International Context
(South Africa’s International Obligations & Space Affairs Act)

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Introduction

- Pursuant to Articles III and VI of the Outer Space Treaty, to which South Africa is a Party:

- South Africa must carry out its space activities in accordance with international law (i.e. treaty law, customary law and the UN charter).

- South Africa bears international responsibility for its national space activities (whether carried on by governmental agencies or by non-governmental entities)

- South Africa is responsible for assuring that its national space activities are carried out in conformity with the provisions of this Treaty.

- South Africa is obliged to assure that the space activities of its non-governmental entities (i.e. private juridical persons & individual natural citizens) are carried on subject to governmental authorization (licensing) and continuous supervision.
These and other international obligations are:

- implemented through national space laws and regulations, and
- imposed upon private entities through some sort of licencing system established under such laws and regulations.

Therefore, South Africa’s Space Affairs Act (the Act) must contain adequate provisions that appropriately comply with South Africa’s international obligations.

I have examined the studies and reviews that were forwarded to me.

In my opinion, they have addressed several important issues and contain very good suggestions for the improvement of the Act.

In this presentation, I intend to discuss only those points that are not addressed & those regarding which I have different perspective.
Compliance with international obligations and commitments

- Internationally, governance of space activities is actively being supplemented by the so-called ‘soft-law’ instruments in the form of declarations, resolutions, guidelines, best practices, technical standards, regulatory procedures, etc.

- They are NOT ‘legally’ binding, but have significant persuasive value (i.e. they are believed to be ‘politically binding’).

- Therefore, the often used wording in the Act “terms of international conventions, treaties or agreements entered into or ratified by the Government of the Republic”, may be replaced with simple and standardised wording like “international obligations, commitments and foreign policy interests of South Africa”.

• This suggested wording would cover both specifically space and other relevant non-space related hard-law (legal) obligations and soft-law (political) commitments undertaken by the Government of South Africa.

• This suggested wording may be used to indicate as one of the principal aims of the Act, to determine space policy, to impose conditions of a license, etc.
Space to be explored and used for “peaceful purposes”

- South Africa is legally obliged to use only the moon and other celestial bodies “exclusively for peaceful purposes,” which essentially means for “non-military purpose.”

- South Africa is NOT legally obliged to use outer space per se “exclusively for peaceful purposes.”

- South Africa is politically expected to use space for “peaceful purposes.”

- There is no legal prohibition against exploring and using space for military purposes.
• In this context, the only legal prohibitions are against:
  • (a) nuclear explosion in space;
  • (b) placing in orbit around the earth nuclear or other kinds of weapons of mass destruction;
  • (c) installing such weapons on celestial bodies; or
  • (d) stationing such weapons in space.

• The use of space for military purposes was the first, still remains significantly dominant and is expected to expand space activity in the future.

• Internationally, there is a strong trend towards making more use of commercial and civilian satellites for military purposes.

• This is mainly due to the fact that the concerned States wish to support their commercial satellite operators.
# Major civilian satellites in U.S. military use

[http://www.milsatmagazine.com/cgi-bin/display_article.cgi?number=919362418](http://www.milsatmagazine.com/cgi-bin/display_article.cgi?number=919362418)

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*Table 3 — Major civilian satellites in U.S. military use*
• It is difficult, if not impossible, to distinguish between commercial, civilian, humanitarian and military activities when carried on with the use of same satellite system.

• Within the international context of space activities, ‘peaceful purposes’ are generally considered to include military purposes, but to exclude aggressive activities.

• Therefore, in order to economically support South African commercial space industry, the stated goal of the Act should be to promote space activities for “peaceful purposes”, but not “exclusively peaceful purposes.”
Participation in the formulation of space-related international obligations and commitments

- It is imperative that South Africa complies with its international obligations and commitments.

- However, it is more important that the Government ensures that its international obligations and commitments are formulated in order to protect and enhance space-related interests of South Africa.

- It is believed that the SACSA (DTI) and the SANSA (DST) are/would be county’s top expert institutions in space-related matters.
• Their (or their respective departments’) participation in the discussions (formulation) of space-related international obligations and commitments may be specifically identified in the Act.

• This is in line with Section 5 of the Protocol on Governance of Space Affairs in South Africa between Ministries of Trade & Industry and Science & Technology.

• Official delegations for such discussions may possibly be led by the department of foreign affairs.

• Such delegations may also be consisted of representatives of other appropriate government departments or agencies, like defense, telecommunications, etc.
Broad scope of South Africa’s international responsibility

- As noted earlier, South Africa is internationally responsible for its national activities in outer space.

- This responsibility is quite broad, thus all possible space activities should be regulated (licensed) in order to remain within the scope of South Africa’s international obligations and commitments.

- Firstly, it appears that under Sections 11 and 26 of the Act, the Government of South Africa or its official agencies are required to seek licences.

- In some jurisdictions (like Canada), such requirement is normal. However, in other countries (like the US), such requirement is not imposed.
• There is no international obligation of South Africa to require authorization (licenses) for governmental space activities.

• The term “non-governmental entities,” is generally understood to include an individual (i.e. natural person) and juridical person.

• However, Section 11 of the Act imposes licensing requirement only on juristic persons that are incorporated or registered in the Republic.

• Therefore, natural persons (individual citizens) of South Africa should also be required to comply with the licencing requirement, if their space activities are being carried on from outside South Africa. Such requirement has become a standard international practice.
• Secondly, a license is required only for the launching from the territory of the Republic or the territory of another State.

• Section 11 of the Act may be expanded to include launching from the high seas, aircraft, and spacecraft. Such launchings are currently taking place and will be more so in the future.

• Thirdly, aerospace transportation systems for human travel to and from space (and launching of small satellites) will become common soon. Therefore, the Act may be expanded to include aerospace operations and re-entry vehicles.

• Consequentially, the term ‘operation of a launch facility’ in Section 11 (1. c) of the Act may be expanded to cover operation of spaceports.
Launching from the high seas, aircraft, and spacecraft as well as aerospace systems.
• Since, aerospace transportation systems will be seamlessly flying through air space and outer space. Their regulation should be coordinated with governmental authorities that regulate aviation.

• Fourthly, under Section 1 of the Act, the definition of "space activities" includes the launching of spacecraft and the operation of such craft in outer space.

• Under Section 11 (1.d) of the Act, a private company (juridical person) that plans to operate a telecommunication satellite will be required to obtain a license under the Act.

• That company might also be required a second license under another law governing telecommunications. If this is true, this requirement may be somehow streamlined to lessen the regulatory burden on private companies.
• **Fifthly,** licences may be categorised into various types (i.e. licenses, permits, authorisations, etc.) to be used for several purposes depending upon the nature of the space activities involved.

• This may be done for launching or operation of **small satellites** or for use of **small launch vehicles** from aircraft, or for **experimental purposes**, etc.
On-orbit transfers of spacecraft

- On-orbit transfers of spacecraft are becoming common and will be more so the future.

- Under international law, only a launching State can register a space object launched into outer space, both nationally and internationally.

- Change in the ownership of a satellite will eventually result in change of its State of Registry, but not its launching State(s).

- For example, if a change occurs in the ownership of a South African satellite when transferring it to a private company of another State, which was not a launching State at the time of the launch of the satellite, the legal status of South Africa will remain as a launching State for that satellite.
• International legal rule appears to be that “once a launching State is always a launching State.”

• If any damage is caused by the transferred satellite, South Africa could possibly be held liable as a launching State.

• Therefore, there should be a provision in the Act, which requires all parties involved in an on-orbit transfer of satellite to conclude an appropriate agreement under which South Africa must be reimbursed if it is obliged to pay compensation for the damage caused by the transferred satellite.

• In addition, if the on-orbit transfer of South African satellite is subject to ITARs (International Traffic of Arms Regulations of the US), South Africa must procure approval of the concerned American authorities before such transfer becomes valid. There must be a provision in the Act that deals with such legal and procedural matters.
And FINALLY
Search, rescue & return of astronauts & space objects

- South Africa is under international obligation to:
  - take all possible steps to rescue foreign astronauts or other personnel of a foreign spacecraft, if found in the South African territory due to accident, distress, emergency or unintended landing;
  - take practicable steps to recover the foreign space object or its component parts, if discovered on the South African territory; and
  - safely and promptly return them to representatives of the launching authority.
Therefore, there should be **appropriate provisions in the Act** for **search, rescue and return** of foreign astronauts and space objects as well as for **investigation of national** space-related accidents.

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Thanks for your attention!

Questions?