# APRSAF 21 in Tokyo Side Event UTokyo Policy Alternatives Research Institute The University of Tokyo

International Workshop "Space Policy and Law for Social Development"

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#### Fundamental national space policy factors

- ▶ Geopolitical:
- Kazakhstan as former part of the Soviet Union, Strategic partnership with Russia and other CIS countries; Kazakhstan as part of Asia (membership in APRSAF)
- Economical (space applications use in different sectors of natural economy)
- Infrastructural (Baikonur, ground space infrastructure, strategic technological objects)
- Intellectual (space research institutions, space education, space companies)
- Legal (international and national space law, bilateral agreements)

#### **National Space Assets**

#### ► Telecommunication Satellites

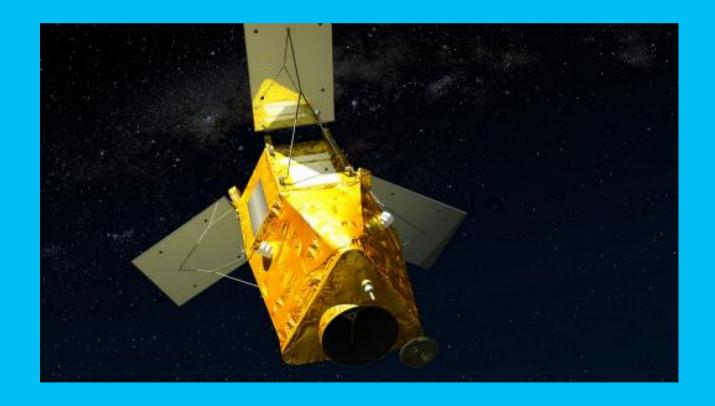
KazSat	2006	Khrunichev, Russia	Baikonur	Proton-K
KazSat-2	2011	Khrunichev	Baikonur	Proton-M
KazSat-3	2014	Reshetnev	Baikonur	Proton-M



#### **National Space Assets**

#### **▶** Earth Observation Satellites

KazEOSat-1	2014	Airbus Defence and Space	Kuru	Vega
KazEOSat-2	launch planned for December 2014	SSTL	Baikonur	Dnepr



Dnepr



#### Space Policy facts

- Space Policy of the Soviet Union was part of the Cold War Policy
- Baikonur was main element of the Soviet space infrastructure (launch vehicles: Vostok, Soyuz, Proton, Zenith)

#### **National Space Policy "precursors"**

**1957 - 1991** 

Baikonur - key element of the Soviet Space Policy

Launch Vehicles: Soyuz, Proton, Zenith

Human space flight program

#### National Space Policy "precursors"

**1991-1998** 

Legal status of Baikonur is under discussion with Russia (1991-1993)

Institute of space researches of the Academy of Sciences of Kazakhstan (1991) in Almaty

National Aerospace Agency (1993) in Almaty is

1994 – negotiations with NASA, ESA, Roscosmos

1994 – bilateral agreement with Russia on Baikonur legal status

1998 – Baikonur as essential part of the International Space Station Proram

#### National Space Policy governing structure and development

- ▶ 1993 National Aerospace Agency in Almaty
- ▶ 1994 Aerospace Committee of the Ministry of science and new technologies
- 2005-2007 National Space Program
- 2007 National Space Agency in Astana
- 2007-2014 –space projects developing and space assets emerging
- Since August 2014 Aerospace Committee of the Ministry for Investments and Development

National space policy goals

Capacity building in the field of space activities

Enhancing space applications use in national economy

Promoting space technology transfer through international cooperation
Involvement into the international space activities

Developing of space science

Contribution to the contry's positive image and investment climate

- Space activities clusters
- National Earth Observation System
- Satellite assembly, integration and testing Center
- ▶ National ground Infrastructure of satellite navigation system
- Space science (Astrophysical Institute, Institute of Ionosphere, Space research Institute)





2010 - space cooperation agreement between

Kazakhstan NSA and JAXA to promote joint efforts in the field of:

- Space science;
- ► Earth Observation;
- Satellite communications;
- Global satellite navigation.

#### **▶** Conclusions

National space policy basic principles:
 adherence to the international space law;
 multi-vectoral cooperation;
 commercialization of space applications;
 capacity building through technology transfer

#### Proposals

- Promote further cooperation in the field of space policy
- Develop APRSAF space policy agenda
- Expand discussion platform for space policy issues
- Establish Asian-Pacific Space Policy Institute
- Appreciate contribution of the University of Tokyo to the regional space policy development

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Thank you!