



PERMITTING DECISION SUMMARY

SMOG-P

Budapest University of Technology and Economics

1. Budapest University of Technology and Economics have developed a novel spectrum monitoring payload, built by students using off-the-shelf materials.
2. The SMOG-P 'PocketQube' is a miniaturised satellite with a size of 125cm³. The primary mission is to investigate the effectiveness of thermal insulation properties covering a section of the satellite.
3. The satellite will also examine a form of pollution called electro smog; part of electromagnetic waves which are radiated by electrical equipment. This electro smog is not observable to human senses, but is detectable with sensors.
4. Payloads are permitted in line with the [Outer Space and High-altitude Activities Act 2017](#) (OSHAA) and the [Outer Space and High-altitude Activities \(Licences and Permits\) Regulations 2017](#).
5. Each payload has been approved by the Minister for Economic Development, on advice from officials across agencies. When approving payloads, the Minister needs to be satisfied that:
 - a. The applicant has taken and will continue to take all reasonable steps to safely manage the operation of the payload;
 - b. The proposed operation of the payload is consistent with New Zealand's international obligations; and
 - c. The applicant has an orbital debris mitigation plan that meets prescribed requirements.
 - d. Despite being satisfied of these matters, the Minister may nevertheless decline a permit if he is not satisfied that the proposed operation of the payload is in New Zealand's national interest.

Date Granted	Authorisation Number	Payload Name	Owner or Operator	Country of Origin
30 October 2019	190069-PPT	SMOG-P	Budapest University of Technology and Economics	Hungary



**NEW ZEALAND
SPACE AGENCY**



PAYLOAD PERMIT
190069 - PPT

I, Hon Phil Twyford, as Minister for Economic Development, acting pursuant to section 17 of the Outer Space and High-altitude Activities Act 2017 grant a Payload Permit to:

**Budapest University of Technology
and Economics (BME)**

BME is authorised to launch and operate one 1/8U PocketQube satellite ('SMOG-P'), for the purpose of technology demonstration.


This permit will take effect upon signature, and will expire
(i) three years from the date of signature, or

(ii) if the payload is launched, when the payload is no longer in the Earth's orbit.

This permit is granted subject to the Outer Space and High-altitude Activities Act 2017 and all regulations under the Act, and the conditions of the permit.

30 OCT 2019

Dated


Hon Phil Twyford
Minister for Economic Development

New Zealand Government