



N°	ÎLOT	SYNOPSIS
X1	<b>SECURING SPACE TO DEVELOP HUMAN ACTIVITIES</b>	<p>From tracking space debris, to issues of protection, and traffic/orbiting missions managing: the development of sustainable space activities will necessarily need secured and managed space traffic. Today, these issues need innovating solutions in order to detect, follow and identify debris or artificial objects in orbit around the earth.</p> <p><i>Main partners involved: Sodern, Arianegroup, Onera, Thales Alenia Space.</i></p>
X2	<b>FUTURE OF SPACE MISSIONS</b>	<p>Space is an important scientific object, vector of international collaborations. Go to deep space with BepiColombo, which started his 7 years cruise to Mercure, the closest planet to the Sun, where two scientific orbiters will be deployed by 2025. Discover MICROSCOPE, a space mission to test the equivalence principle, foundation of Einstein's Theory of General Relativity, which has already provided exceptional scientific data.</p> <p><i>Main partners involved: Onera, Cnes, DLR, JAXA.</i></p>
X3	<b>ENABLING NEXT GENERATION OF EUROPEAN ROCKETS</b>	<p>Come meet ArianeWorks, the CNES and ArianeGroup acceleration platform, whose goal is to prepare the future of European launchers, by developing innovating technologies and new international partnerships (start-ups, laboratories, SMEs, industrials...). Learn more about Themis demonstrator, an affordable &amp; reusable launcher, as well as PROMETHEUS, a new European rocket engine using oxygen and methane.</p> <p><i>Main partners involved: Cnes, Arianegroup.</i></p>
T1	<b>FUTURE OF FLIGHT</b> 	<p>New modes of piloting and transport, more electric planes and helicopters, new sustainable configurations : come see what future air mobility will look like, through iconic CityAirbus and Vahana projects, or new helicopter missions..</p> <p><i>Main partners involved: Airbus Hélicoptères, Airbus, Daher, Safran, Onera.</i></p>
T2	<b>DIGITAL SKY</b>	<p>In support of the EU Aviation Strategy and the Single European Sky (SES), SESAR aims to deliver an ATM system for Europe that is fit for the 21st century and capable of handling the growth and diversity of traffic safely and efficiently, while improving environmental performance. Come discover SESAR, which will introduce its innovating solutions to ensure ensure the safe and secure management of both manned and unmanned air traffic in Europe</p> <p><i>Main partners involved : JU SESAR et partenaires</i></p>

T3	<p><b>LOW NOISE AND LOW CARBON AIRCRAFT</b></p> 	<p>To deal with environmental challenges, new technical and technological innovations are helping to meet the major challenges that drive aeronautics: noise pollution, and climate and air quality. Come discover the new hybrid or "all-electric" technologies, as well as the latest evolutions in terms of energy performance and the electrical or hybrid systems set up to reduce noise pollution during flights, but also on the ground, when manoeuvring at the airport.</p> <p><i>Main partners involved: Safran, Airbus.</i></p>
E1	<p><b>NEW METHODS FOR DEVELOPMENT AND PRODUCTION</b></p> 	<p>High production rates, globalization of industrial schemes, major evolutions in after sale, digitalization and emergence of disruptive technologies in product conception: aeronautics industry must face multiple challenges. A context, which inevitably leads to create and optimize development of new methods and innovating productions.</p> <p><i>Main partners involved: Airbus Hélicoptères, Dassault Aviation, Daher, Onera, Latécoere.</i></p>
E2	<p><b>BIG DATA &amp; AI</b></p> 	<p>Big Data and AI are two levers of competitiveness and innovation in the aerospace industry. These technologies are at the heart of our sector's challenges, and are already deployed through numerous initiatives. Come see how AI and Big Data can project us in 10 or 15 years, into disruptive innovations, and what these technologies already provide us.</p> <p><i>Main partners involved: Dassault Aviation, Thales, Airbus, Safran, Air France, INRIA.</i></p>
E3	<p><b>FROM SENSOR TO DECISION</b></p>	<p>In the aerospace industry, when people's security is at stake, the decision chain is critical. Follow the path leading from captor to decision, applied to different situations. Human stays at the heart of the steps, and can count on a trustworthy and secured environment</p> <p><i>Main partners involved: Thales, Thales Alenia Space.</i></p>
P1	<p><b>UNDERSTANDING CLIMATE CHANGE</b></p>	<p>The measure and understanding of climate change is embedded on planes and satellites. Discover for example the instrument IASI, which measures temperature and atmospheric humidity with an extreme precision, as well as detecting quantity of gas. Other means of climate understanding and monitoring use the third dimension: CO<sup>2</sup> captors on airline plane, and the diversity of measures realised by SAFIR's measure plane operated by the CNRS, the CNES and MétéoFrance.</p> <p><i>Main partners involved: CNRS/INSU, MétéoFrance, Cnes, Air France.</i></p>
P2	<p><b>NEW ENERGIES FOR AEROSPACE</b></p> 	<p>ATM, satellites... Space &amp; flight mobilities ask for alternative energy solutions, less energy, and more electrification. Take off on a cruise in air and space, to discover the flying electrical system of tomorrow, and discover the upcoming challenges, which the aerospace industry will have to face.</p> <p><i>Main partners involved: CEA LITEN, Safran, Airbus, Thales, Thales Alenia Space.</i></p>

<p><b>P3</b></p>	<p><b>SUSTAINABLE AVIATION FUEL</b></p> 	<p>Aerospace industry is aiming to reduce of 50% the CO2 emissions in 2050 (compared to the 2005 level). To face climate challenge, aeronautics will have to count on a sustainable fuel to reduce its carbon footprint. Biomasses, sugar, micro-seaweeds, leaven... Come discover today's, tomorrow's, and the day after tomorrow's sustainable fuels.</p> <p><i>Main partners involved: Air France, ATAG, IFPEN, Safran.</i></p>
		<p><b>DRONE CORNER</b></p> 