

# SMALL SATELLITES RELATED REGULATIONS IN SOUTH AFRICA

UN/SOUTH AFRICA SYMPOSIUM  
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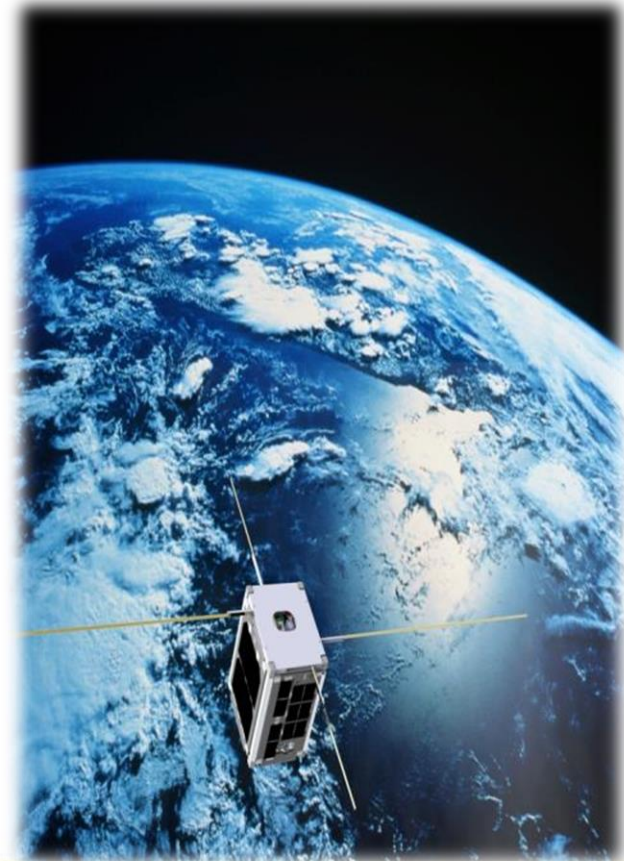


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# PRESENTATION OVERVIEW



- Current Legislation: Space Affairs Act no. 84 of 1993, as amended
- Relevant Definitions & Text in the Current Legislation
- Small satellites Consideration
- Legislation Review Outcomes
- Revised Legislation
- Conclusion

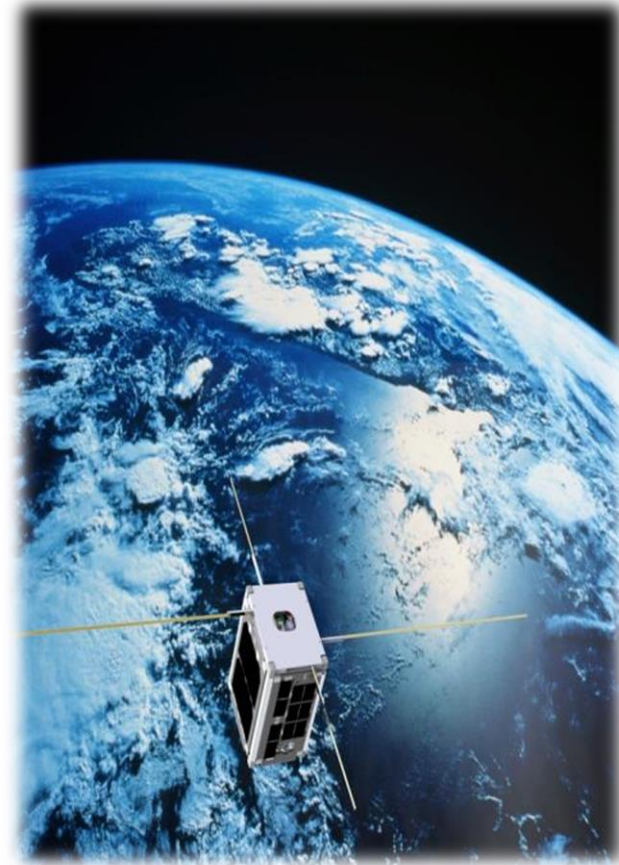


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# CURRENT LEGISLATION: SPACE AFFAIRS ACT NO. 84 OF 1993, AS AMENDED



## The main objects of the Act are:

- To establish the **National Space Policy** to be followed in the Republic
- To establish the **South African Council for Space Affairs (SACSA)** to **regulate space affairs** in the Republic
  - To **advise the Minister of Trade and Industry** on international obligations and related matters in space affairs;
  - To **authorise and supervise space activities** carried out within South Africa or by persons/entities under South African jurisdiction;
  - To establish and maintain a **National Register of domestic space entities**; (Launched in 2011 & three space objects registered)
  - To ensure **safety** of all space activities and peaceful uses of outerspace.



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# RELEVANT DEFINITIONS/ TEXT IN THE CURRENT LEGISLATION

**Spacecraft** : means any object launched for the purpose of being put and operated in outerspace

**Launching** : means placing or attempted placing of ANY spacecraft into outerspace or testing of a launch vehicle or space craft in which it is foreseen that the launch vehicle will lift from the earths surface



Licensing is mandatory for ANY launching within the territory of the country or another state by a juristic person incorporated in the country

Hence SA Legislation does not differentiate between the size of the Space Object

# SMALL SATELITES

- There is growing trend towards manufacturing and launching of satellites due to improvements in launch and satellite technologies
- This development is proving significantly advantageous for universities, small companies and developing countries – and South African space sector is no exception
- Potential consequence is that:
  - Number of satellites being built and launched will increase
  - Some players may not follow proper legal and regulatory procedures
  - More players from countries that have no regulatory framework

# SUMMARY OF FINDINGS OF THE REVIEW OF THE CURRENT ACT

- South Africa's current space programme has outgrown the legislative framework foreseen in the SASAA of 1993;
- The current regulatory framework does not adequately address national development needs;
- The Act does not cover the regulation of space applications such as Earth observation, communications or navigation or the use of satellite derived information;
- There is a need for Regulations to clarify certain aspects of implementation of the Act.



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# DRAFT LEGISLATION: Scope of applications

The new draft bill will regulate the following space activities:

- Operation of a space facility;
- Manufacture of space objects;
- Launch of space objects into outer space;
- Operation and control of space objects in orbit;
- Re-entry of space objects;
- Space applications and space exploration, through regulations, for attainment of the objects of the Act.



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# OBJECTS OF THE ACT

**Establishes the South African Space Regulatory Council SASREC ( the Space Council) as a national competent authority to regulate space affairs**



- advise the Minister on regulations or any matter that may have an influence on space affairs;
- supervise and implement matters arising from international conventions, treaties and agreements, ratified by the Republic;
- issue, amend, suspend or revoke licences;
- oblige persons & authorities involved in the space industry to register with Council;
- provide for the appropriate and widest possible publication of information concerning the activities of the Council; and
- perform any other activity with a view to contributing to the effective achievement of the objects of the Act.



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# OBJECTS OF THE ACT

Establishes  
**SASREC**  
to issue licences  
or amend, suspend  
or revoke



- Emphasises that **all** space activities shall be authorized by the Space Council through a licence;
- Deals with change of ownership and surrendering of a licence as authorised by the Space Council;
- Introduces licence fees, processes and procedures that may be prescribed by the Minister;
- Outlines conditions under which Space Council has the prerogative to grant, refuse, amend, suspend and revoke licences;
- Identifies the types of licences that may be issued:
  - Space Launch licence
  - Space Facility Licence
  - Re-Entry licence



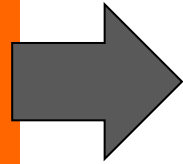
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# OBJECTS OF THE ACT

Promote the development of space capabilities that address socio-economic needs of the Republic.



- The Space Council will maintain Space National Registry with information of space objects licensed under the Act;
- All persons and authorities involved in the space industry must :
  - Register space capabilities with the Space Council through a Space Council Compliance register in order for government to enhance and co-ordinate the space industry and its capabilities.
- Furthermore, it is envisaged that incubation/clustering of space institutions /industries will be considered as per **the government** Policies.

# OBJECTS OF THE ACT

**Implementation of the Liability Convention: Introduces insurance clause for compensation of damage or loss resulting from the conduct of space activities**



South Africa ratified the Liability Convention and has responsibility of its implementation.

- Emphasises obligation on any person conducting space activities to obtain and maintain a liability insurance against any liability that might incur under this Act;
- Introduces compensation payment for any damage to third parties that the launch, operation or return may cause;
- This obligation does not apply when government is undertaking space activities;
- Introduces Insurance waivers such as:
  - the recommendations by the Council to Minister on consideration of exemptions on a case by case basis from one or more provisions of the Act on conditions that overlap with other regulations or
  - where a duplicate regulatory environment administered by other regulatory authority e.g. NPC, NCACC.



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# REGULATIONS IN RELATION TO SMALL SATELLITES

- The South African space law does not differentiate regulations based on size of space object
- Small satellites, irrespective of their size are governed by current international space legal regime.
- Secondly, the launching and/or operation of such satellites constitute space activities and are subject to such legal regime.

# REGULATIONS IN RELATION TO SMALL SATELLITES

- South Africa has manufactured a number of satellites as follows:
- SUNSAT -63 kg not licensed
  - SUMBANDILASAT- 80kg was licensed by SACSA
  - 3 Cube SATS:
    - Tshepiso Sat was also licenced
    - QB 50 Contribution: N-Sight 1 & ZA-Aerosat were licensed in
    - Belgium

# CONCLUSION

- The licensee is required to comply with several broad requirements related to South Africa's international obligations
- *In reality, it will be difficult to strictly apply the requirements of the law to small satellites e.g. requirements related to insurance*
- On option is to focus the nature and scope of applicable regulatory regime on 'capability' instead of size for licensing requirements

THANK YOU

Ms N Majaja



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