

Cooperation in launch services

クロードン

Jean-Louis CLAUDON

Advisor, Arianespace

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Arianespace operates Ariane 5, Soyuz, Vega

- > Developments by the European Space Agency
- > Prime contractors: Airbus Defence and Space, Roskosmos/TsSKB, and ELV
- > Launched from French Guiana, South America
- > Sales and launch operations by Arianespace



Arianespace active in Japan since 1986

- > First Japanese commercial satellite launched by Ariane in 1989
- > 29 satellite launch contracts for Japanese commercial satellites
- > Launch of two antenna deployment experiments for JAXA



Ariane / H-II commonality meetings

1993–96

Component standardization meetings

1995–96

RFP for Ariane / 702 satellite adapter

1996

Study of medium launcher with LE-5B

1998–99

Study of Artemis launch using H-IIA

1999

Ariane / H-IIA commonality meetings

1999–...

Launch of NASDA's LDREX by Ariane

2000

MTSAT-1R backup launch guarantee

2000–01

ADEOS-II / AR-5 backup launch study

2001–02

Cooperation in commercial areas . . .

1998–...

The Launch Services Alliance (past)

- > An alliance among Arianespace (Ariane 5), Mitsubishi Heavy Industries (H-IIA) and Boeing Launch Services (Sea Launch).
- > Mission assurance if the primary launch vehicle is grounded.

Partnership with Mitsubishi Heavy Industries (current)

- > Combined satellite launch offerings to worldwide customers.



Ariane – H2 / 3 mutual backup of launch missions

Backup of commercial launches : **all green !**

- >Arianespace and Mitsubishi H. I. know how to do it technically, contractually and programmatically.
- >The price problem of MHI launchers is getting fixed.

Backup of government missions : not there yet

- >Almost made it : ESA's Artemis on H-II
- >Almost did it : MLIT's MTSAT-1R on AR
- >Too late : ESA's Rosetta mission
- >REQUIRES BILATERAL AGREEMENT
- >In 2002 Mr Kôji OMI asked for a study



Ariane – H2 / 3 mutual backup of launch missions

Main reasons for EU-Japan cooperation :

- > Similar launch capabilities, excellent reliabilities.
- > Small space budgets, few government missions.
- > Both sides have no heavy-lift backup launcher.

Europe-Japan report “Mutual backup of H-IIA and Ariane 5 for government missions: Feasibility of a cooperation between Japan and Europe”

- > Joint study performed in 2002 and 2003.
- > Mutual benefits were confirmed. No feasibility issue.
- > Report submitted to ESA and MEXT in October 2003.

Where is the real threat to Japan's launchers?

H-2BロケットのライバルESAのアリアン5ロケット - Yahoo!...

blogs.yahoo.co.jp/bdcxs228/33278264.html ▾

2010/10/08 - ヨーロッパ連合のフランスのアリアンスペース社アリアン5ロケットは、商業衛星市場の約半分を打ち上げ実績ヲ持つトップクラスの商業衛星ロケットです、国際宇宙ステーションへ無人補給船ATVを運んだ、大きなロケットです <http://ja.wikip...>

Late 1980's: "U.S. satellites are more competitive" and the 1990 U.S.-Japan agreement on satellites.



SpaceX CEO Elon MUSK met Prime Minister Shinzô ABE in Tokyo on 9 September 2014.



Let's cooperate!



Thank you