



DLR – Raumfahrt-Agentur
REXUS / BEXUS-Studentenprogramme

Maria Roth
Königswinterer Straße 522-524
53227 BONN
Telefon: 0228 447 324
maria.roth@dlr.de

Form B: REXUS / BEXUS EXPERIMENT TECHNICAL OVERVIEW

No. _____

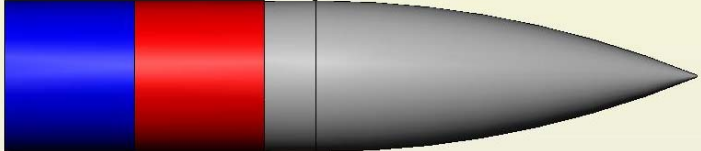
In Form A I / we applied with my /our experiment on

REXUS

BEXUS

Team/Experiment Name	
New Members name, branch of study, university	<i>Are there any new members in your team?</i>

Organisation	
Describe the Organisation of your project.	<i>How will you organize/distribute work within your team? Do you have a workshop/a laboratory to work? Do you have all the material and equipment which is needed for your experiment? Do you know how to finance all your expenses? Who will support you (professors, institute, sponsors, others)?</i>
Describe your outreach programme for before, during and after the REXUS/BEXUS flight campaign?	<i>How are you planning to present your experiment to the public? Newspaper, local radio, webpage, presentation at the university,...</i>
Mechanical Interface	
Describe your experiment set-up!	<i>Describe here the experiment. This part should link the scientific objective to the experiment itself. Please explain how you are</i>

	<p><i>going to fulfil the scientific goal.</i></p> <p><i>This part gives you the chance to update your experiment set-up description from Form A. If you have CAD drawings, attach them to this Form B.</i></p>
<p>Update the dimensions and mass of you experiment!</p>	<p><i>Update specifications that you have done in Form A</i></p>
<p>Define preferred position of your experiment:</p>	<p><i>REXUS:</i> <i>Define preferred position in the rocket, bottom module, top module or nosecone section. Do you think that you need access to the outside environment? Holes? Hatches?</i></p> <div data-bbox="582 846 1401 1086" style="text-align: center;">  <p>Bottom module Top module Nosecone section</p> </div> <p><i>BEXUS:</i> <i>Define preferred position in the balloon, inside or outside the gondola or at the flight train.</i></p>
<p>Do you use any inflammable, explosive, radioactive, corrosive, magnetic or organic products?</p>	<p><i>Precise if you know that you will use a product with this characteristic. This is not a disqualification question.</i></p>
<p>Do you use a laser?</p>	<p><i>Which class? Is the lather path securely contained? This is not a disqualification question.</i></p>
<p>Is your experiment airtight? Are parts of your experiment airtight?</p>	<p><i>Yields to a pressurized experiment (1 bar) when the vehicle reaches higher altitude with lower pressure values.</i></p> <p><i>This question should remind you that there will be a very low ambient pressure environment for your experiment.</i></p>

<p>Do you use any motors?</p>	<p><i>Motors will cause vibrations and may create high start currents. Precise if you have further information on the motor you want to use.</i></p>
<p>Are there any hot parts?</p>	<p><i>Beside electronic parts that heat up. This is not a disqualification question.</i></p>
<p>Is there any moving part? Is the moving part reachable?</p>	<p><i>This is important for the preparation before launch. Access to the experiment will be discussed with EuroLaunch. E. g. for a moving part is a tappet.</i></p>
<p>Do you need any pressure systems from EuroLaunch before launch?</p>	<p><i>If you know that you need for example a pressurized nitrogen-bottle for you experiment before launch, please precise here. All pressurized bottles will be handled by EuroLaunch personal.</i></p>
<p>Electrical Interface</p>	
<p>REXUS only: Will you need the power supply by the REXUS service system?</p>	<p><i>REXUS power supply is described in the REXUS System Description. BEXUS experiments will not get power by the BEXUS system.</i></p>
<p>Will you need (additional) batteries? What do you need for charging?</p>	<p><i>Possible batteries are listed in the REXUS/BEXUS System Description. Explain why you want to use a different type of battery.</i></p>
<p>What is the electrical consumption of your experiment?</p>	<p><i>Estimate if possible...</i></p>
<p>REXUS Only: Do you need auxiliary power? Do you need a separate umbilical?</p>	<p><i>Auxiliary power for charging or consumption before launch is not standard. Precise if possible why you need auxiliary power.</i></p>
<p>Do you need Up- and</p>	<p><i>Will you downlink your data or store it during flight? Which type of data/datarate do you need? Do you need to downlink</i></p>

Downlink?	<i>separate lines/signals? Precise...</i>
REXUS Only: Do you need to use the REXUS TV Channel?	<i>There is only one channel available, only one experiment can use the tv channel. Why should it be your experiment?</i>
Describe the experiment actions during flight, such as timer or telecommand events!	<i>Precise ...</i>
Environmental Questions	
Is the experiment using wireless devices?	<i>Wifi (WLAN), Bluetooth, infrared, airport, data transmitters; Precise the type of devices and used frequencies</i>
Is the experiment using magnetic or electrical fields?	<i>Precise the type of produced field and the measured value of this field if possible.</i>
Could there be an electrostatic discharge?	<i>Is it part of the experiment? Precise if known....</i>
Is the experiment sensitive to light?	<i>Precise if known.</i>
Is the experiment sensitive to vibrations?	<i>Precise if possible...</i>
Is the experiment generating vibrations?	<i>Vacuum pump, rotating devices, etc.. Estimate the amplitudes and frequencies of the produced vibrations if possible...</i>
Safety Issues	<i>Is there anything else you could think of, that is maybe dangerous before, during or after the launch?</i>

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**Your text should be intelligible to engineers with general scientific background.
Please give special attention to the REXUS- resp. BEXUS-Manual before you write
your fill out Form B!**

Form A can be requested as Word file at the e-mail address mentioned above