Delft University of Technology

# Master Internship at SkyfloX B.V.

*Telecommunications Engineer for a feasibility study*

## *Company Profile*

**Company:** SkyfloX is a newly founded ESA Spinoff, installed in the ESA BIC in Noordwijk, which is developing the ORCA concept. ORCA is an ESA patented alternative platform concept for Smallsat-like Payloads, forming constellations. This concept has been proposed to address issues such as launch costs, debris, environmental impact, coverage and lifetime of Smallsat constellations. This alternative platform concept will bring Telecommunications/Earth observation applications to a new level. The result will be a more commercial deployment of Smallsat-like constellations

**Location:** ESA BIC Noordwijk, Kapteynstraat 1, SBIC Building suite 140

**Website:** None yet

## *Assignment for Internship only*

**Detailed description of work to be done:**

The Telecommunications Engineer will be involved in the identification and adequacy evaluation (including commercial aspects) of small mass/size telecommunication transmitters/receivers and antennas (such as those developed for cubesats/smallsats) for high altitude platform applications, in line with pre-defined requirements/specifications at payload level:

The tasks include support in the areas:

- Derive specifications for the Tx/Rx equipment from the overall payload requirements
- Review/select among existing, or shortly available, Tx/Rx equipment
- Review small size antennas (preferably planar), as well as blade antennas
- Review/select data handling equipment (storage and processing capabilities)
- Defining the general architecture and operating principles of the telecommunications and data handling part of the payload
- Participate in the evaluation of the overall performance of the payload
- Contact suppliers to obtain specifications /prices;
- Support flight testing of selected equipment

**Required profile of candidate:**

Applicants for this internship should have a degree in engineering or physics, with focus in telecommunications and/or electronics.

Familiarity with in UHF, L-Band or millimetric wireless techniques and experience in hardware development and performance analysis are desirable.

The working language is English.

## *Period of the internship*

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| Preferable start date | : 1 March 2017 |
| Duration | : Up to 6 months |
| Remuneration | : Allowance and travel costs to be negotiated |

## *Application*

Students who are interested can send their CV and motivation letter directly to:
L.Rammos@skyflox.eu