



RLS-Sciences Project Presentation
Munich, 15 July 2016

**MUNICH
AEROSPACE**

Global Aerospace Campus

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Executive Board Member Munich Aerospace
Director of the Institute for Carbon Composites at the Technical University of Munich



MUNICH AEROSPACE

VISION

Pooling key competencies in the fields of aeronautics and space in the Munich area

PREMISE

Munich Aerospace was founded on 9 July 2010 as a non-profit organisation

SPONSORED BY

Bavarian State Ministry of Economic Affairs, Media, Energy and Technology

Bavarian State Ministry of Education, Science and the Arts

Members

Technical
University
of Munich



der Bundeswehr
Universität  München



 **Bauhaus Luftfahrt**
Neue Wege.

Activities

RESEARCH

- Fostering **collaborations** between aerospace institutes in Munich
- **Recognition** as Munich Aerospace Research Group

TEACHING

- Cooperation in teaching and **mutual credit recognition** between Technical University of Munich and the University of the German Armed Forces
- Developing **new academic programmes**

NETWORKING

- **Networking events** for researchers and private sector representatives
- **Seeking solutions** for partnership activities

Research

Autonomous Flight

Advanced Aerospace Communications and Navigation

Public Security

Green Aerospace

Key Topics

Safety in Orbit

Aviation Management

Geodetic Earth Observation

Research Network



Location

Ludwig Bölkow Campus was initiated in 2012 by the **Free State of Bavaria**, **research** and **industry partners**. The Campus is located on the Airbus site to the south of Munich.

The Ludwig Bölkow Campus

- is a hub for international aerospace researchers and experts,
- links teaching, science and private sector
and
- boosts innovation – from idea to product.



Location

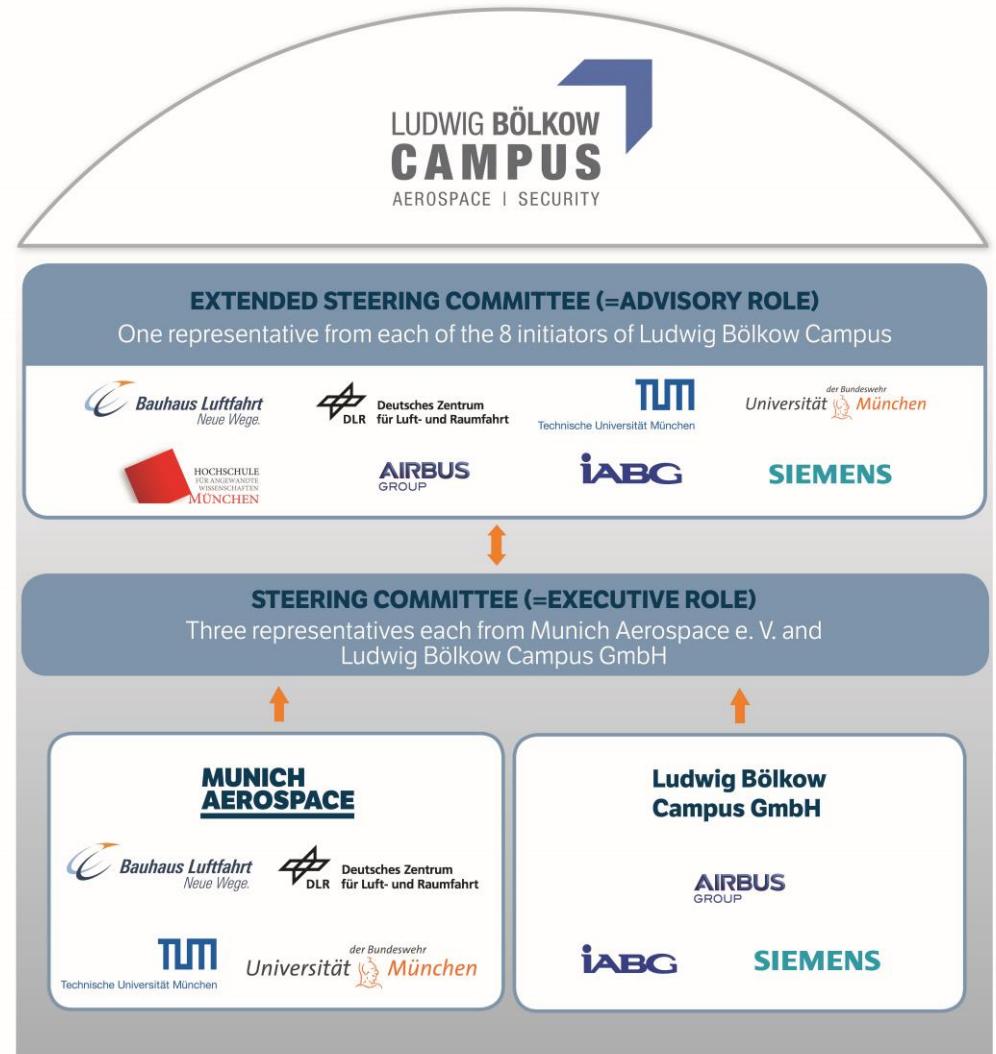
Ludwig Bölkow Campus
is managed by

- **Munich Aerospace**,
representing the
research community

and

- **Ludwig Bölkow
Campus GmbH**,
representing the
private sector.

**MUNICH
AEROSPACE**



Project Presentation



Global Aerospace Campus

Teaching – Networking – Research

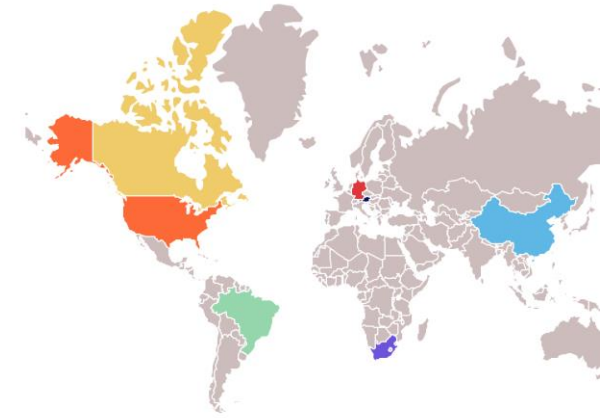


Global Aerospace Campus

Vision

Facilitating partnership activities between aerospace researchers from the RLS Network and raising the profile of our regions as distinguished aerospace centres

Concept



1. Teaching

Virtual Aerospace Campus

Massive Open Online Courses (MOOCs) with contributions from each partner region on the RLS MOOC Channel

2. Networking

Summer School focused around select research topics determined by a different region each year

3. Research

Publishing platform for latest content and research

Presentation platform for researchers

1. Teaching

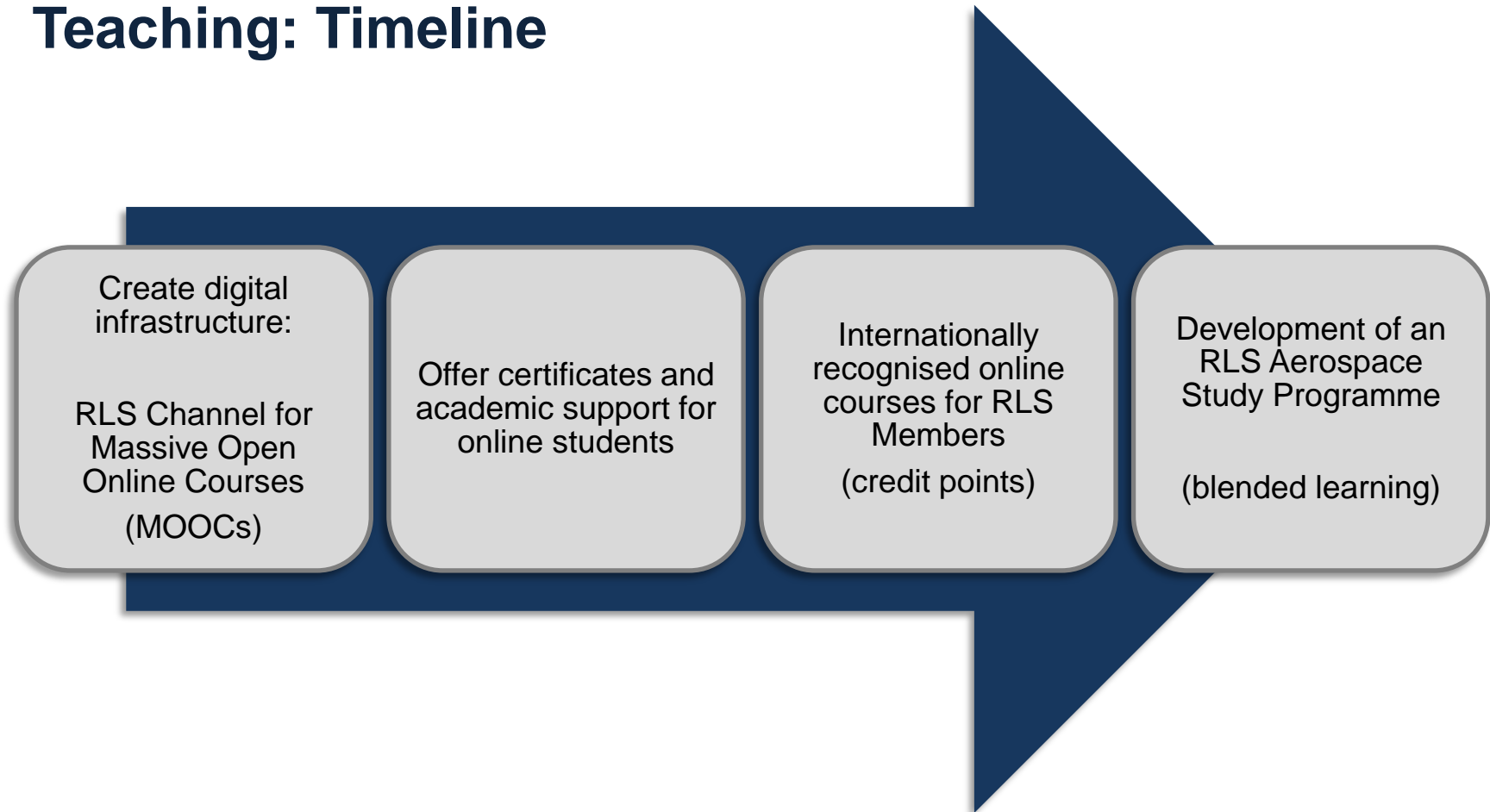
2. Networking

3. Research

4. Long-term Plans

5. Next Steps

Teaching: Timeline



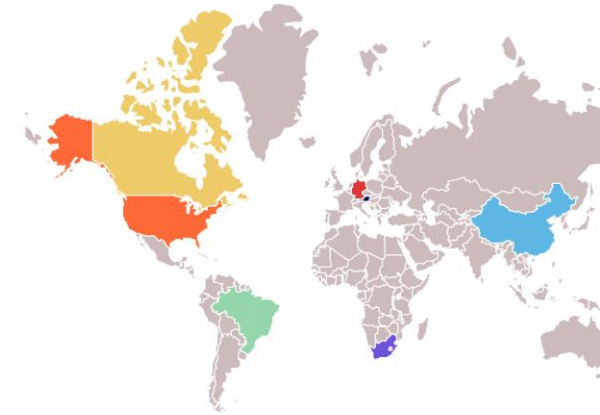
1. Teaching

2. Networking

3. Research

4. Long-term
Plans

5. Next Steps



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Prospects

5. Next Steps

Networking

RLS Networking Events are held to strengthen ties through personal interaction at annual partner events conducted alternately in each partner region



1. Teaching

2. Networking

3. Research

4. Long-term
Plans

5. Next Steps

Global Aerospace Campus

1st RLS Summer School 2016

- 1st RLS Summer School was held from 22 to 24 June 2016 at Lake Ammer, Bavaria
- Main topic: Autonomous Flight
- 100 attendees, for 3 days

Concept

- International speakers and guests from the scientific and private sectors
- 1 main topic
- 2 days of lectures
- 1 day exclusively for members
- Interdisciplinary dialogue
- Opportunity for conversation and networking



1. Teaching

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3. Research

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Plans

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Global Aerospace Campus

1st RLS Summer School 2016



Summer School // 22 - 24 June 2016 // Herrsching at Lake Ammersee

**MUNICH
AEROSPACE**

Flying Robots

Concepts and Challenges of Aerial Autonomy

The reputation of Unmanned Aerial Vehicles (UAVs) is improving. An increasingly positive media coverage and a higher number of private users have influenced public acceptance. UAVs deliver parcels, help with ocean exploration and earth observation and can also save lives: whether it be floodings, environmental disasters, emergency rescues in the mountains or at sea – still, a currently unclear legal situation hinders the deployment of UAVs. Consequently, benefits and potential risks have to be addressed and investigated.

At the Munich Aerospace Summer School academic and industrial experts will examine the Summer School's key topic Autonomous Flight from various perspectives.

REGISTRATION AT MUNICH-AEROSPACE.DE

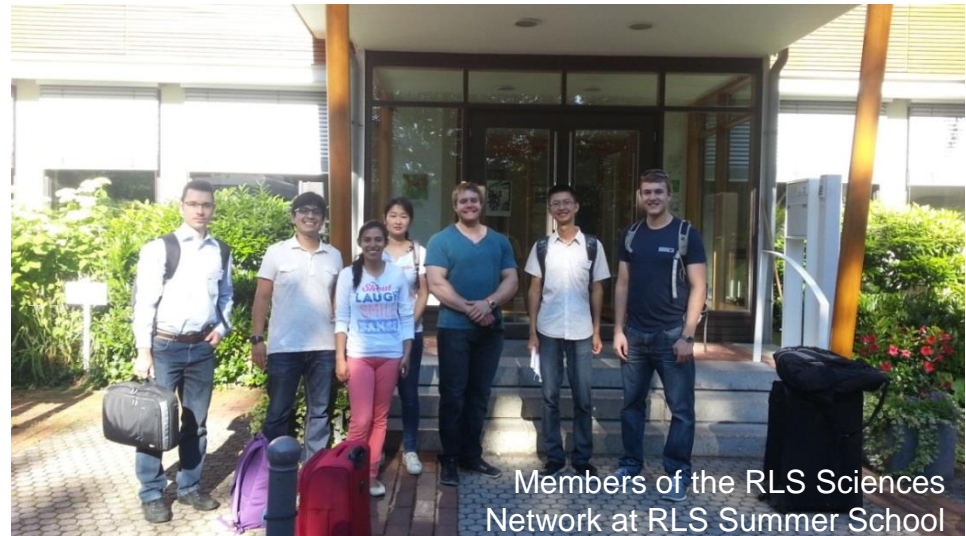


Universität der Bundeswehr München



Deutsches Zentrum für Luft- und Raumfahrt

Bauhaus Luftfahrt
Neue Wege.



Members of the RLS Sciences
Network at RLS Summer School

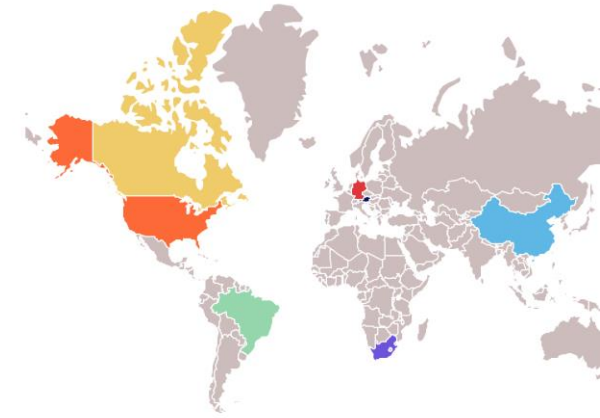
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The virtual aerospace campus is an open-access
online presentation platform for **aerospace**
researchers from the RLS Network

1. Teaching

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Research: Goals

The Global Aerospace Campus

- **strengthens the profile** of aerospace research activities,
- greatly accelerates the **releasing of research results**
and
- **diminishes the gap** between teaching and research.

1. Teaching

2. Networking

3. Research

4. Long-term
Plans


5. Next Steps

Long-term Plans

- Develop an **RLS Aerospace Online Study Programme** with attendance phases (blended learning)
- Establish an **alternating RLS Summer School Event**
- Offer a **global exchange programme** for aerospace students including
 - **internships** with industry partners
and
 - establishing a **mobility programme** for aerospace students modelled on the European Mobility Programme *Erasmus*
- Offer an **exchange programme for RLS Aerospace professors**

Next Steps

Determine the next
Summer School host
region



Initial online course
offerings



Planning for the RLS
Aerospace Study
Programme

Thank you for your attention.