



Luxembourg, October 25, 2018

Recommendations and proposals from the Luxembourg space industry association - GLAE to the new Government

GLAE - Groupement Luxembourgeois de l'Aéronautique et de l'Espace' encourages the new Government :

- to guarantee adequate financial resources for space development in the field of space communications and space resources (national programs, ESA programs) and to maintain Luxembourg's budget commitments to ESA, as defined and approved in the context of the national strategy.
- to target Luxembourg's ESA commitments to areas with sustainable growth potential for the country.
- to provide continuous political and financial support for the '**Spaceresources' Initiative** that has helped diversify Luxembourg's economy in an out-of-the-box niche that will have technological spillover effects in a large area of other industries and expand these industries' customer base on outer space, and eventually create a new ecosystem.
 - o to promote the Hague Space Resources Working Group in its efforts to accelerate the creation process of an innovation-friendly multilateral legal framework on the utilisation of space resources.
 - o to simplify and streamline authorisation processes through a harmonisation of the law on space mining and the bill on space activities. Instead of having multiple Ministries monitor space activities (including communication and frequency topics), responsibilities should be bundled to the greatest extent possible.
 - o to set up a working group, with the inclusion of commercial actors, to discuss ESA's future role within the 'Spaceresources' initiative.
- to further develop the activities of the **Luxembourg Space Agency**:
 - o Luxembourg Space Agency should become a one stop shop for all space activities through all ministries (economy, environment, transport, defense, agriculture, research...).
 - o Extend the Space agency staff/human resources along the needs and the ambitions, double in size the headcount resources (from 10...12 resources to 25 within the next 5 years).

- Continue the Space sector promotion activities by allocating sufficient budget and resources for communication, marketing material and participation to trade shows
- Develop strategic alliances with the space agencies of our neighboring countries: DLR (Germany), CNES (France), Federal Office for Space Policy in Belgium and at the regional level the Cluster Wallonie Space and Flemish Space Industries (Belgium).
- to guarantee well-functioning procedures with ESA (e.g. LuxIMPULSE program) for Luxembourg companies. GLAE suggests to detach Luxembourg Space Agency employees to ESA for 2/4 year assignments.
- to allow for a reinforcement in the value chain of Luxembourg companies and/or institutions by an inclusion of their foreign partners into the LuxIMPULSE scheme.
- to exploit the full potential of Luxembourg space competences in the defense and public security area.
- to consider colocation of space companies when growing out of the incubators with Luxembourg space companies to facilitate, training, technologies needs and offer possibility to share existing infrastructures (e.g. R&D and testing equipment).
- to continue investing in **education**:
 - Primary & Secondary Education: Develop the image of the Engineer, inform Teachers about ESA educative programs (Teach with Space, ESERO), include in school curriculums the necessity for school classes to participate to ESA-offered educational programs https://www.esa.int/Education/Teachers_Corner/Teach_with_space3
 - Higher Education: Further develop the uni.lu Master's Program initiative, create networks/bridges/exchanges between that program and (i) similar Master's in other European as well as Non-European universities, as well as (ii) Luxembourg-based and non-Luxembourg-based companies. Take benefit from the ESA programs addressed to Students/Universities: https://www.esa.int/Education/ESA_Academy continuing funding for the ESA Young Graduate Trainee Program.
 - strengthen exchanges with International Institutions to offer specialization courses with Uni.lu or to offer the infrastructure of our university to establish activities from the Grand Duchy.
- Establish concrete cooperation needs with other ESA member countries such as Switzerland, Poland, Czech Republic and other non-ESA member countries.
- Take full measure of Luxembourg's strategic and political position, notably in the orientation of European space policy, in the definition of roles of the European Commission and ESA and in the implementation of the Horizon2020 program and the future Horizon Europe program.

GLAE assures the new government that it will be ready to support all initiatives that aim to support the development of the Luxembourg space sector nationally and internationally.

About GLAE:

The "Groupement luxembourgeois de l'aéronautique et de l'espace" (GLAE) was founded as a non-profit making organization in February 2005.

GLAE gathers the following Luxembourg companies: GRADEL S.A., GT Satellite Systems S.A., HITEC Luxembourg S.A., ispace Europe S.A., LuxGovSat S.A., LUXSPACE S.à.r.l., POST Luxembourg, SES S.A., TELINDUS S.A. as well as the innovation agency LUXINNOVATION GIE. These companies represent some 500 employees in direct or indirect relation with the field of space activities.

GLAE is a partner of the Luxembourg Space Agency – LSA and helps the agency to fulfil its aims.

GLAE key sectors are:

- *Information and Communication Technology (ICT) and security activities;*
- *The ground segment, including the design and installation of antenna systems and ground management system engineering;*
- *Materials and components that can be used in the construction of the space segment;*
- *Integration of space systems with emphasis on microsatellites;*
- *Skills and know-how in the field of earth observation;*
- *Manufacturing processes.*