

# **Talent-Centered Approach: The Cultivation and Development of Talents for Aviation Industry**

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- 1 Challenges**
- 2 Measures**
- 3 Prospects**

# 1.1 Historical Challenge: World Civil Aviation & China' s Civil Aviation



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Ultra-quiet, Supersonic, Super-economical, Ultra-safe

2050



Equipment

Talent

Standard

Civil Aviation in  
Europe and America

Homemade equipment

C929 initiated

C919 in operation

ARJ21 in operation

Birth of COMAC&ACAE

Establishment of EASA  
Airbus VS Boeing

Establishment of FAA

Issuance of CAR

Equipment

Talent

Standard

Import

Training

Army-run  
period

Leading the  
world

Airbus  
Boeing  
COMAC

Formulating  
regulations

Issuing  
CCAR

40-year  
pursuing  
self-reliance

**Upgrading & Leading**  
in talent cultivation and  
R&D: with homemade  
equipment and standards &  
regulations going global

30-year  
following  
up

**Importing**  
equipment & regulations,  
cultivating talents in  
operations and maintenance

30-year  
starting

**Starting from scratch:**  
cultivating talents in  
maintenance, ATM, transport  
management

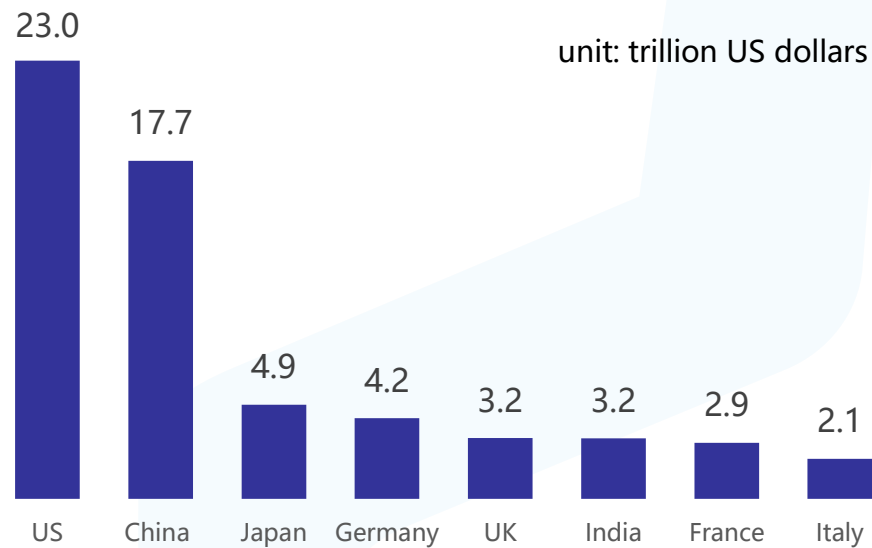
China' s Civil Aviation

Development of Civil Aviation Education

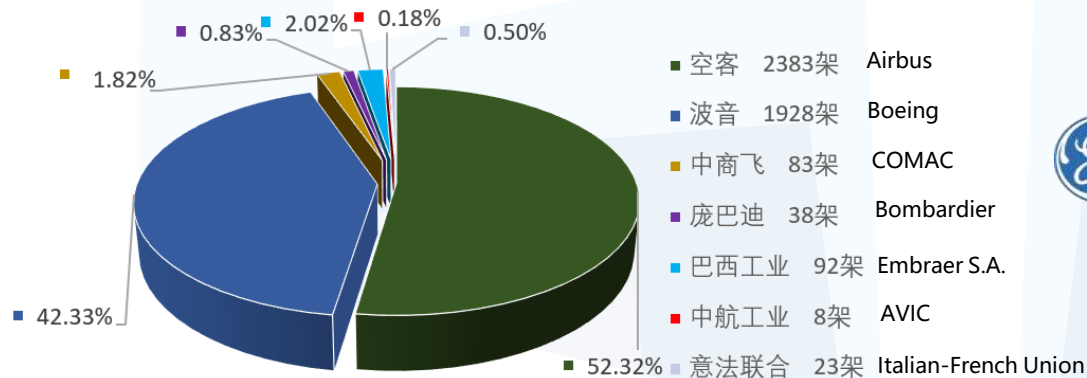
## 1.2 International Challenge: the “Airbus-Boeing-COMAC” Aviation Landscape



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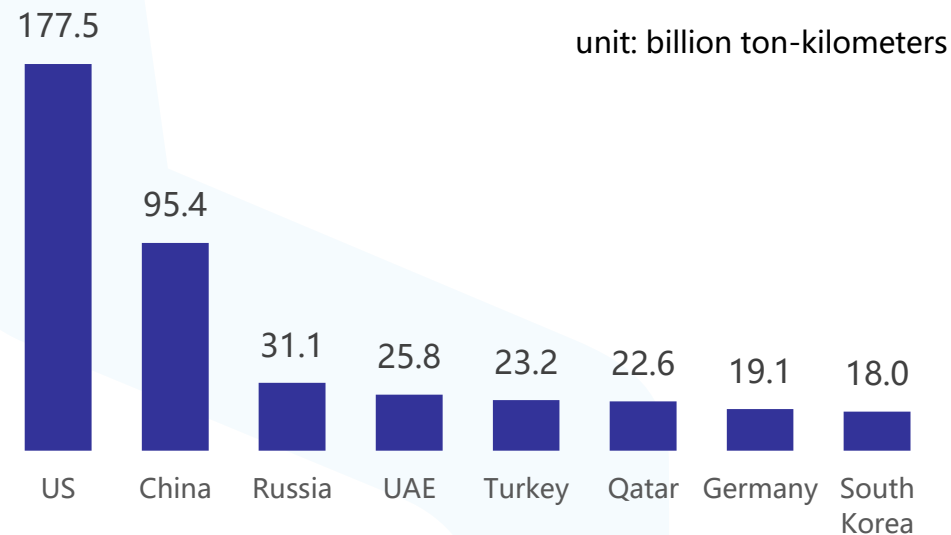


Top 8 countries by GDP, 2021



截止于2023年1月

Percentage of aircraft manufacturers in China's civil aviation in early 2023



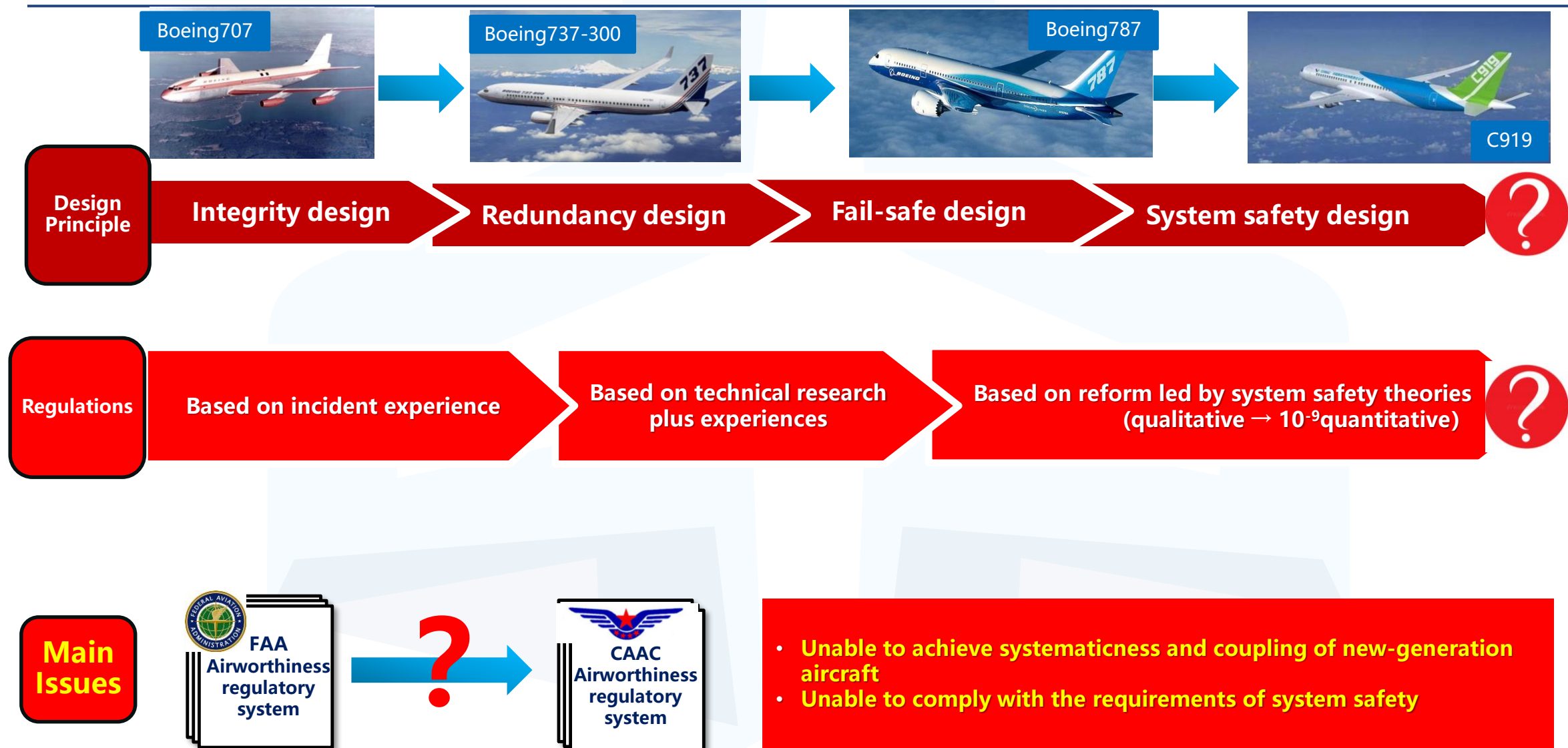
Top 8 countries by turnover volume in civil aviation transport, 2021

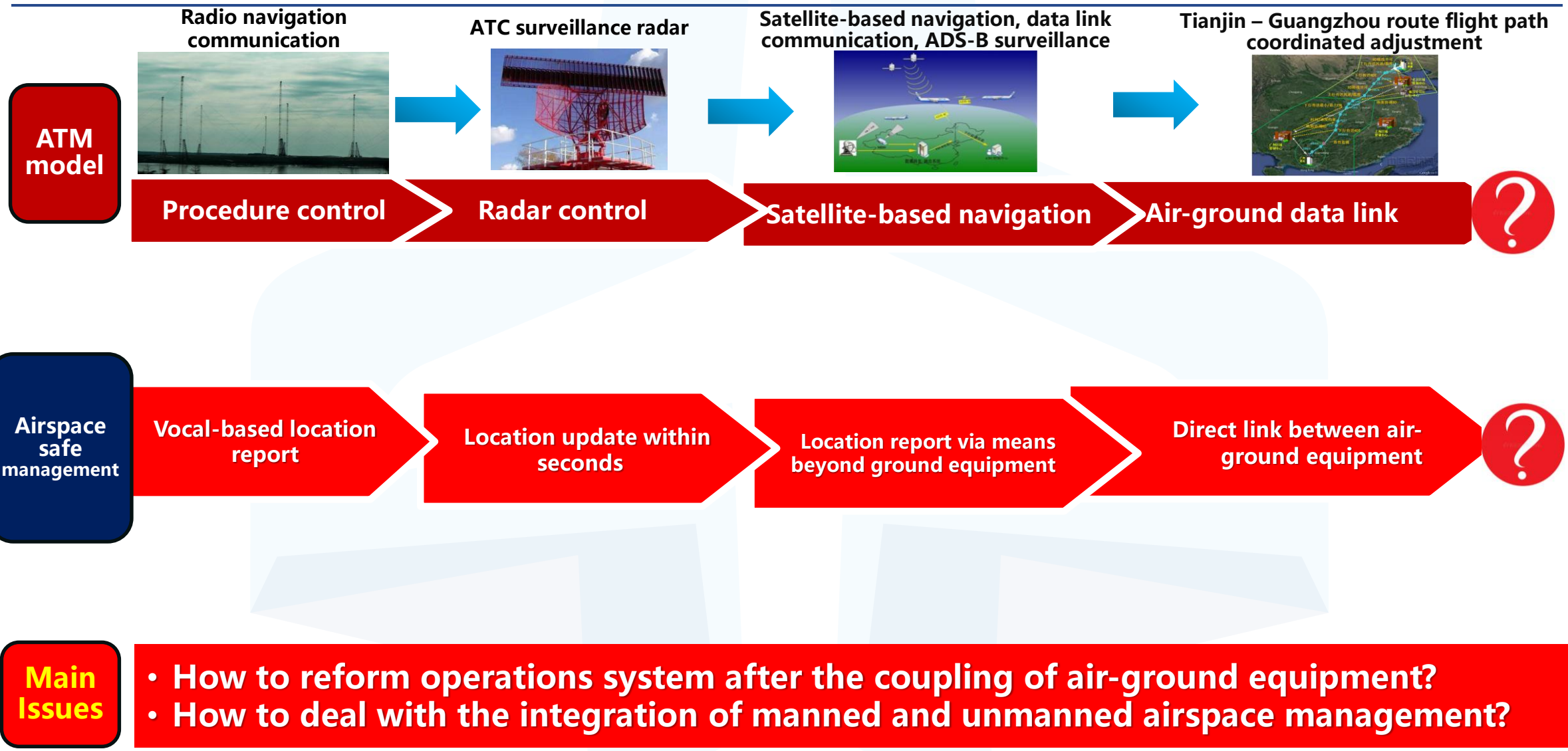


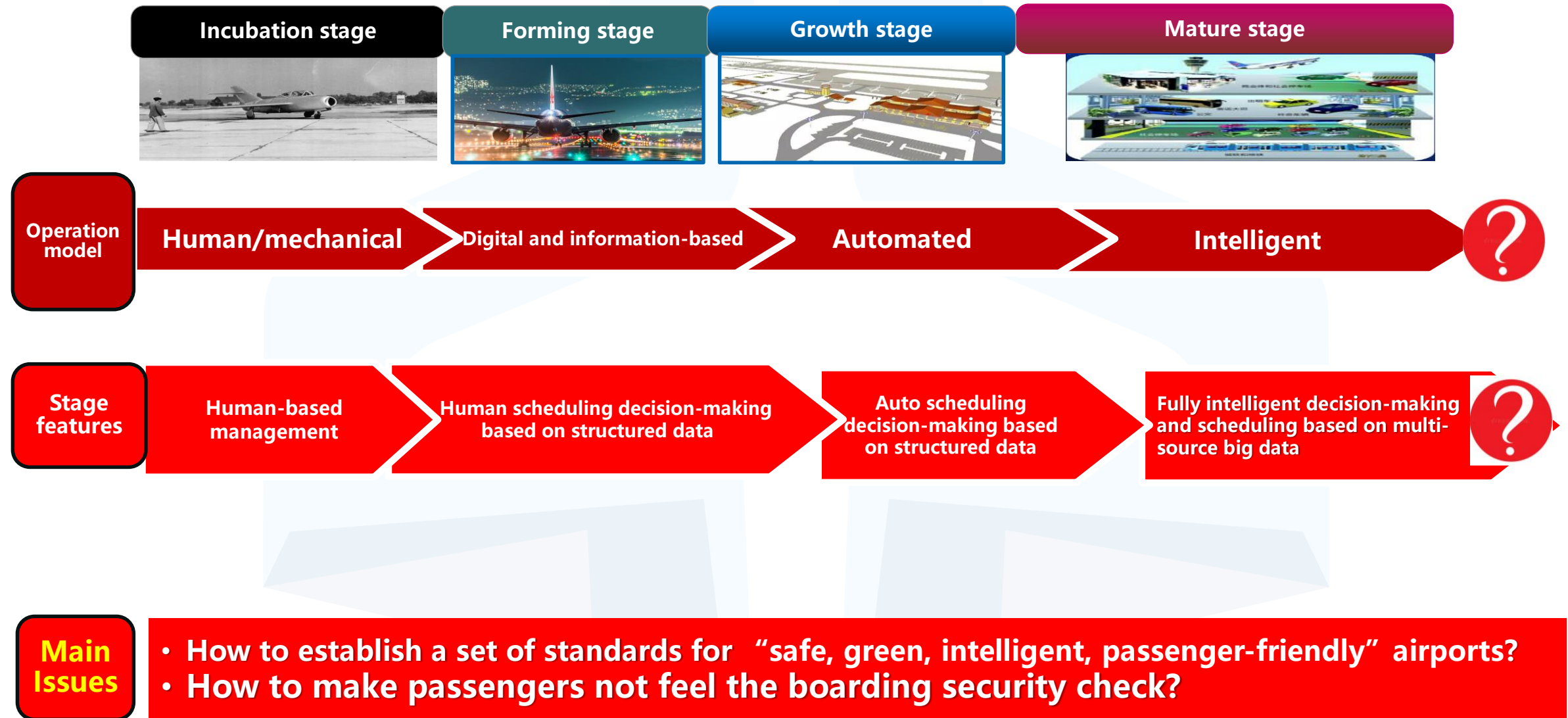
Connectivity among the participating countries of Belt and Road Initiative

Status quo of international civil aviation rules and regulations

# 1.3 Technical Challenge: Safety and Airworthiness of Civil Aircraft Presenting New Demands for Talents (1)









personal entertainment



production



transport at both ends



network transport



UAV

Development

Instant information capture

Daily information capture

Short-distance point-to-point transport

Medium and long distance network transport



China's concept

Prudent, tolerant and scattered

Exploring to build up strength

Technology-led, properly regulated, and unmanned & manned

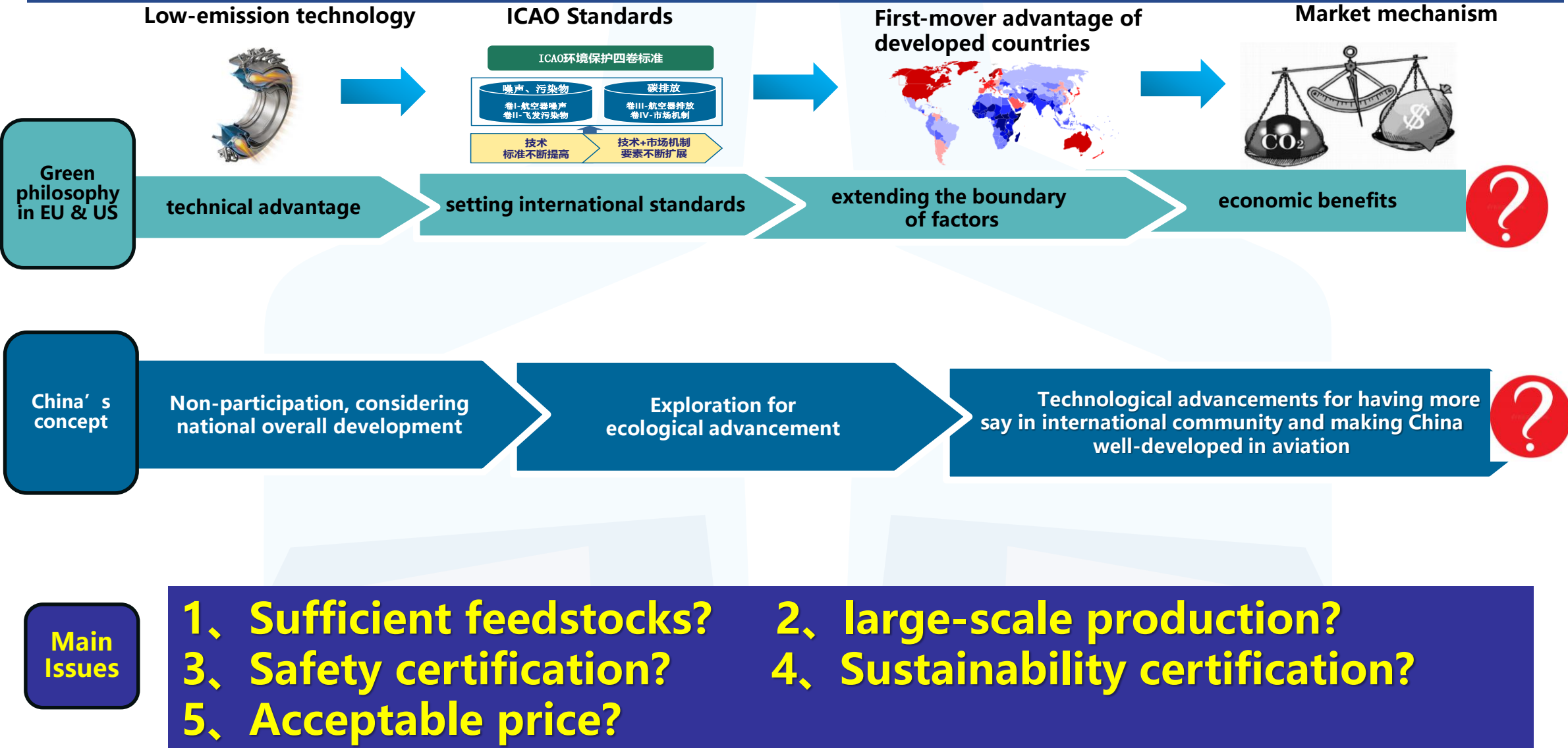


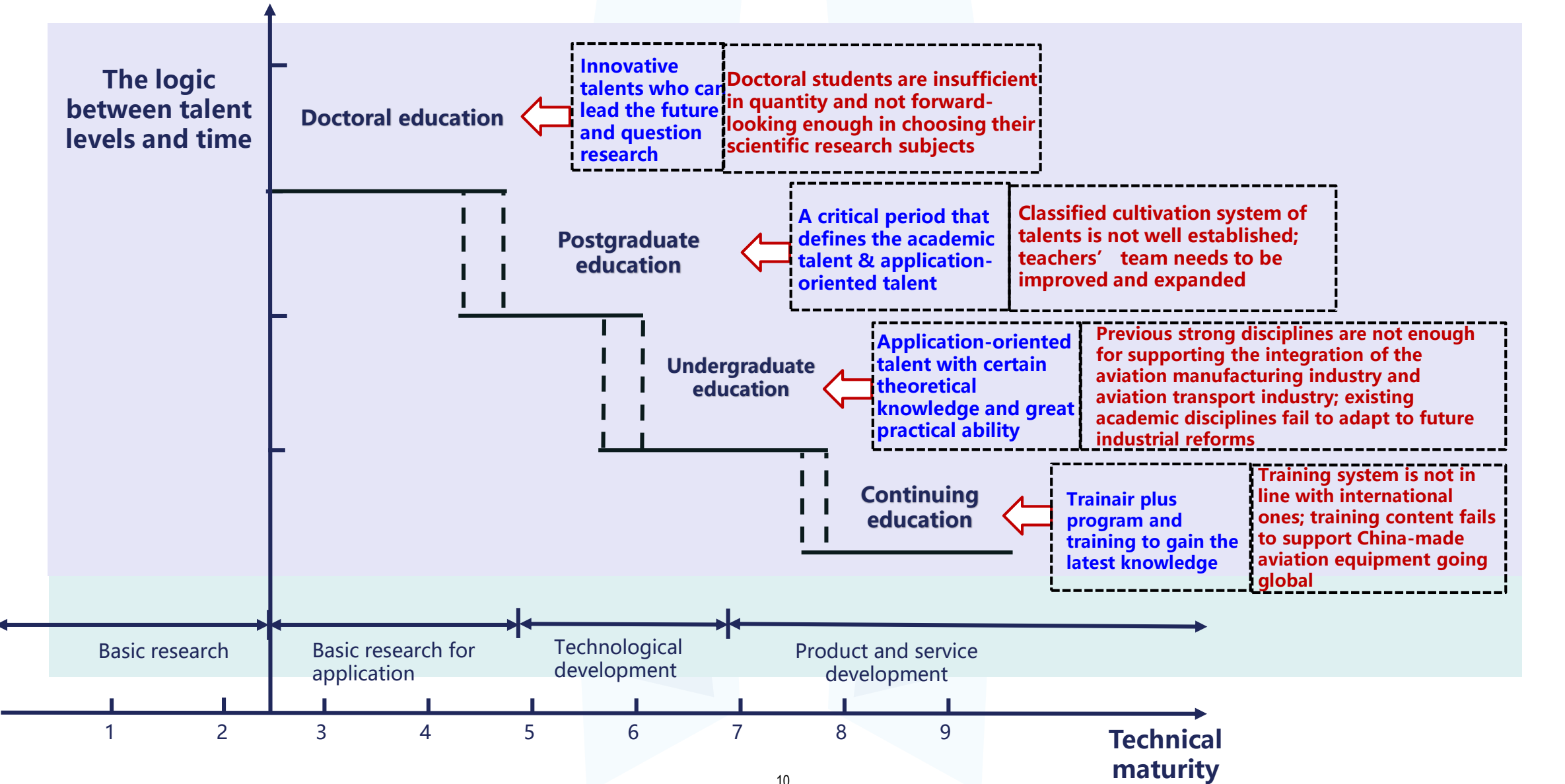
Main issues

- Passenger and freight transport setting high requirements for UAV safety

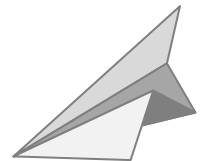


### 1.3 Technical Challenge: Civil Aviation Environment & Sustainable Development Presenting New Demands for Talents (5)





- **Lack of high-level key labs and technology & innovation centers in aviation**
- **Lack of coordination among planning and construction of experiment facilities, planning and support of research projects, and building and development of research teams.**



The Mechanism  
of classification  
evaluation has  
not yet been  
formed

...

Selecting  
talents:  
limited  
perspective

Managing  
talents:  
inflexible  
system

Retaining  
talents:  
unfavorable  
environment

● **First-class teachers** who are loved  
and esteemed by students

● **First-class scholars** who are able to  
compete with others in the academic  
arena at both home and abroad

● **First-class teams** who are capable of  
solving key problems in fields of  
national strategic importance

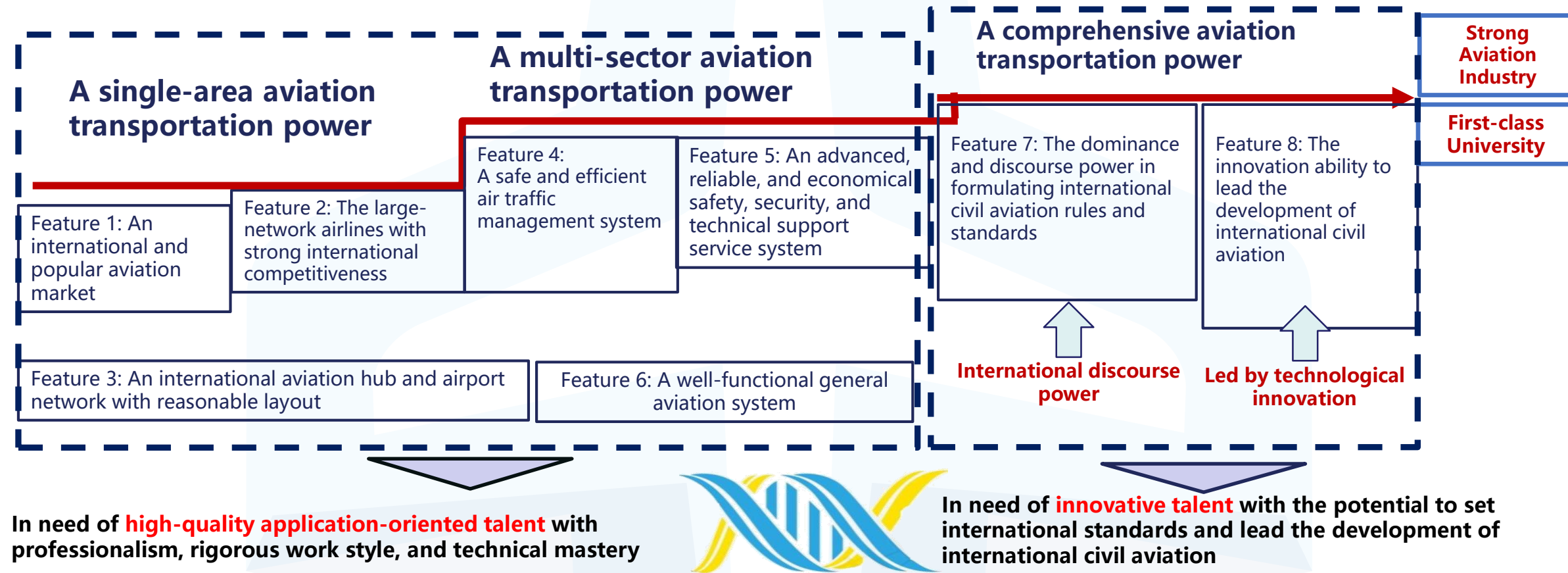
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## 2.1 High-quality Development of Civil Aviation need Cultivating First-class Talents



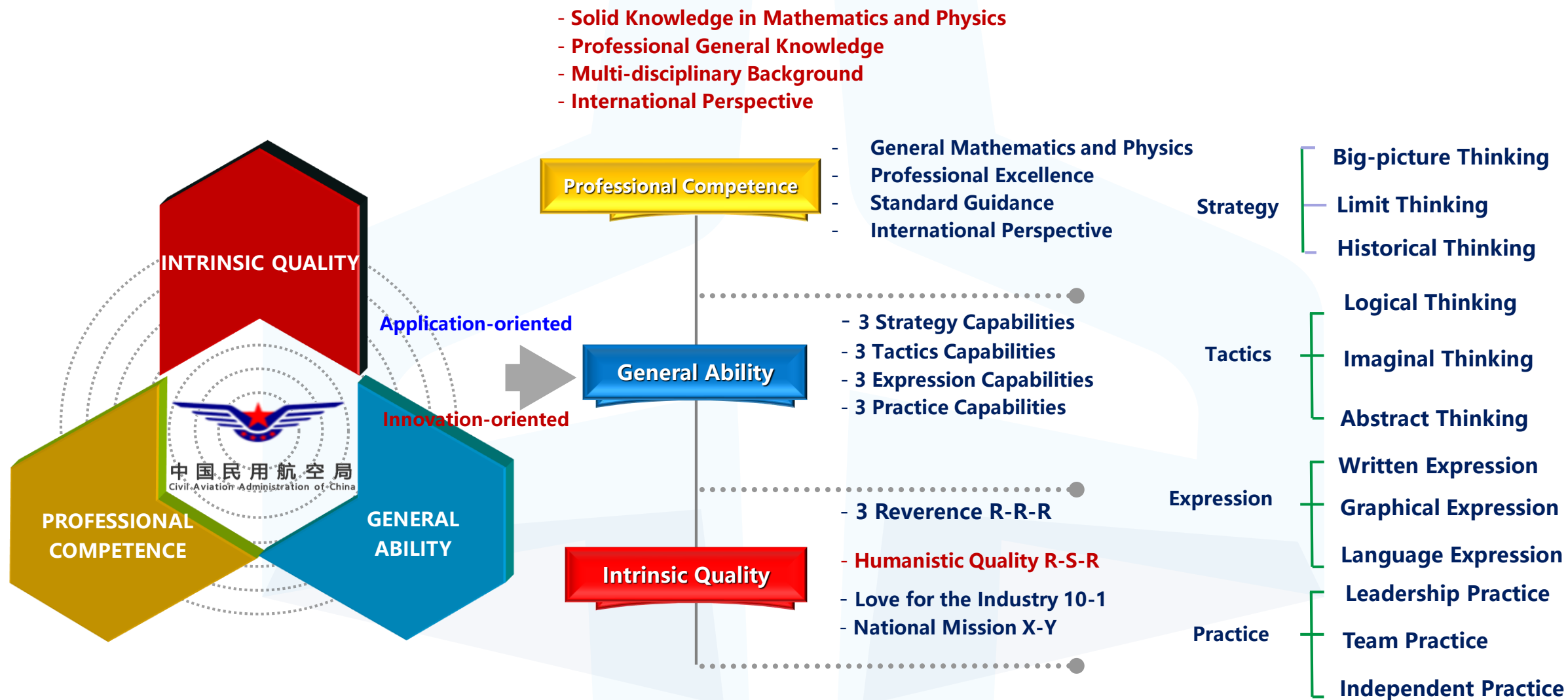
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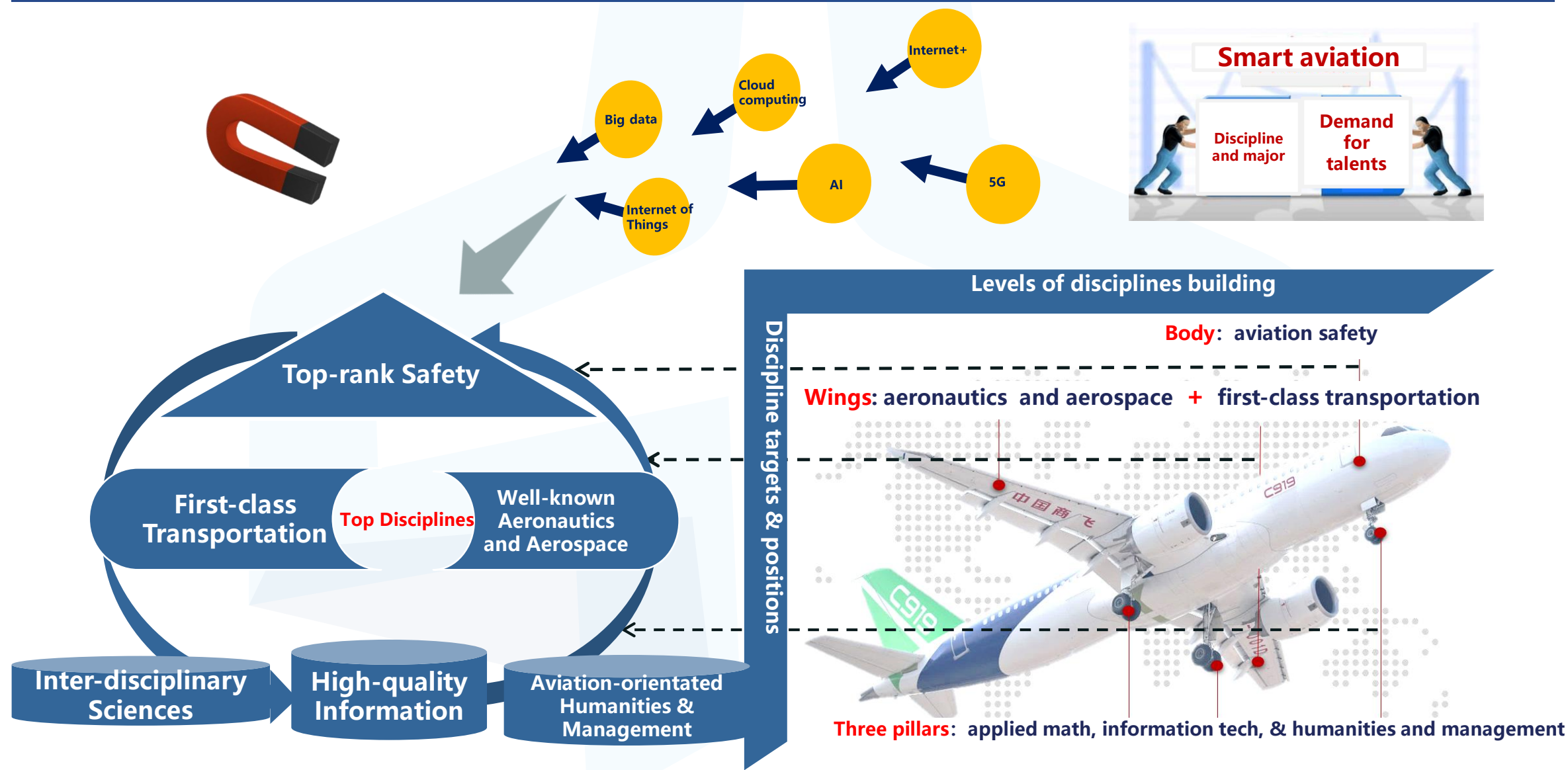
### The role of universities in innovation:

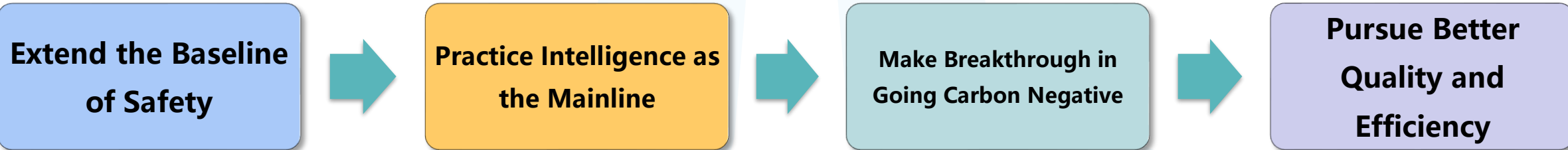
Forward-looking exploration, Leading innovation, Strengthening the foundation, Supporting the development

## 2.2 Standards for Two Types of Talents









- **International Development Trend? National Strategic Needs?**
- **A Must for Aviation Power ? Accumulation of Disciplines?**

- **Civil Aircraft Safety and Airworthiness**
- **Airspace Integration and Safe Operations**
- **Future Airports and Intelligent Equipment**
- **General Aviation & Intelligent Network Unmanned Transport System**
- **Civil Aviation Environment and Sustainable Development**
- **Collaborative Research on International Aviation Laws**

## 2.5 Exploring New Path for Cultivating Prominent Engineers



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### Knowledge-innovation Capability



Research Projects



Academic Contests



Academic Exchanges

### Target

“Aiming high while acting down-to-earth” : following national strategies, responding to future demands and solving practical problems.

Integration of Science and Education

Prominent Engineers

Integration of Industry and Education

### Cultivation Path

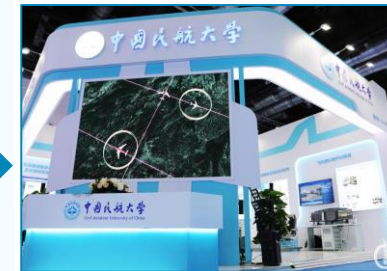
Against the background of integrating aviation manufacturing industry and air transport industry, applying independently-made equipment, working to take the lead in innovation, and facing the containment from strategic rivals, CAUC implements the “enterprise-guided, government-led, Sino-French cooperation” approach and develops an international model of cultivating prominent aviation engineers, encompassing undergraduate education (elite preparatory), postgraduate (elite engineers/professional) and doctoral education (engineering-oriented).

### Practice-innovation Abilities

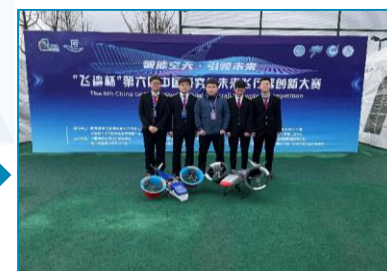
Practice Bases



Innovation Platforms



Practice Contests

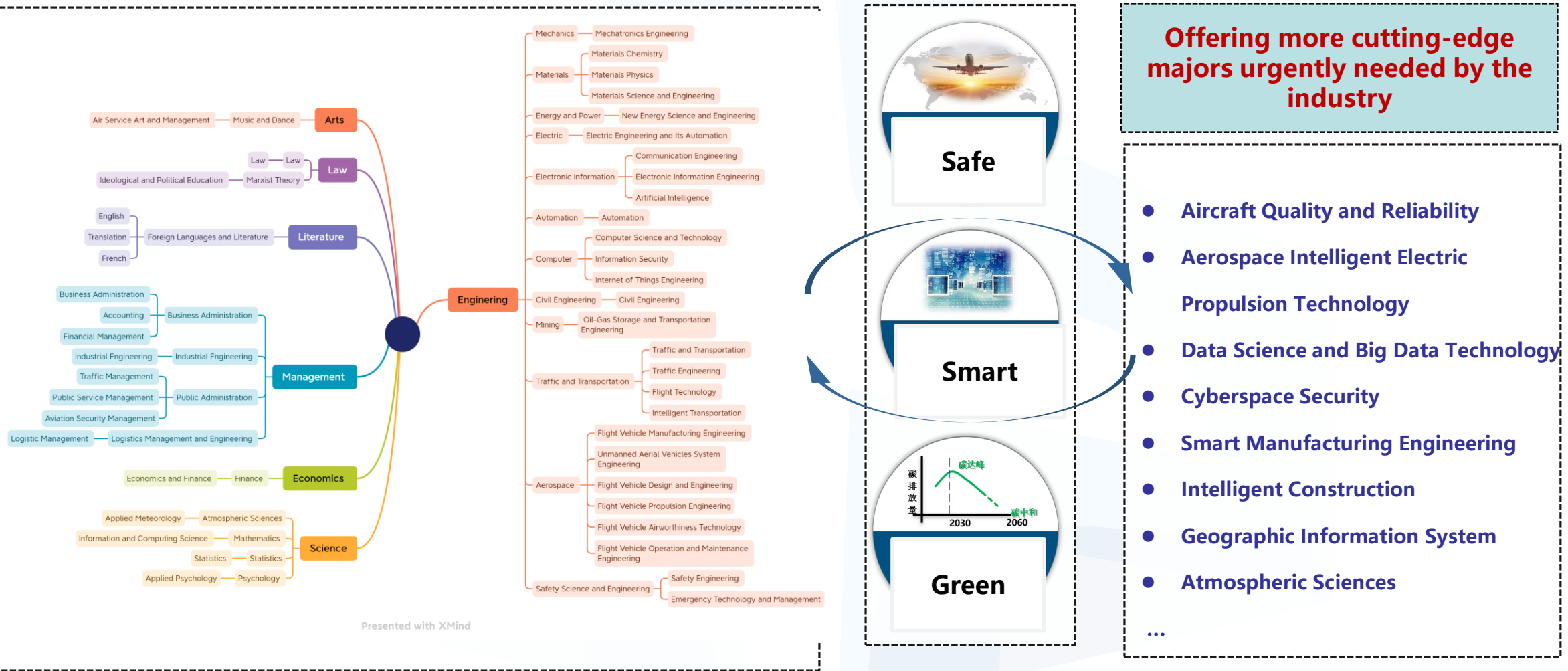


Taking “ability cultivation” and “quality enhancement” as the core and deepening the “integration of science and education, industry and education” .

## 2.6 Optimize the Layout of Disciplines and Majors for the Future Needs of Talent



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Presented with XMind

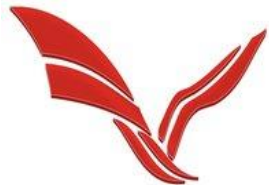
**Developing eight national first-class majors, including Transportation, Flight Technology, and Aircraft Power Engineering. The majors of Aircraft Power Engineering, Aircraft Manufacturing Engineering, and Information and Communication Engineering have gained AABI accreditation. Sino-European Institute of Aviation Engineering has gained CTI accreditation. CAAC offers new cutting-edge majors urgently needed by the industry to meet the future needs of industrial innovation.**



### Continuing Education:

The "Airbus-Boeing-COAMC" aviation landscape





④Flight Academy (Xinjiang)

**“Research on flight”** : CAUC researches new technology, new theories, and explores new practices and future-oriented theoretical, technological and practice systems as China’s approaches to future problems.

**“Contributing to flight and its safety”** : by developing disciplines, CAUC applies its research findings to aviation manufacturing and transport full-industry chains in an efficient way, promoting commercial success and the restructuring ability of global industrial chains.

**“Flight ability”** : improving the cultivation of top level pilots, who have both ability and political integrity and of top level innovative talent with competence both in manufacturing and service industries.

**“Flight competence”** : Providing a training base for high-level pilots, a sci-tech innovation verification base, and an airport economic industries commercialization base.

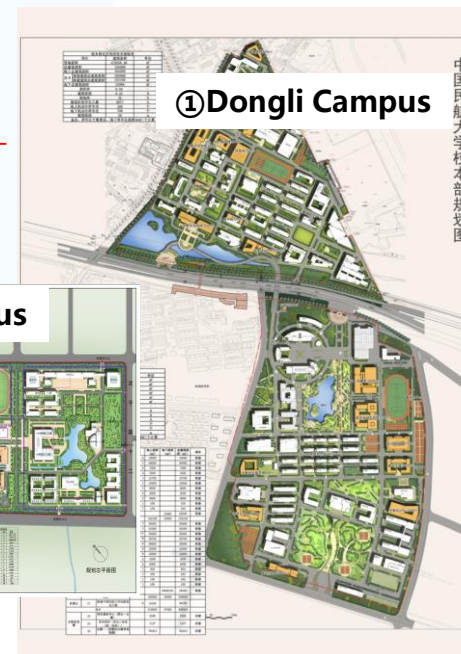


④Flight Academy (Inner Mongolia)

③Beijing Daxing Base



④Flight Academy (Liaoning)

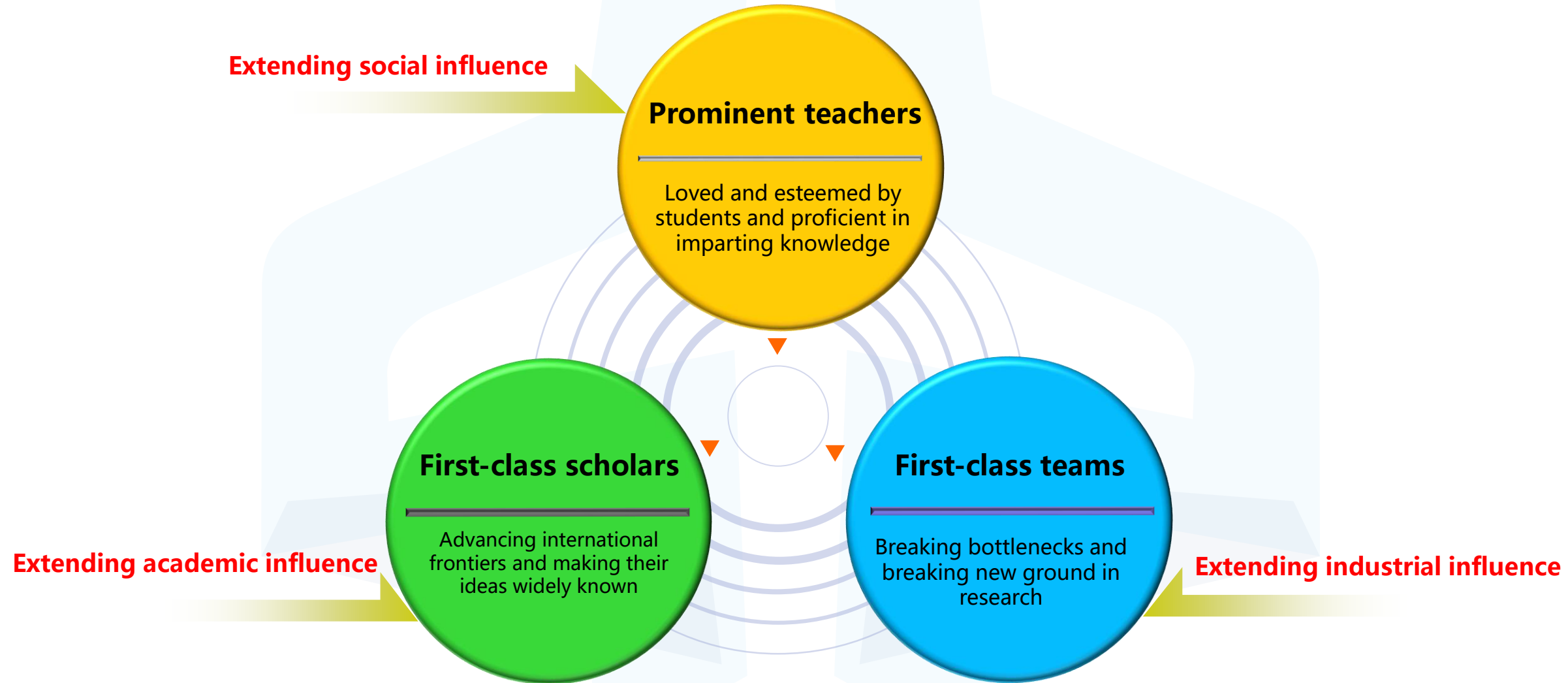


①Dongli Campus



②Ninghe Campus

**“Multiple Campuses”**





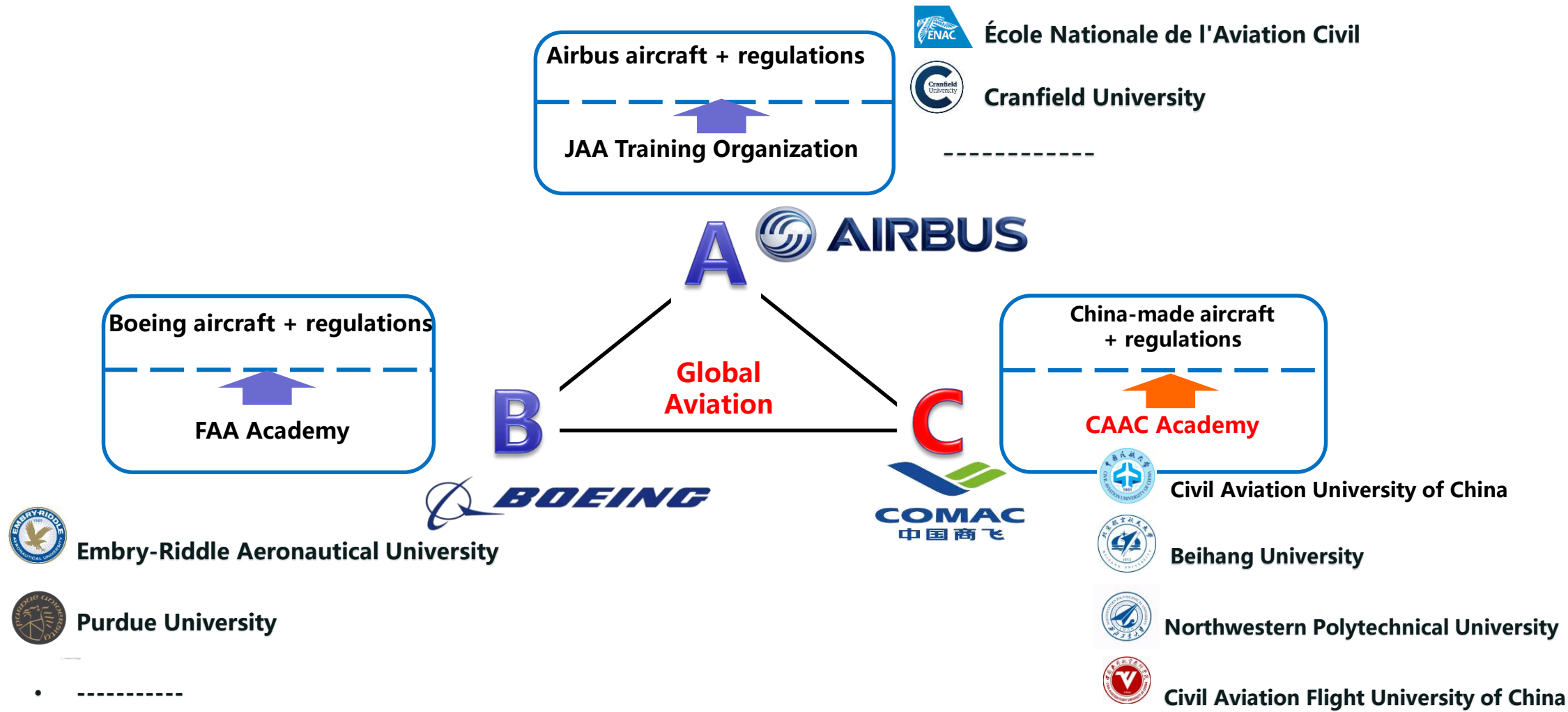
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# Global cooperation to build a seamless sky



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**Thank you for your attention!**