the century Spain was playing a role as a equipment supplier, thanks to the public support and to the competitiveness of our industry we have now achieved the capability to lead complete space programs.

Just to quote a few examples, in November the 6th we will celebrate the 50th Anniversary of the European Space Agency in Madrid, with the presence of the Spanish Prime Minister. At that occasion, the signature of two major space contracts led by Spanish industry will take place:

- Spain is leading the PROBA-3 mission, devoted to test new formation flying technologies. This will be the first time the Spanish industry leads a complete European space mission and, to give an idea of the relevance of this achievement, there will be 15 countries participating in the program.

- Spain will also lead the CHEOPS mission, which will provide invaluable research on new planets. The contract to be signed has been awarded in a competitive process, with 4 international companies bidding and having been the Spanish offer the most attractive.

Coming back to the European Inter-parliamentary meeting in 2015, we are already working in the two meetings that will take place in Madrid, under the subject "Governance of space".

Please allow me to end my address thanking and congratulating again our hosts for the work they have performed this year, and for their hospitality these days.

Thanks again and I look forward to seeing you soon in Spain."

16th EISC, French Presidency, Paris, 20 October 2014

Summary of the Morning Session

Kai-Uwe Schrogl, ESA

The Morning Session contained convincing testimonials on the socio-economic benefit of space. The main arguments and figures mentioned were:

- In 2013, the global space economy has generated €203 billion in revenues.
- The European space industry's global turnover reached €6.8 billion in 2013 (up 5% compared to 2012), corresponding to 10,6% of the global space manufacturing chain.
- In Europe, space industry employment increased in 2012 for the seventh consecutive year, reaching a historical level slightly above 36,000 in 2013.
- Estimated benefits of weather forecast in the EU 27 in the areas of protection of property and infrastructure, added value to the European economy, and private use by the European citizens is €61.5 billion per year and direct value to the economy is €41 billion.
- Each Euro invested in the space sector brings at least 6 Euros in economic return (OECD).
- ESA Member States represented more than half of the world's scientific publications on satellite technologies in 2013. These publications do not only come from the largest ESA contributors to space but the ones that rank top in terms relative to their investments are Portugal and Greece.
- Space is one of the top inspirational areas for the young generations to study Science, Technology, Engineering and Mathematics and Europe is of great need of young scientists and Engineers.

The Morning Session also held the following messages addressed to MPs:

- Space needs MPs assembled in EISC for encouraging further support to space
 - inside the Parliaments (in particular in those committees which are potential users of space applications and in the budget committees) and
 - in the constituencies, where often the citizen has to be convinced why space is a priority and of benefit even if other activities/investments seem to be more directly relevant ("space is the better and more efficient solution!").
- Space needs MPs to support public institutions (agencies, research establishments, universities) as well as industry in their efforts to create knowledge and industrial benefit and to provide a climate for new creative engagement in particular for start-ups.

The Lisbon Treaty enlarged the responsibility of the EU for space. But at the same time it clearly states that space is a parallel competence together with the Member States.

This means that the role of national parliaments has actually been highlighted and strengthened by the Lisbon Treaty.

Three recent concrete examples of how national parliaments shape space activities through legislative acts:

- The French Space Operations Act, which entered into force in 2010 and provides the legal framework for authorization of space activities.
- The German Satellite Data Security Act, which entered into force in 2007 and fosters the use of remote sensing data while at the same time safeguards security and foreign policy interests.
- The Polish act establishing a Polish Space Agency of 2014. This was initiated by the national parliament and the space group was instrumental.

What is currently at stake, where national Parliaments can act:

1) Securing frequencies for space activities

- The single Member States are responsible for the management of the frequency spectrum and are represented in the International Telecommunication Union (ITU) and their World Radiocommunication Conferences. In Europe an association of States (more numerous than the EU) is coordinating the positions: the European Conference of Postal and Telecommunications Administrations (CEPT).
- All space activities require frequencies for operations and use (not only telecom but also navigation, Earth observation and science). However, all frequency bands allocated to space services are under pressure from terrestrial services (in particular mobile telecommunications), which need more and more bandwidth and which squeeze the space services to more and more narrow areas. This endangers the investment the countries are putting into space activities, because the full potential can be less and less guaranteed.
- EISC can be the place, where strategies and actions can be coordinated to improve the situation regarding the frequencies for space services. The national parliaments have a strong role in making the national regulatory authorities to better consider and to protect space services. Whenever the talk is about “neutrality”, it mostly leads to a disadvantage for space services – this means, space services have to be protected = discriminated in a positive way, overcoming a neutrality, which hurts them.
- Also the way for new technologies, which only recently entered regulation (as optical communication), can be discussed in EISC to avoid problems as presently with other space services.

2) National organisation of the use of Earth observation data

- The European Union established in 2007 the INSPIRE (Infrastructure for Spatial Information) directive. To ensure that the spatial data infrastructures of the Member States are compatible and usable in a Community and trans-boundary context, the Directive requires that common Implementing Rules (IRs) are adopted in a number of specific areas (metadata, data specifications, network services, data and service sharing and monitoring and reporting). These IRs are adopted as Commission decisions or regulations, and are binding in their entirety. The Commission is assisted in the process of adopting such rules by a regulatory committee composed of representatives of the Member States and chaired by a representative of the Commission.

- The role for national Parliaments is evident since the implementation process provides them with a direct mandate. EISC could again be the place to coordinate efforts on how this is handled in the respective parliaments and to exchange on practices on how to best serve the interest of space applications in public use as well as in commercialization.

3) National space legislation for authorization of space activities of private actors

- It is the single Member States, which have ratified the Outer Space Treaty of 1967. Therefore, its implementation cannot be passed to another level. This means that the national Parliaments have to pass national laws dealing with the authorization of private space activities (for example private telecom operators or universities launching small satellites) in order to safeguard public interest for safety and to regulate third-party liability, which rests with the State.
- Less than half of the EU/ESA Member States have so far passed such national space laws, but all should do so.
- EISC could be a forum to coordinate these efforts in order to get the legislators informed in-depth about the existing laws and experience with these laws and to avoid that legislation varies too much with the threat of “licence shopping” by multinational companies.

4) Export of space-related goods and services

- Export of space-related goods and services are often closely linked with dual use and thus face a delicate political and regulatory regime regarding export. EISC could exchange on the national practice and experience in this field.

5) Regulating private human spaceflight/space tourism

- A number of States in Europe have plans for private human spaceflight/space tourism. The UK, Spain and the NL have ideas about operations from their respective territories.
- While there are ideas of involving the European Aeronautics Safety Agency (EASA) in the regulatory efforts, which are required for safe operations, the issue rests with the national legislators. EISC can play a role as a natural forum to discuss and coordinate.

6) Supporting space as a theme in primary and secondary education

- Primary and secondary education are not European but national (or federal States - level) competencies. Therefore, each Member State should try on its own to use space as an attractive theme in education to foster the interest of children in STEM (Science, Technology, Engineering and Mathematics). EISC has started under the Belgian Presidency to look into the issue and could further engage in this field to make efforts even more effective and efficient.



Grupo de Parlamentarios para el Espacio
Asamblea Nacional - Senado

**XVI SESIÓN PLENARIA
PRESIDENCIA FRANCESA**

PROGRAMA PROVISIONAL

**“EL ESPACIO AL SERVICIO DEL CRECIMIENTO Y EL
CRECIMIENTO AL SERVICIO DEL ESPACIO”**

NO SE UTILIZARÁN POWERPOINTS (UNA ÚNICA DIAPOSITIVA COMO RESUMEN)

DOMINGO 19 DE OCTUBRE DE 2014

18.30: Cóctel de bienvenida en Maison de l'Europe

LUNES 20 DE OCTUBRE DE 2014

8.30 – 09.00: Inscripción en la Asamblea Nacional

09.00: Inauguración (60 minutos)

- Alocución a cargo del Presidente GPE/Presidente CIEE
- Alocución a cargo de la Ministra Geneviève FIORASO, Secretaria de Estado para la Educación Superior y la Investigación
- Alocución a cargo de Jean-Yves LE GALL, Presidente, CNES
- Alocución a cargo de Jean-Jacques DORDAIN, Director General, ESA (El futuro del sector espacial y del crecimiento económico)

09.45: Primer tema de trabajo – Del espacio al crecimiento (al servicio del crecimiento)

- Presentación del vídeo “Invertir en el Espacio”

Primera mesa redonda: Espacio para la conectividad (45 minutos)

Orador principal: ITU (Telecomunicación Internacional)



Grupo de Parlamentarios para el Espacio
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Oradores:

- Axelle LEMAIRE, Secretaria de Estado para la Economía Digital (pdc)
- Steve COLLAR, Consejero Delegado, O3B (pdc)
- Magali VAISSIERE, Directora de Telecomunicaciones y Aplicaciones Integradas, ESA
- Jean-François BUREAU, Director de Asuntos Institucionales e Internacionales, Eutelsat
- Bertrand MAUREAU, Vicepresidente, línea de negocio para las telecomunicaciones, Thales Alenia Space (constelaciones)
- Eric BÉRANGER, Director del Sistema Espacial / Programas, Defensa y Espacio Airbus
- Declaración de un usuario (alcalde - red Eurisy)

Moderador: Patrice MARTIN-LALANDE, diputado, Copresidente de la Comisión de Internet y Vicepresidente de la Comisión del Espacio, Asamblea Nacional

Preguntas

10.45: Pausa café

11.00: Segunda mesa redonda: Espacio para la observación terrestre (45 minutos)

Oradores:

- Presidente de la Comisión / UE / Copérnico
- Joel BARRE, Subdirector, CNES (sinergia civil y militar)
- Philippe PHAM, Director de Óptica y del Programa Airbus de Defensa y Espacio
- Alain RATIER, Director General, Eumetsat
- Hervé LAMY, Vicepresidente Observación y Ciencia, Thales Alenia space
- Declaración: el punto de vista del sector agrícola

Moderador: Peter HULSROJ, Director, ESPI

Preguntas

Conclusiones sobre el tema de trabajo: Kai-Uwe SCHROGL, Director del Departamento de Políticas, ESA

12.45-14.00: Almuerzo



Grupo de Parlamentarios para el Espacio
Asamblea Nacional - Senado

14.00- 14.30: Anuncio del ganador del **Galardón de la CIEE -ESA “El espacio al servicio de la sostenibilidad”**

Presidente: trío presidencial Bélgica - Francia – España

Introducción a cargo de Jean-François CLERVOY, astronauta de la ESA, presidente del jurado

14.30 – 16.30: Segundo tema de trabajo – El crecimiento al servicio del espacio (¿Cómo fomentar y mejorar el crecimiento espacial en Europa?)

Orador principal, General Pierre BOURLOT, Delegado general del GIFAS (presentación del sector espacial francés)

Denis REDONNET, Director de Unidad, Dirección General de Comercio de la Comisión Europea, sobre la Asociación Trasatlántica de Comercio e Inversión (ATCI)

Denis NEITER, representante de la Hacienda de Francia

Mesa redonda: mejores productos

- Jean-Yves LE GALL, Presidente y Director General, CNES
- Jean-Lin FOURNEREAUX, Director Espace SAFRAN
- François AUQUE, Director General, Defensa y Espacio Airbus
- Stephane ISRAEL, Presidente y Director General, Arianespace
- Jean-Loïc GALLE, Director General, Thales Alenia Space
- + PYME

Moderador: Alain RUELLO, periodista especializado en economía y defensa, *Les Echos*

16.30: Discurso de clausura a cargo de Emmanuel MACRON, Ministro de Economía (pdc)

Visita a la Asamblea Nacional

Salida en autobús hacia el Senado

Concierto en el Senado

Cena en el Senado

Regreso en autobús a la Asamblea Nacional



Grupo de Parlamentarios para el Espacio
Asamblea Nacional - Senado

MARTES 21 DE OCTUBRE DE 2014 – solo para miembros de EISC

09:00 – 11:00: Bajo la presidencia de Chantal BERTHELOT, Copresidenta del Grupo Espacial Parlamentario de Francia y Copresidenta de la 16ª EISC

- Debate y adopción de la resolución
- Nombramiento de la Presidencia de 2015
- Clausura oficial de la 15ª CIEE

Biographies of the Speakers

EISC Plenary Session 2014

6 Magali Vaissiere – Director of Telecommunications and Integrated Applications, ESA

Magali Vaissiere is the Director of Telecommunications and Integrated Applications of ESA (responsible for the ARTES programme of ESA R&D programme in satellite telecommunications and applications with an annual budget of 300 Meuros-) since 2008. She is also the Head of ECSAT (UK Centre of ESA located in Harwell) since July 2013. Before joining ESA, she has worked in industry: EADS-Astrium Satellite (for 15 years) and earlier in Thomson-CSF Radars (9 years). Education: engineer from the Ecole Nationale Supérieure des Telecommunications de Paris (Telecom Paris Tech) & Master of Sciences of Stanford University, Executive MBA from the Centre de Perfectionnement aux Affaires. Since March 2014; Member of the French "Académie des Technologies".



2 Christophe Allemand – Head of Unit Telecommunication and Navigation, CNES.

Ingénieur de formation, titulaire d'un Master of Business Administration, Christophe Allemand, 46 ans, est à la direction de la stratégie et des programmes du CNES depuis 1997. Chargé jusqu'en décembre 2000 du programme Navigation dans la phase initiale de GALILEO, il a piloté les travaux du CNES sur plusieurs domaines innovants des télécommunications spatiales, notamment la diffusion TV sur des terminaux mobiles puis, plus récemment, l'offre de services d'accès très haut débit à Internet, domaine dans lequel le CNES a reçu le soutien financier du CGI. Il est depuis juin 2012 responsable des programmes de télécommunication, de navigation, de collecte de données et de recherche & sauvetage. Son équipe est engagée au quotidien dans la promotion des systèmes spatiaux au service du grand public, des entreprises et des administrations civiles.



6 Jean-François Bureau – Director of Institutional and International Affairs, Eutelsat

Jean-François Bureau, a graduate of the Institut d'Etudes politiques de Paris, began his career in the private office of France's Ministry of Defence where he was advisor for political affairs from 1983 to 1985. He subsequently carried out various responsibilities at the Ministry of the Interior, including as sub-prefect and civil administrator from 1985 to 1991 before joining the Minister of Defence private office as advisor from January to September 1991. From 1991 to 1994 he worked in the secretariat-general of the Presidency of the French Republic, and from 1994 to 1998 was a rapporteur at France's Court of Auditors (Cour des Comptes), dealing with defence and industry issues. In 1998, Jean-François Bureau set up the Communications and Information Delegation at France's Ministry of Defence, which he managed until 2007, in addition to acting as spokesman. From 2007 to 2010, he was NATO Assistant Secretary General, in charge of public diplomacy. He was a General Controller at France's Ministry of Defence from July 2010 to October 2011, when he joined Eutelsat as Director, in charge of Institutional and International Affairs.



Eric Béranger – Head of Space Systems and Programs, Airbus Defence and Space

Eric Béranger currently holds the position of Head of Programs, Space Systems within the Airbus Defence and Space division created in 2014. Since starting his career in 1988, he has held management positions in engineering, operations and finance at France Telecom, Société Générale, and Matra Marconi Space (now Airbus Defence and Space). At the inception of EADS in 2000, he was appointed Senior Vice President Marketing for all space activities, and successfully led the negotiations of the Skynet 5-



Paradigm secure satcoms PFI project with UK Ministry of Defence. He was subsequently nominated CEO of Astrium Services at its creation in 2003. Under his leadership, the company has grown its revenues and workforce more than 15 fold from 2003 to 2012 and achieved major successes with contracts including Skynet 5 (UK), Satcom BW (Germany), Yahsat (UAE), Passerel (France) and the acquisition of Vizada at the end of 2011. In 2012, he became CEO of Astrium Satellites, and contributed to the conclusion of major milestones for earth observation satellites contracts, as well as the award of electric commercial satellites contracts from SES and Eutelsat in 2014 for the new Airbus Defence and Space organization. In 2006, he was awarded the prestigious Chevalier de la légion d'honneur for his accomplishments in developing space activities. Born in 1963, Colonel in the public reserve of the French Air Force, he is a graduate engineer from the Ecole Polytechnique and Telecom Paris. Married with two children, his interests include flying - he holds a pilot's licence -, sports and science.

Bertrand Maureau – Executive Vice President, Telecommunications Business Line, Thales Alenia Space.

Bertrand Maureau, 49, is Executive Vice President, Telecommunications Business Line, at Thales Alenia Space. A 1987 graduate of the Ecole Centrale des Arts et Manufactures engineering school in Paris, Bertrand Maureau started his career the following year with Dassault Aviation. From 1985 to 1988, following an initial position as mechanical and thermal engineer on the Hermes spaceplane program, he was named head of satellite design and development, then took responsibility for preparing Mirage 2000 production for Taiwan. He joined Thales Alenia Space in 1995. Based in Toulouse, he held different telecom project management positions, prior to being named program director in 2000. Bertrand Maureau was subsequently named director of the telecom payload business in 2005, then deputy director of the telecom systems and missions division in 2007. Two years later, he was appointed head of AIT (Assembly, Integration, Testing) at Thales Alenia Space's plant in Rome. From October 2011 until December 2013, Bertrand Maureau was director of the Iridium Next program.



Jean-Pascal Le Franc – Deputy Director at the International Relations Department, CNES

Jean-Pascal Le Franc (56) graduated in engineering from l'École Centrale de Paris. He started his career as science attaché to the French Embassy in South Korea, before joining CNES in 1982 where he occupied various positions at head office relating to international and European affairs and to dealings with subsidiaries. In 1989, he was appointed as technical adviser to the cabinet of Hubert Curien—the French Minister for Research and Technology and subsequently for Research and Space. In 1994, he became Director of Development of the —Aeronautics and Space sector at the CECAR group—France's first insurance broker to cover industrial special risks. He returned to CNES in 1997 as Strategy Officer, before becoming Assistant Director of International Relations and then, in 2004, head of the European Affairs service of the DSP—of which he now becomes Assistant Director responsible for the International Relations department of CNES.

Peter Breger – Deputy Head of Unit for Copernicus Services, DG Enterprise and Industry, European Commission

Peter Breger obtained a degree in Electrical Engineering at the University of Cape Town and holds a degree in Plasma Physics from the Ruhr University of Bochum. Prior to his current positions, he held the following positions: Development Engineer at Brown Boveri & Cie, AG, Ladenburg, Germany (1981 - 1984), Research Fellow at the Institut für Experimentalphysik V, Ruhr Universität Bochum, Germany (1984 - 1990), Research Scientist for Plasma Spectroscopy at the European nuclear fusion laboratory JET Joint Undertaking, Oxfordshire, UK (1990 - 1998), Project Officer in European Commission for Framework Programme 5 "Standards, Measurement and Testing" (DG Research: 1998 - 2002), Project Officer in European Commission for Framework Programme 6&7, GMES and Satcom Research (DG Research, 2002 - 2005). In 2005 Mr Breger became Policy Officer for Space research and development (DG Enterprise and Industry), active in development of the EU Research funding programmes FP7 and Horizon 2020 for "Theme Space" – covering space applications and research for strengthening the foundations of space science and technology. Since 2013 he is Deputy Head of Unit for Copernicus Services in European Commission (DG Enterprise and Industry)

Alain Ratier – Director-General, EUMETSAT

Alain Ratier was appointed EUMETSAT's fourth Director-General on 1 August 2011. His tenure so far has seen the launch of the third Meteosat Second Generation (MSG-3) and Metop-B satellites, the start of the development of the Meteosat Third Generation (MTG) system and preparation of the next generation EUMETSAT Polar System Second Generation (EPS-SG) programme. Under his leadership, the role of EUMETSAT in the EU Copernicus programme has been recognised and the organisation prepared for the operation of the Sentinel-3 and Jason-3 ocean satellites. He has also overseen the expansion of EUMETSAT's membership, with Estonia, Lithuania and Iceland becoming Member States in 2013-2014. Between 2004 and 2011, Mr Ratier was Deputy Director-General of Météo-France. Mr Ratier already played a part in shaping EUMETSAT as Director of Programme Development and deputy to the Director-General between 1996 and 2004. During this time, he guided the development of the MSG and EUMETSAT Polar System programmes and EUMETSAT's contribution to Jason-2. He also designed the process for establishing user requirements for future EUMETSAT programmes, starting with MTG, to ensure that programmes provide Member States with maximum value. From 1987 to 1996 Mr Ratier was a Programme Manager and subsequently Associate Director for Earth Observation Programmes at the French Space Agency (CNES). There, he contributed to the expansion of the French Earth observation programme to include atmospheric, oceanographic and climate sciences and data assimilation. Mr Ratier's career began at Météo-France in 1983, where he spent five years in research and development activities and modelling of the upper ocean and air-sea interactions and data assimilation. Mr Ratier graduated from the École Polytechnique in 1981. He was awarded an engineering diploma from the French National School of Meteorology and also holds a degree in oceanography from Paris VI University, both received in 1983. He is a member of the French Marine Academy and the Air and Space Academy. Mr Ratier is married with three children.



Patrick Mauté – Head of Observation and Science, Thales Alenia Space

Patrick Mauté graduated from the Ecole Polytechnique (X 77) and SupAero 82. From 2000 to 2013 he was Director of the Science and Earth Observation Programs. In this position he developed the High Resolution Optical Observation Export business (Gokturk, MN-135, Falcon Eye) and managed a considerable number of programmes for the European Space Agency, the European Southern Observatory and the French Space Agency CNES:

- For ESA: Huygens (European probe for landing on a moon of Saturn, TITAN), Meteosat 2nd generation (European flagship for meteorology from geostationary orbit), Herschel Planck (Astronomy, mapping of Universe background radiations, and of big bang signature), GOCE (mapping of Earth Gravity field and Ocean Circulation), Copernicus Sentinel-3 (Operational Oceanography), EXOMARS (Exobiology Mission on MARS), Meteosat 3rd Generation.
- For ESO: ALMA (Large Array of MW telescopes for Astronomy in Chile).
- For CNES / DGA: Jason-1/2/3 (World leading program for ultra-precise altimetry), Corot (Astronomy, Detection of exo-planets), SMOS (Soil Moisture and Ocean Salinity), IASI (Infrared Interferometer for Meteorology), Pléiades High Resolution Instrument (French dual use Earth Observation Program), SPIRALE satellites (Early Warning Demonstration Program), Musis CSO Very High Resolution Instrument.

Prior to that he held the position of Meteosat Second Generation (MSG) Project Manager (1992 – 1999: from the early competitive phase until delivery of the Flight Model N°1, European flagship for Space Geostationary Meteorology) and the position of Mission Analysis, System Engineering and Advanced Projects (1982 – 1991: Definition of Transfer Orbit Operations for the first European geostationary satellites equipped with Unified Propulsion Systems, Advanced projects for future Astronomy and Earth Observation Satellites: 5 Patents, among which Meteosat Second Generation conceptual design and first geostationary gyro-stellar Attitude and Orbit Control System concept). As of November 2013 he is Chief technical Officer in charge of Company Design Authority, Product Policy and R&D.

Philippe Pham – Head of Optical and Program, Airbus Defense and Space

Mr. Pham obtained an Engineering Degree at the Ecole Nationale Supérieure de l'Aéronautique et de l'Espace (SupAero – 87). He has held successive management and leadership roles and responsibilities in space systems

and services, satellite and systems engineering, system engineering management and large projects / programmes / product lines and proposals management, in both telecommunications and earth observation. Support to Proposals, Marketing and Sales and Business Development wrt Customers. ESA and European National Agencies, R&D planning, strategy and product policy and development planning and governance, consolidation of marketing and sales inputs and proposals and customers feedback. Drive of Business Units improvement plan / change and transformation. Management experience of Divisions encompassing 400+ engineers/ headcount (human resources competencies, objectives setting, annual interviews, evaluations, promotions, recruitment). Management of 20+ MEuros of yearly R&D (internal funding and external/ Agencies Contracts). Interface with all Airbus Defence & Space home countries (France, UK, Germany, Spain, Netherlands) and key sales offices.

Mr. Pham's specialties include: Large Division general management. Large programmes management, product lines drive & bids/ proposals management. Leadership of Business Divisions improvement plans and transformation programmes. Systems engineering. R&D planning. Product policy definition and processes, product management and governance, development strategy. Customer support in products operations. Engineering team management. French medium size legal entity general management with all management and leadership dimensions (Conseil d'Administration as MD/DG role, Comité d'Entreprise as President role).

Giovanni Sylos Labini – SME4SPACE, Board of Director

Background: in 1984 he was recruited at the Earth Observation Division of the Piano Spaziale Nazionale of the Italian National Research Council (after 1989 ASI, the Italian Space Agency) in charge of a major space geodesy project; he cooperated with NASA for the establishment of the long term NASA plan in Geodesy and Geophysics and for the launch of LAGEOS II satellite; from 1988 to 1995 has been recruited at the Italian Space Agency; from 1987 to 1995 is an Italian Delegate at the European Space Agency (ESA) Earth Observation Program Board; was director of the Center of Space Geodesy of the Italian Space Agency (ASI) the ASI facility for Earth Observation, space geodesy and space robotics until 31/12/1995; from 1997 he is Professor at IUAV University of Venice and cooperates with Nettuno Institute for the University Everywhere. Is founder and CEO of Planetek Italia since 1994.



Current position and responsibilities: CEO of Planetek Italia and Planetek Hellas, President of AIPAS (Italian Aerospace SME Association), Board member of SME4SPACE (European Aerospace SMEs Association), Board member of EARSC (European Association of Remote Sensing Companies), Invited Professor at Urban & Regional Planning course, IUAV (Venice University Institute of Architecture), Chairman of SPEGEA Business School of Assindustria Bari.

Peter Hulsroj – Director, European Space Policy Institute

Peter Hulsroj obtained law degrees from the University of Copenhagen and Harvard Law School. Mr. Hulsroj then qualified as a practising attorney with the large Danish law firm Bech-Bruun. After this he served as a contracts officer in ESA and, for 14 years, as the Head of Contracts and Legal Affairs of the international organisation Eumetsat. This was followed by a stay in Vienna as the Legal Adviser of the Comprehensive Nuclear-Test-Ban Treaty Organization. In 2008 Mr. Hulsroj was appointed the Director of the Legal Affairs and External Relations Directorate of the European Space Agency, where he was until taking up the post as the Director of ESPI in 2011. Mr. Hulsroj has published a significant number of articles on public international law, space law and international governance in peer-reviewed journals and recently published a book, The Principle of Proportionality, on ethical, legal and governance issues.



Kai-Uwe Schrogl – Head of the Relations with Member States Department in the Director General's Cabinet, European Space Agency

Prof. Dr. Kai-Uwe Schrogl is the Head of the Relations with Member States Department in the Director General's Cabinet of the European Space Agency (ESA, Headquarters in Paris, France). From 2007 to 2011 he was the Director of the European Space Policy Institute (ESPI) in Vienna, Austria, the leading European think tank for space policy. Prior to this, he was the Head of the Corporate Development and External Relations Department in the German Aerospace Center (DLR) in Cologne, Germany. Currently he is the chairman of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space, the highest global body for space law making, comprising 73 Member States. He also served as the chairman of other bodies as the ESA International Relations Committee. He presented, respectively testified, at hearings of the European Parliament and the U.S. House of Representatives. Kai-Uwe Schrogl is Vice President of the International Institute of Space Law, Member of the International Academy of Astronautics (recently chairing its Commission on policy, economics and regulations) and the Russian Academy for Cosmonautics as well as Corresponding Member of the French Air and Space Academy. Kai-Uwe Schrogl has written or co-edited 15 books and more than 130 articles, reports and papers in the fields of space policy and law as well as telecommunications policy. He sits on editorial boards of various international journals in the field of space policy and law (as Space Policy and ZLW). He holds a doctorate degree in political science and lectures international relations at Tübingen University, Germany as an Honorary Professor.



Denis Neiter – Adjoint au Chef de Bureau des Affaires Aéronautiques

Ingénieur de l'école Polytechnique et membre du corps des Mines, Denis Neiter a débuté sa carrière à l'Autorité de contrôle prudentiel et de résolution, dans le domaine de la supervision assurantielle. Il a rejoint la direction générale du Trésor, où il occupe les fonctions d'adjoint au chef de bureau des affaires aéronautiques, militaires et spatiales, en 2013.

Joël Barre – Deputy Director-General, CNES

Born on March 8, 1955, Joël Barre graduated from France's Ecole Polytechnique (1974) and SUPAERO (Ecole Nationale Supérieure de l'Aéronautique et de l'Espace) (1979). In 1979, he began his career at the French Defence Procurement Agency (DGA) where he was appointed as Director of the ASMP missile programme in 1987 and as Director of the Helios satellite programme in 1991. In February 1997, he was responsible for the design of the control, communication and information Defense system. Joël Barre joined CNES as Director of Programmes and industrial policy in September 1997. In June 2001, he moved to Snecma as head of space activities in the Rocket Engines Division, before being appointed as Managing Director of the Space Engines Division in March 2002. Joël Barre was Director of the Guiana Space Centre between July 2007 and June 2012, and was appointed as Deputy Director General of CNES in December 2009. He has performed the missions of Deputy Director General for Operations at CNES since July 1, 2012. Joël Barre is Chief Operating Officer (Vice-President) since April 4, 2013. Joël Barre is an Officer of the Legion of Honour, an Officer of the National Order of Merit and a Legionnaire First Class of Honour. He is also a member of the IAA (International Academy of Astronautics) and the ANAE (French Air and Space Academy).



François Auque – CEO, Airbus Defense and Space

Mr. François Auque is Executive Vice President-Space Systems at Airbus Defence & Space SA, a Member-Executive Board at Airbus Group NV, Chairman at Bordeaux Business School, and a Member-Executive Committee at Groupement Industries Françaises Aéronautiques Spatiales. Mr. Auque was previously employed as Chief Executive Officer by Astrium SAS, Group Managing Director & CFO-Space Division by Aerospatiale Matra Group, Chief Financial Officer by Banque La Hénin, a Principal by United Nations Board of Auditors, a Principal by Cour des Comptes, and Vice President-Finance & International Development by Credisuez SA. He received his undergraduate degree from Ecole Nationale d'Administration, an undergraduate degree from Sciences Po, and an undergraduate degree from École des Hautes Études Commerciales de Paris.

Jean-Loïc Galle – Président Directeur Général, Thales Alenia Space

Jean-Loïc Galle a été nommé Président Directeur Général de Thales Alenia Space et Senior Vice-Président Espace du Groupe Thales depuis le 1er septembre 2012. Jean-Loïc Galle était précédemment Senior Vice-Président des Opérations Aériennes et membre du Comité Exécutif de Thales. Il avait été nommé à ce poste en 2010. De 2008 à 2010, il occupait les fonctions de Directeur Général de l'unité Radars de Surface. Auparavant, Jean-Loïc Galle était PDG de ThalesRaytheonSystems France, la filiale française de la Joint Venture entre Thales et Raytheon. Jean-Loïc Galle a intégré Thales en 1996 en devenant Vice-Président et Directeur Général de l'unité « Avionique pour hélicoptères », couvrant l'ensemble des marchés internationaux d'hélicoptères civils et de défense. Il a ensuite accédé au poste de Vice-Président et Directeur Général de l'unité « Avionique Militaire », couvrant l'ensemble des activités avioniques relatives à l'ensemble des plates-formes militaires. Jean-Loïc Galle a débuté sa carrière comme ingénieur logiciel chez SFENA en 1985 avant d'occuper successivement les fonctions de Vice-Président en charge de la stratégie et de Directeur Général de l'unité Systèmes de Navigation chez Sextant Avionique. Diplômé de l'Ecole Centrale de Paris, Jean-Loïc Galle possède également un MBA de l'INSEAD ainsi qu'un diplôme du Centre des Hautes Etudes de l'Armement (CHEAr).



Jean-Lin Fournereaux – Director Espace, SAFRAN

Graduated from the Institut National des Sciences Appliquées of Toulouse, France (Mechanical Engineering - 1976), Jean-Lin Fournereaux practiced his all professional activities within companies of the Safran group. He begins his career in 1977 at SEP (part of Snecma in 1997) where he performs many functions in space propulsion and becomes Vice President and General Manager of the Satellite Propulsion Division of Snecma in 1994. In 1998, he is appointed Vice President and General Manager of Liquid Rocket Engine Division of Snecma, mainly dedicated to Ariane motorization. In 2001, he joins Techspace Aero as Chairman and CEO and then, becomes Chairman and CEO of Snecma Services in 2004. In 2007, he is appointed Chairman and CEO of Sagem. In 2011, he joins Safran in his current function.



Stephane Israel – Chairman and CEO, Arianespace

Stéphane Israël is the Chairman and CEO of Arianespace, the world's leading satellite launch services company. Arianespace operates the Ariane 5, Soyuz and Vega launchers from the Guiana Space Center in French Guiana. His mission is to define the company's strategy, and to develop and maintain a close relationship with the company's private and government customers from around the world. As Chairman and CEO, he represents Arianespace in relations with European governments, Space Agencies and industry partners.



Stéphane Israël is an expert in the domain of public economics and the aerospace industry. Stéphane Israël holds degrees from the Ecole normale supérieure and the Ecole nationale d'administration (ENA). He was appointed judge in the French Court of Auditors in 2001. In this position he mainly participated in missions concerning French space policy and the Ariane launcher family. He moved to the aerospace industry in 2007, first as advisor to Louis Gallois, Chief Executive Officer of EADS, then in various operational management positions in the defense branch of Astrium Space Transportation and the geo-information services division of Astrium Services. From May 2012 to April 2013, he was Head of Private Office of the French Minister for Industry, which includes the Ministry for Digital Economy, SMEs and Innovation.

A professor affiliated with the Ecole normale supérieure and Paris I La Sorbonne from 2005 to 2007, Stéphane Israël was also a teaching assistant at Harvard University in the United States from 1994 to 1995. He is Board member of three prestigious entities: CDC International, a co-investment body between Caisse des Dépôts and international sovereign funds; Havas, the 5th worldwide communication company; Ecole normale supérieure.

Alain Bories – Head of Strategy, OHB

48-year old Alain BORIES is an engineer for armament technology and qualified at the Ecole Polytechnique and the Sup'Aéro. He equally passed the French Licence in Applied Economy at the University of Paris Dauphine, and acquired the degree of a Master of Science at the Massachusetts Institute of Technology (U.S.). He started his professional career with the Délégation Générale pour l'Armement, the French General Agency for Military Procurement, where he was responsible for the programmes C3I for the air force. In 1987, he started to work for Alcatel ISR, where he performed various functions including that of the Director of the Department for Aeronautic Control. In the year 1996, he became the Vice President for Aeronautics in Alcatel's Department Radio, Space, Defence, before he took over the job of the Director for Institutional Markets with Alcatel Space in 1998. In the year 2000 he changed to the enterprise of Thomson-CSF (later: Thales), where he worked as the Director of the Space Department and the Galileo programme till 2004. Apart from that, Mr. Alain BORIES is the Vice President of the Association of Graduates of the Ecole Polytechnique.

Jean-Jacques Tortora – Secretary General, ASD - Eurospace

Jean-Jacques Tortora currently serves as the Secretary General of ASD-Eurospace, which is the trade association of the European Space Industry. From 2004 to mid-2007, he was head of the French Space Agency (CNES) office in North America and the Attaché for Space and Aeronautics at the Embassy of France in Washington, D.C. Previously he was Deputy Director for Strategy and Programs, responsible for the Industrial Strategy of CNES, the French Space Agency. Prior to that position, he was France's representative in the ESA Industrial Policy Committee and Joint Communication Board. From 1998 to 2000, Mr. Tortora was adviser to the French Ministry of Research for Industrial Policy Funds management, aiming at industry competitiveness support and new space applications and services development and promotion. From 1996 to 1998, he was appointed by Arianespace in Evry, France, to lead a risk mitigation and cost reduction plan covering to the end of operational life of the Ariane 4 launcher. From 1990 to 1996, Mr. Tortora was based in Kourou, French Guiana, as Head of Arianespace Operations Quality Department. There, he led the Quality Management of the Ariane 4 launchers final integration and of the launch pad operations and maintenance. He supervised the industrialization and the implementation of the associated control plans. Mr. Tortora started his career in 1984 at the French military procurement agency, DGA, as a naval weapons integration and test engineer, expert in signal processing and warships acoustic discretion.