Volume 4 Number 06– Wednesday, 08 February 2012

Part I

Special Focus: Colombia

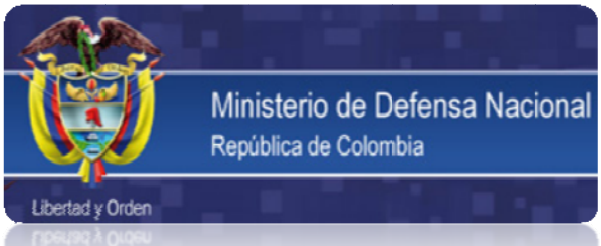
Part II

Epicos Newsroom

Epicos in Colombia

Epicos' 7-year project in Colombia involves up to (500) Colombian Aerospace, Defence & High-Technology companies, as well as academic & research institutions and is implemented under the auspices of the Ministerio de Defensa Nacional Republica de Colombia (Ministry of National Defence). This project is the foundation on which the country's Aerospace, Defence, and High-Technology companies can be supported under Offsets. It aims at accelerating the development of the Colombian Aerospace and Defence industry by analysing its current capabilities and structuring key technology development projects in coordination with the Ministry of National Defence. These development projects will be the basis for the creation of markets in which the Colombian industry can be specialised and compete internationally.

"Thanks to the offset agreement already signed with Embraer, Epicos will be responsible for the development of a project that has special importance for Colombia. As part of our policy of industrial and social cooperation-offsets, this project represents the first brick that is the foundation for developing everything else. With the mapping of our A&D industrial capabilities, we will be able to identify our strengths and weaknesses. A significant number of Colombian companies will be part of this project; it will be the opportunity to be known and to show the potential they have. That is why we consider this project as the beginning of the internationalisation of companies that until now were known only in Colombia" said Dr. Yaneth Giha, Director of Planning & Budgeting, Ministry of National Defence at that time (July 2008). Dr. Yaneth Giha was appointed the Vice Minister of Defence in August 2010, and still maintains the post of Vice Minister of Defence today.



Dr. Giha also stated that "Epicos is a world leader in this type of projects and we are counting on its experience and its ability to support industrial development plans in Colombia. We are convinced of the benefits that this project will bring us. To the Ministry of National Defence, this project is the beginning and the basis to formulate our strategic vision to improve self-reliance for our Armed Forces. At the same time, it helps us to contribute to the development of the Colombian A&D industry in the long term. Thus, Epicos becomes a Colombian partner in finding the best way in which the country should go for its own industrial development."

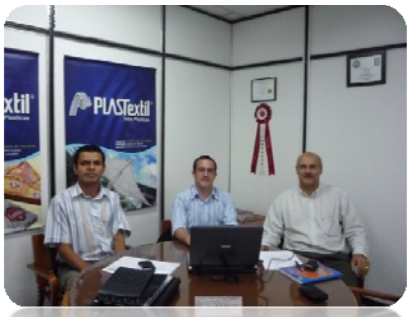
"The project is truly on a national scale and will provide the Global A&D community with a clear insight to the country's potential. This information today is difficult to find and not accessible outside of Colombia. Epicos, in cooperation with (3) leading Colombian

Universities and Exostar will enable the Ministry of National Defence to develop a strategy on where to penetrate its offset resources, and to ensure Offsets have a sustainable and economic impact on the Colombian Economy", said Jacques Purewal, VP International Business, Epicos.

Epicos Mapping Colombian Aerospace, Defence and High-Technology Industry

The main goal of the Epicos Project in Colombia is to analyse the country's industrial capabilities in the Aerospace, Defence and High-Technology (ADHT) sectors. In order to achieve this Epicos initiated a pioneering method. As part of this method Epicos organised sixteen (16) Awareness and Training Seminars that took place in (7) cities and carried out the Basic-Level Industrial Capability Mapping and Analysis for more than five hundred (500) Colombian companies. The next phase of the Industrial Capability Mapping and Analysis is the In-Depth mapping analysis of a selection of up to three hundred and fifty (350) companies. This mapping and analysis process that is currently under implementation requires close cooperation with the selected companies involving site visits and interviews with company executives. During this phase, the companies are being visited at their premises and their capabilities are analysed and categorised in more detail.

The companies selected to participate in the In-Depth Mapping are companies that during the Basic-Level Mapping were identified as:



1) Currently active and with existing capabilities in the Aerospace, Defence and High-Technology (ADHT),

2) Currently not active in the ADHT but having related capabilities and the potential to enter these markets and benefits.

This activity is implemented under the coordination and supervision of Epicos in partnership with the following institutions and organizations which are engaged in the related activities, each one in its respective geographical region. The following universities have a prominent and active presence in the Colombian cities of:

- Universidad Pontificia Bolivariana: City of Medellin, Pereira and Manizales,
- Universidad de San Buenaventura: City of Bogota, Barranquilla, Duitama, Bucaramanga, Cartagena (Through UNIVERSIDAD TECNOLOGICA DE BOLIVAR)
- Camara de Comercio de Cali (in cooperation with the Air Force Academy): Valle Del Cauca Region

The mapping methodology and analysis have been developed as a result of the experience and

research on different international industry mapping diagnostic tools and study objects of technology management and innovation.

This methodology provides Epicos and its Mapping Partners a diagnostic tool which intends to identify and document the current company situation against a desired or an expected situation in order to acknowledge the technology/capabilities management and innovation needs of a company. This shall then allow for the structure of specific strategies focused on the development of competitive advantages on a National ADHT Industry level as well as the development of specific projects that will be the basis for the creation of markets in which the Colombian industry can be specialised and compete internationally.

This methodology takes into account a very specific set of questions that allows to give a complete view of the current state of the company (business x-ray) in terms of such parameters, allowing the generation of a 'technology/capabilities inventory' and the 'Business profile.'

Colombia's Industrial Capabilities Mapping

Epicos will present the Aerospace, Defence and High-Technology (ADHT) industry of Colombia through dedicated newsletters. Every month and until the completion of the project, Epicos will publish newsletters to promote the Colombian industrial capabilities in a categorised and structured way through promotion of specific industry sectors. Epicos Newsletters will provide a dynamic and ideal way for the Colombian companies in supporting:

• The creation of potential synergies within international companies for the establishment of strategic partnerships,
• Identification of new business opportunities,
• International promotion of the Colombian Aerospace Defence and High-Technology products and industrial capabilities

➢ In order to view the schedule of the planned newsletters please press here

➢ Press Here to View Epicos Industrial Capabilities Mapping of Colombia

Interview with the University of San Buenaventura (USB) and the Pontificia Bolivariana University (UPB)

Epicos is currently in the process of mapping the Colombian Aerospace, Defence and High-Technology Industry Capabilities. In order to achieve this, Epicos is collaborating with the following institutions: University of San Buenaventura (USB), University Pontificia Bolivariana (UPB) and the Chamber of Commerce of Cali. Two coordinators of the corresponding mapping partners, namely Professor Ricardo Sandoval Parada, Technology Management Leader - ITER of University of San Buenaventura (USB) and Mr. Jhon Wilder Zartha Sossa, Coordinator of the Group on Policy Research and Technology Management of the University Pontificia Bolivariana described their participation in this project with an exclusive interview given to Epicos.

1. Epicos is currently in the process of mapping the Colombian Aerospace, Defence and High-Technology Industry Capabilities. In order to achieve this, Epicos is collaborating with the University of San Buenaventura (USB), the Pontificia Bolivariana University (UPB) and the Chamber of Commerce of Cali. Can you please give us some more information about the involvement of these institutions in this activity?

UPB: The UPB through the Group of Policy and Technology Management has actively participated in this project for several months, in order to collaborate in strengthening industrial and innovation capabilities in the areas established by EPICOS. We wanted to participate by contributing the knowledge generated in our Group in the last 20 years in the process of diagnosis and creating company profiles in Innovation and Technology, for it, we put at the service of the Project a management methodology for Technology and Innovation which was supplemented and enhanced with expert contributions from EPICOS and of the other participating institutions, allowing to implement a complete and comprehensive tool for mapping industrial capacity. We are sure that the information and knowledge generated in this mapping process will be useful for strengthening industrial capabilities, the development of new projects in the area and the creation and consolidation of networks in the aeronautics, defence and High-Technology Colombian sectors.

In the last year we have visited about (80) companies in the following cities: Medellin, Pereira and Manizales. The collected information is focused on detailed areas of the company related to core industrial capabilities and key business aspects.

USB: Universidad de San Buenaventura – USB, has performed since the beginning of this Project (191) visits; site visits to more companies is on-going. USB has been in charge of covering the following main cities in Colombia: Bogotá, Bucaramanga, Barranquilla and in a partnership with Universidad Tecnologica de Bolivar the city of Cartagena.

The mapping has been a good opportunity in both sides to create bridges between the University and the community, also a good opportunity to serve the country with a project that is relevant for the progress of the local industry and the research and technology level of the nation and its Ministry of National Defence.

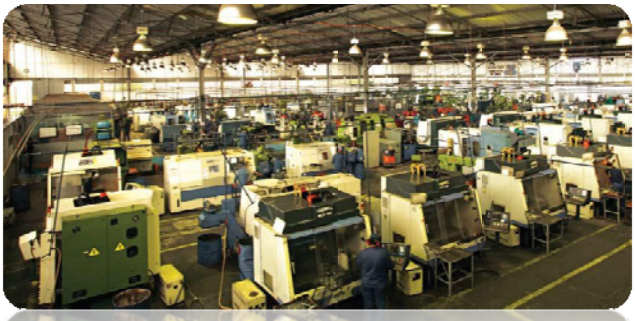
2. Have you ever been involved in a similar activity in the past, namely in an Industrial Mapping of the Aerospace, Defence and High-Technological (ADHT) Capabilities on a national scale?

UPB: The Research Group Policy and Technology Management of the UPB in the last four (4) years has mapped more than (300) Colombian companies and institutions with methodologies of Technology and Innovation Management, in almost all industrial sectors; this is the first time we participate in the mapping of industrial capacity in these sectors (aeronautics, defence and High-Technology). With the support of EPICOS and other Colombian universities and institutions we have been able to generate and apply a comprehensive approach that would simultaneously measure capabilities of key industrial and business areas.

USB: We have not been involved in a project like this for the aerospace, defence and high-technology. The University has experience in mapping projects for the telecommunications field, and many years ago the French industry proposed to the university to perform a research about the French products that are used in the aeronautical field in Colombia.

3. In which way do you believe this activity will benefit the Colombian industry?

UPB: We have always tried to increase the dynamics of regional and sectoral innovation systems. This project (Mapping process aeronautics, defence and high- technology) allows us



to know the current state of best practices and capabilities of organizations and institutions that are key actors in these industry sectors, and has also allowed us to identify most relevant technology and innovation gaps. We expect that the institutions that make decisions in these sectors will use this knowledge generated in order to increase the dynamics of sectors, close their gaps, co-develop projects, increase their competitiveness and contribute to a better quality of life in the country.

USB: In every way this activity will benefit the nation and especially in research and technology fields giving to the Colombian industry the possibility to increase with future projects based on the mapping activity, the opportunity to improve current processes,

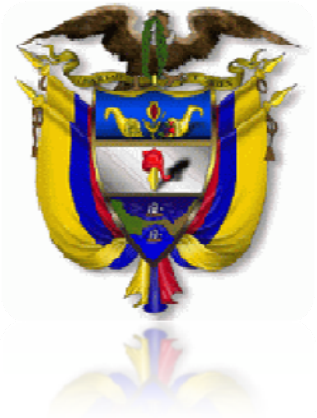
methods and strategies and lay the foundation for the development of key technology and knowledge projects.

Also, will give to the research institutes and Universities, the chance to learn about new technologies, updating the knowledge and techniques and upgrading the level of research and also the software and hardware equipment.

The mapping gives the nation the necessary foundation. Through this we can highlight what are the actual industrial capabilities that exist today in Colombia. We can then classify the real activities and markets, understand the strengths and weaknesses of the industry and prepare the industry to play an active role in the near and long-term future needs of the country.

San Buenaventura University Branch Bogotá is always committed with the development of Colombia and one of the reasons to work on this project was to support this great prospect.

Interview with Ms. Andrea Rojas, Coordinadora Grupo de Cooperacion Industrial y Social - Offset, Ministerio de Defensa Nacional Republica de Colombia



Ms. Andrea Rojas, Coordinadora Grupo de Cooperacion Industrial y Social - Offset, Ministerio de Defensa Nacional Republica de Colombia gave an exclusive interview to Epicos, regarding offsets in Colombia. Amongst others she stated that: "In line with the new science, technology and innovation policy, the MOD will be focusing on certain key areas: Radars, Simulators, Propulsion, Land tactical mobility, Aerospace, Combat systems, Energy efficiency, Satellites, Health. Offsets will be one of the tools used to develop projects in these areas; they share specific characteristics such as: sustainability, duality, being cross-sectional and addressing a real necessity of the services… ".

1. What are the main targets of the Colombian offset policy?

The Colombian Offset policy was established according to the 2007-2010 National Development Plan, and set out general and specific objectives as part of the governmental initiative of building a more competitive country.

The general aim of this policy is to make it possible for Colombia to acquire industrial, economic and commercial benefits derived from offsets.

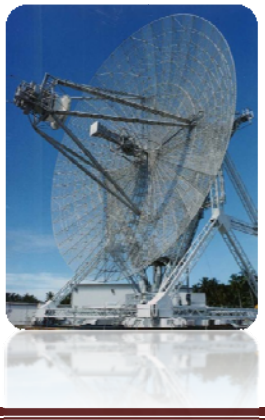
The policy specifically aims to meet the following goals:

1. Self-sufficiency in the life cycle of military equipment; aiming for the services to gain capabilities in maintenance and modernisation of their equipment.

2. Industrial returns on materials and electronics; ensuring that companies improve their capabilities in these fields through key technology transfer.

Finally, offsets can be an opportunity to support national social policy.

In addition, in line with the new science, technology and innovation policy, the MOD will be focusing on certain key areas:



- Radars
- Simulators
- Propulsion
- Land tactical mobility
- Aerospace
- Combat systems
- Energy efficiency
- Satellites
- Health

Offsets will be one of the tools used to develop projects in these areas; they share specific characteristics such as: sustainability, duality, being cross-sectional and addressing a real necessity of the services.

2. Is there a plan for a new directive or an amendment to the current policy in the near future?

In August 2011 a new directive was approved. This directive compiles previous offset directives, follows the guidelines established in the CONPES[1] and explains the selection process for offset receptors in a more detailed manner.

3. Could you briefly describe the main principles for evaluation and approval for an offset receptor?

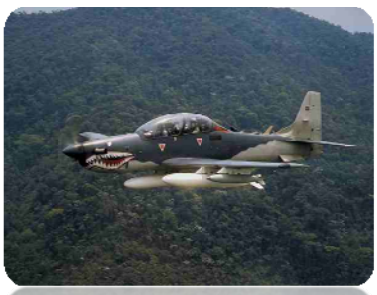
The Colombian offset policy establishes that the foreign companies have to choose the receptor of the project, as an assurance of transparency, viability and permanency of the long-term project. In no case the Ministry of National Defence, will be able to impose the receptor. Obligors are the ones who choose the receptor based on an objective and diligent selection that allows to guarantee the complete fulfilment of the project.

4. What are the key elements a proposed offset program should have in order to be in line with the Colombian offset policy and be successful?

Projects should be aligned with the policy's objectives and may touch on, but should not necessarily be restricted to, the areas mentioned previously.

One of the elements that can make a proposal successful is a high component of technology transfer that will make it possible to substitute imports and diminish delivery time, allow technological integration to take place and reinforce the present capabilities.

5. Offsets are aimed at supporting the sustainable development of the national Aerospace, Defence and High- Technology industry of the country. Are there any offset programs that you would like to present as "success stories" for the above?



"Modernisation of the T-27 airplane"

Through this project, Colombia is going to be able to modernise the T-27 airplane in CIAC´s (La Corporacion de la Industria Aeronautica Colombiana) installations. CIAC will in turn become the only authorised entity to modernise these airplanes in the world. The project includes designs, technical specifications and procedures to manufacture the components of the aeronautical support equipment for this activity.

"Computer based training"

In this project, a national private company has acquired the capability to develop computer based training (CBT). This company has provided the Air Force with the first CBT for a C-295

[1] CONPES is the acronym in Spanish for National Economic and Social Policy.

airplane and is now working with other services on developing other types of CBT for different equipment.

"Training, production and development of machine gun mountings"

This project gave a Colombian company the technology to produce mountings for the installation of MK44 machine guns in HUEY II helicopters that belong to the Air Force. The company has now sold the mountings to other services in Colombia.

Colombian Offset Policy

Offset is a relatively new concept in Colombia with the first fully official guidelines dating from July 2007. These guidelines give priority to projects that increase self-sufficiency and independence in maintenance, repair, and overhaul (MRO) for the purchased equipment and to projects that obtain industrial returns to strengthen strategic sectors (electronics and materials).

Not to forget that projects with social benefits are also part of the intents of the policy, but on a different level of concern.

During the first years of the offset policy implementation, Colombia intends to focus on gaining skills in the maintenance and repair of military equipment. In this context, transfer of advanced technologies will play a big role and will be given high priority. This will also lay the foundation for manufacturing parts and equipment of export quality. Future projects will tend towards co-production of military equipment.

In general the guidelines are fairly flexible with the offset authority generally being open to all value added proposals.

For Further Information Press Here to Read EPICOS' Country Offset Report (CORE)
Or
Here to read the General Guidelines for implementing industrial and social cooperation agreements – offsets- relating to acquisition in the field of defence in Colombia

Epicos Newsroom

US Senate sends aviation funding bill to Obama

The US Senate on Monday adopted a bill to fund the Federal Aviation Administration (FAA), sending it to President Barack Obama despite a provision angrily opposed by Democrats' labour-union allies.

The Democratic-led chamber voted 75-20 to approve the measure, which had cleared the Republican-held House on Friday by a 248-169 margin.

The legislation, fruit of a compromise between the polarized US Congress's Republican and Democratic leaders, would provide the FAA $15.9 billion per year through fiscal year 2015 after years of temporary extensions in funding.

Organized labour, which Democrats hope will provide vital fundraising and organizational support in the November elections, fiercely objected to a provision that makes it harder for airline or railroad employees to form a union.

"Airline and rail workers would suffer significant losses as contracts are jettisoned, collective bargaining rights are cut and legal hurdles will be placed in the way of gaining a voice at work," 19 unions said in a joint statement when the legislation was announced January 30.

Democratic backers of the compromise bill said the House version would have cut more deeply into labour union organizing.

The FAA has been a political battleground over the past five years, funded with stopgap measures and hit with a shutdown last summer when one measure lapsed without a replacement in the works.

The legislation includes subsidies for rural airports, some of them in the home states of powerful Democratic lawmakers, and calls for upgrading air-traffic control technology.

Source: 2012 AFP, Agence France-Presse (AFP)

EU 'not backing down' on airline emissions in Chinese row

The European Commission said Monday it will stand by a new law that imposes charges on airline carbon emissions after China banned its carriers from paying for such permits.

"We are not backing down and this legislation will apply to companies operating in Europe," said Isaac Valero-Ladron, spokesman for EU climate action commissioner Connie Hedegaard.

Valero-Ladron warned that the law, which came into force January 1, carries fines for airlines that ignore it but he said the commission "remains confident" that Chinese airlines will comply with the rules.

All Chinese carriers "have complied with the legislation" so far and applied for free pollution permits handed out under the EU's Emissions Trading System (ETS), he said, adding that the airlines are set to receive the permits.

"It will be much more costly for any airline not to comply with the legislation than doing so," the spokesman said.

Airlines receive 85 percent of their carbon permits for free but have to purchase the remaining 15 percent under the system. Refusing to participate can carry a fine of 100 euros per tonne of CO2 emitted.

The inclusion of airlines in the ETS system is opposed by the United States, China, India, Russia and other nations but the European Union has remained firm on its stance since the European Court of Justice backed the law late last year.

The EU says it decided to impose its own system to curb airline emissions since talks have so far failed to yield any global agreement.

Valero-Ladron said Brussels was "open to keep discussing with all partners their concerns," including through the United Nations' International Civil Aviation Organization (ICAO).

"I understand that some countries have concerns about the so-called unilateralism of this measure but I don't think you can find a partner in the world who has fought harder than the European Union to get a global agreement done," he said.

China's State Council, or cabinet, announced Monday a directive barring airlines from participating in the ETS "without the approval of relevant government departments."

Beijing fears its aviation sector will have to pay an additional 800 million yuan ($125 million) a year on flights originating or landing in Europe, and that the cost could be almost four times higher by 2020.

Source: 2012 AFP, Agence France-Presse (AFP)

Lufthansa seeks 1.5-billion-euro profit boost

German airline Lufthansa said Tuesday it planned to boost earnings sustainably by at least 1.5 billion euros ($1.8 billion) by 2014.

A Lufthansa spokeswoman said chief executive Christoph Franz had announced the figure at a meeting with around 1,000 management-level staff on Monday.

"The aim is a sustainable increase in earnings of at least 1.5 billion euros by 2014," the spokeswoman said.

The target would be achieved via synergy effects, cost-cutting, structural changes and increased revenues.

"We need a sharp improvement in profits to finance investment in aircraft," Franz explained.

Source: 2012 AFP, Agence France-Presse (AFP)

Brazil privatizes three airports ahead of 2014 World Cup

The Brazilian government privatized three airports, including Sao Paulo's Garulhos, through concessions valued at a total of $14 billion during an auction Monday.

The concession for Garulhos, the country's biggest airport, was won by a consortium that included three firms, including South Africa's ACSA, with an offer of more than $9.4 billion.

Also privatized were Viracopos airport in Campinas, Sao Paulo state, and Brasilia's President Juscelino Kubitschek airport. The three airports together account for 30 percent of passenger traffic in Brazil.

Source: 2012 AFP, Agence France-Presse (AFP)

Le Russe Aviamost n'a pas encore les fonds pour acheter des Skylanders

Le societe russe Aviamost, qui a signe un protocole d'accord avec l'avionneur francais Geci pour 40 avions Skylander et une option pour 260 autres, ne dispose pas encore des financements et espere resoudre cette question en mars, a indique mardi son directeur general a l'AFP.

L'annonce le 25 janvier par Geci de cette commande avait fait bondir le titre de Geci International et de Geci Aviation a la Bourse de Paris, a tel point que les cotations avaient ete suspendues.

Deux jours plus tard, l'Etat francais annoncait investir 60 millions d'euros dans le projet d'avion de transport a helices Skylander, dont les besoins sont estimes a 100 millions d'euros, selon une source proche du dossier.

"Nous essayons d'inclure (notre projet) au sein du programme d'Etat de developpement (de l'aviation regionale en Russie). Par ailleurs, une serie de banques sont interessees. Nous preparons actuellement l'argumentaire economique et le 30 mars au plus tard, la question du financement de ce projet doit etre regle", a explique Viktor Medvedev, directeur general d'Aviamost.

Le gouvernement russe, face a la vetuste des appareils petits porteurs en Russie, a annonce le lancement d'un plan pour financer l'achat d'avions destines a equiper les compagnies regionales russes.

Aviamost compte notamment sur le fait que les autorites russes ont emis fin janvier un decret prevoyant que l'Etat subventionnera a hauteur de 30% l'acquisition d'avions de moins de 20 places.

M. Medvedev a indique chercher a faire inscrire les Skylander sur liste des avions qui pourront beneficier de cette aide de l'Etat russe, sans cacher que la tache serait ardue, la Russie souhaitant en premier lieu commander des avions de fabrication nationale.

Le Skylander est aussi en concurrence avec l'avion canadien de Viking air, le Twin Otter et des appareils americains.

"Je suis convaincu que (l'appareil francais) est la meilleure option", a souligne M. Medvedev.

Le prix --hors option-- du Skylander est de 6,5 millions d'euros par unite, soit au moins 260 millions d'euros pour 40 exemplaires et plus de 1,95 milliard si l'option etait levee.

M. Medvedev a explique, sans donner de montants, que les structures qui investiront avec lui dans l'achat de ces appareils "deviendraient coproprietaires" de son entreprise jusqu'a leur remboursement.

Selon lui, une dizaine de compagnies aeriennes russes sont deja interessees par les 40 premiers avions que Geci doit produire. M. Medvedev souligne que si "c'est rentable", les 260 appareils suivant seront assembles en Russie.

Geci, de son cote, doit adapter son projet Skylander aux conditions russes. L'avion devra notamment pouvoir voler par -55°C (contre -40°C dans le projet actuel) et etre capable de se poser la ou il n'y a ni pistes ni routes, la Russie manquant d'aerodromes.

Aviamost s'occupera de faire traduire toute la documentation technique, certifier l'avion en Russie, former les equipages et d'assurer la maintenance.

"Quand le premier avion decollera, ca deviendra plus facile de respirer", releve M. Medvedev, selon qui le premier Skylander doit voler entre novembre 2012 et fevrier 2013.

Source: 2012 AFP, Agence France-Presse (AFP)