

Minutes of the PRIDE-JUICE Annual meeting

29 October 2019 – JIVE, Dwingeloo

Present: (TB) T. Bocanegra (JIVE), (GC) G. Cimò (JIVE), (FC) F. Colomer (JIVE), (DD) D. Dirkx (TU Delft), (LG) L. Gurvits (JIVE), (BV) B. Vermeersen (TU Delft), (OW) O. Witasse (ESA)
Remote attendance: (GM) G. Molera, (VP) V. Pallichadath (TU Delft)

Action Items:

- 1) Define possible PRIDE science applications during the JUICE cruise phase (PRIDE team)
- 2) Organise a telecon on PRIDE participation IN JUICE WG's and archiving efforts (OW, LG, VP)

The slides of the presentations will be distributed together with the meeting's minutes.

LG starts the meeting with a brief description of its scope, welcoming all participants and introducing JIVE director FC. FC welcomes the participants at JIVE in Dwingeloo.

The agenda of the meeting is confirmed (attached).

OW talks about the status of the JUICE project. During the presentation there were the following questions:

LG: What is the meaning of the increase in max data volume from 1.4 to 2.3 Gbit per day? Longer downlink sessions? Higher data downlink rate? Both?

OW: 1.4 Gbit/day was a base requirement that is now increased and the planned transmission sessions are still 8h/day

LG mentions the possibility of using stations other than the ESA ones to increase further the data rate.

OW: Can PRIDE make use of the low-gain antenna?

LG: Yes, most likely so, but "devil lives in details". The case must be investigated carefully.

TB asks about the orbit inclination and the possibility of occultation science

OW says that there will be many occultations by Jupiter and several - its moons.

LG suggests being more generic about the role of PRIDE in radio occultation by removing the specific reference to "surfaces". The example of study by TB et al. (presented at the meeting) is an example applicable to Jupiter.

BV and LG ask about flybys during the cruise phase.

OW requests a document with possible PRIDE science and experiments during the mission's cruise phase. (Action Item on the whole PRIDE team.)

DD: Since there is no official radio science experiment on NASA's Europa Clipper, will the radio data be archived?

OW: Yes, data will be archived. Furthermore, if the S/C are launched together there will be the possibility of ground-based experiments with two S/C in the Jovian system.

LG presents the status of the PRIDE experiment.

VP talks about the interface of PRIDE with the mission. During her talk there were the following questions:

OW notes that PRIDE needs more people involved in the JUICE working groups, in particular with regard to ring and occultations.

Action Item: OW, LG and VP will organize a telecon in the next couple of months to discuss WG participation, and archiving issues of the PRIDE data products.

GC talks about issues, current work and possible solutions of scheduling S/C observations with VLBI arrays.

DD talks about PRIDE contribution to the ephemerides of the Jovian system.

TB presents her work on radio occultations with EVN (global) telescopes.

LG talks about the future steps of the PRIDE team. During his talk there were the following questions:

BV: Is it expected an increase in VP work?

LG: So far, VP's role and involvement are fine. There may be higher involvement and workload closer to the launch.

BV: What is the practical support coming out the NSO's and NWO's letter of endorsement?

LG: It is planned to have a dedicated junior researcher position at JIVE closer to flight operation (i.e. starting from ~3 years prior to the launch and lasting for the duration of the mission). The duties will be defined by the PRIDE team in concurrence with the JUICE PO and considering a profile of the chosen person. However, a close interaction between JIVE and TU Delft is expected implementing this position functions.

BV comments on the importance of the PRIDE experiment for the Dutch space community.

The meeting ends with the review of the action items (see the beginning of this document) and with the final greetings by LG and FC.

PRIDE-JUICE Annual meeting
JIVE, Dwingeloo
29 October 2018

Arrival of “non-JIVE” participants of the meeting to the Hooegeveen NS station (suggested) at 10:22, transfer to JIVE (Oude Hooegeveensedijk 4, 7991 PD, Dwingeloo).

10:45 –11:00 Coffee

11:00 – 11:10	Welcome	F. Colomer, L. Guirvits
11:10 – 11:15	Meeting’s agenda	L. Gurvits
11:15 – 11:40	JUICE project status	O. Witasse
11:40 – 12:20	General PRIDE status	L. Gurvits

12:20 – 12:55 Lunch at the ASTRON canteen

13:00 – 13:30	“PRIDE–mission” interface	V. Pallichadath
13:30 – 13:45	SCHED and PRIDE scheduling issues	G. Cimò
13:45 – 14:15	PRIDE and the Jovian system ephemerides	D. Dirkx
14:15 – 14:45	Radio occultation studies and PRIDE	T. Bocanegra

14:45 –15:00 Coffee

15:00 – 15:15	PRIDE development milestones for 2018–2019	L. Gurvits
15:15 – 15:25	Critical issues, miscellaneous	All
15:15 – 15:25	Wrap-up, concluding remarks	F. Colomer, O. Witasse, L. Gurvits
15:25 – 15:35	Action items	G. Cimò
15:35 – 15:45	AOB, next meetings	All

15:45 Meeting adjourn