Instrument Centre for Danish Astrophysics (IDA)

Board Meeting Date: 22.09.2022, 10:30 – 15:30 CEST Venue: SDU and Zoom

IDA Board Members

Present

- Allan Hornstrup (AH), DTU, ESO council delegate, Chair of WG1
- Christa Gall (CG), KU, Chair of WG 4, elected member
- Hans Kjeldsen (HK), AU, Head of IDA, Member of the NOT Council
- Irfan Kuvvetli, DTU, elected member
- Jakob Lysgaard Rørsted (JLR), AU, IDA administrative manager and Chair of WG7
- Kasper Elm Heintz (KEH), KU, elected member
- Mads Toudal Frandsen, SDU
- Marianne Vestergaard (MV), KU, ESO STC
- Marcus Marcussen, AU, elected member (student)
- *Mia Sloth Lundkvist*, AU, Danish member of the NOT OPC
- *Sara Svendsen (SS)*, DTU, Chair of WG9, elected member
- Simone Vejlgaard Nielsen, KU, elected member (student)

Parcipating remotely

- Desiree D.M. Ferreira, DTU, Chair of WG3
- Emil Knudstrup, AU, elected member (student)
- Jes Jørgensen, KU, Chair of WG6
- Lars Buchhave (LB), DTU
- Thomas Greve (TG), DTU, member of ESO UC

Excused

- Heidi Korhonen, KU, Chair of the NOT Council, Chair of WG2
- Jens Hjorth, KU
- Johan Fynbo (JF), KU, Chair of WG8, elected member
- Katriona Gould, KU, elected member (student)
- Lise Christensen (LC), KU, Chair of WG5, elected member
- Roman Gould, SDU
- Simon Albrecht, AU

- Steen Hannestad, AU

Observers

Participating remotely

Birgitta Nordström (BN), KU, Danish representative in EAS and A&A, Chair of WG11

Excused

- Troels Haugbølle, KU, Chair of WG10

Chair of the meeting: HK **Minute writer:** JLR

Welcome and adoption of the agenda The agenda is adopted

Approval of the previous minutes and review of open action items Minor correction suggested by MV. Minutes approved. All action items done.

Strategic goals for Danish membership of international research infrastructures The agency is happy about what we delivered. The Board is happy and approves of the general content. HK is pushing for an official translation into English — they agree, but don't have the resources. We are allowed to translate it ourselves, but it will not be official. The process now is that NUFI will approve it on their next meeting and then will the next phase (formulating actions) start.

In the document, a few points are highlighted in red by HK, which are comments from the head of NUFI. HK will modify the text accordingly.

Action Item [2022.09-01] – *HK will circulate the corrected document with the strategic goals ('målplan')*

NOT review and NTE projects update, incl. WG2 status

Review of the Nordic Optical Telescope (NOT). Required by the ministry. Local Danish review (not the full telescope). The "målplan" will be used for this as well. A small group will be formed. Most likely in spring.

The NTE, a revised and realistic plan has been made. First light will be delayed by a year or a bit more (originally February 2023). One of the primary issues has been the workshop at the NBI — this should improve moving forward.

ESO and HIRES/ANDES (@ELT) update, incl. WG1 and WG5 status

AH presents the status. ESO is now fully operational after corona. A new photovoltaic plant has been installed and can power both Paranal and ELT.

ELT is generally in good shape, taking corona-delays into account. Many contracts are being revised, which will result in increased expenses. Some technical issues with the M1 mirrors and continuous re-coating. Most instruments progressing fine.

Financial challenges. Too little put into contingency. The extra cost for ELT that for the last 10 years has been covered by KU, AU and DTU (total of 40 MDKK) that will continue in the coming years at a slightly lower level (2.5 MDKK/year) is planned to be covered via the state budget for the coming years as part of the yearly ESO contribution.

Hard to make budget cuts: cannot cut on ELT, VLT, ALMA. A suggestion is to increase the level of indexation; DK supports an increase, the large countries do not.

The status of ANDES from LC is given in the circulated appendix. Phase B is extended. At least a one-year delay.

<u>*HK:*</u> IDA cannot sign the agreement on behalf on the universities. They must themself do it. Following "målplanen", the intention of DK is to be members of the instrument consortium — high priority.

Greenland Telescope (GLT) status update, incl. WG6 status

TG presents the status. The agreement is signed in the consortium (Denmark, ASIAA, CfA). A review has just been conducted.

First day of the review (mainly Thule site) was mostly positive. A task is to analyse the (potential) performance of EHT with/without GLT. Good opportunities for singledish operations. Second day (movement to summit) with many discussions. The move should be doable. The main concern is operations at summit. Especially concerns relative to the NSF camp (ice-core drilling) and about alignment of the dish, which requires a high mast.

<u>*MV:*</u> We need to find funding to pay the ice-core drilling people for their help, and to find funding for establishing the camp at summit.

<u>TG:</u> Are working on application for funding.

Annual Danish Astronomy Meeting 2023, incl. WG9 status

SS will step down as chair of the WG. KEH has agreed to take over.

Since last meeting, the WG had an evaluation. Overall, it went very well. Recordbreaking attendants. High quality of contributions.

The WG has a meeting last week. Not many people left in the WG. Main discussion point: Maybe a three-day meeting. The new chair will continue the discussion with the WG and hope to attract more members.

Action Item [2022.09-02] – JLR will send an e-mail to the IDA-maillist asking for new members to join WG9

Action Item [2022.09-03] – JLR will update the IDA webpage with the new chair.

Vera C. Rubin / LSST update, incl. WG4 status

CG reports that delays are expected. Everything shifted by a year. The commissioning camera is being mounted now. There is an up-coming workshop about the project (<u>https://sites.google.com/inaf.it/lssteurope4/home</u>).

We are delivering an IDAC (data centre). A problem is that hardware prices has skyrocketed. Also, the current price of electricity is a concern. Thus, a mismatch between original estimate of contribution vs. number of PI's. We are asked to delay, i.e., to not buy any hardware yet. We need to optimise the delivery for our science interests.

<u>*HK:*</u> The PI's who sign up will get data rights, but also a duty to help funding operations in the long run. The main issue that you are bound for 13 years. It might be required for University of Copenhagen to promise to pay for running costs (e.g., electricity for the computers). IDA has promised to support the project; however, IDA cannot pay for hardware or direct running costs.

HK: Not a problem with a reduced number of PI's.

Status on projects

WG3: Future strategies for space-based astrophysics N/A

WG10: Astronomical models and data analysis

Update from TH by email to HK/JLR. Not much has happened. The basic idea is to coordinate the use of DeiC, etc.

It is suggested to review the terms of reference and try to attract more members to the WG.

WG7: ESO outreach and the IDA website

JLR presents a brief update from the WG. Louise (the former IDA administrator) was in the middle of restructuring the website when she resigned. It is now working again and is updated with the new board and WG chairs.

ESO-budget to outreach: Ole Knudsen is paid directly with additional support from ESO. Mainly translations but also communication with journalists. Danish version of website. Point of contact. He will continue doing this.

<u>*AH:*</u> New director of outreach at ESO. Unclear how direction will change.

HK: We should get more members to the WG and figure out how to improve the website. And what is actually needed in terms of ESO outreach (is the Danish version still necessary?).

WG8: IDA observing school

HK gives an overview on behalf of JF. Observing school on the Nordic Optical Telescope on La Palma. Successful school. At some point it should be discussed (also in the NOT council) how many nights should be spent on educational activities. Educational activities are very important, but the NOT might not be the most optimal for all of these (and a night on NOT is expensive).

WG11: Relations to international organisations (including IAU and EAS)

A report with an update and the WG terms of reference was circulated by BN prior to the meeting and is available for inspection.

AA journal

Astronomy & Astrophysics (A&A) is now open access. The status is also presented in the WG11-report.

ASTRONET

HK introduces ASTRONET: European structure to discuss infrastructure. Supports roadmaps for European research. We are an observer. Called for meetings. Not a lot has happened since the last time.

Not directly related to ASTRONET: We have had a request from the Spanish community that we become a member of CCI (the observatory on Tenerife and La Palma). Their argument is that we run facilities on the islands (SONG, NOT). HK will consider it, but it would have to happen on the ministerial level. Currently HK is an observer and attends the meetings.

Danish roadmap for research infrastructure

ANDES might be able to be funded through the roadmap in a future application. Especially if the boundary conditions (specifically the maximum project length of 5 years) are modified.

STEP is on the roadmap, but not yet fully funded. STEP is a UV payload with focus on stars and exoplanets and partners from AU, AAU, DTU, KU and SDU. Currently on hold due to budget issues. The project was formed as a result of discussions in the Partnership for space and space technology. IDA is not supporting the project development financially, but IDA need to be informed and since this related to the roadmap for research infrastructure it is relevant for IDA. STEP will probably be modified from its original form if approved by the STEP team. HK will keep the IDA Board informed on future development, as it will be of interest for the community and partners are members of IDA. A note on the roadmap: The plan for IDA is to push the ministry and NUFI to modify the roadmap requirements, as it is currently very hard to use for space activities and long-term instrument development (such as ELT instrumentation). Additionally, the deadline is usually very short, which also makes is hard.

АОВ

"GAIA 2"

Question: Danish interest in "Gaia 2" (or "Gaia NIR"), i.e., future the ESA astrometric mission in the near-infra red. IDA support? A working group?

<u>LB:</u> "Gaia 2" is the second recommendation of the Voyage 2050, whereas the first selection is an exoplanet mission. Just to make it clear that it is in some sense a selection between the two.

<u>*HK:*</u> The discussion of how we fit into the Voyage 2050 framework is a strategic decision and should be discussed — especially in WG3.

Decision: The strategic working group WG3 will have a general discussion of future missions of opportunity. It is important to figure out, what is the structure that helps us (working groups, sub-working groups, discussion groups, open discussions, etc.). We can support the discussions of multiple missions without making commitments.

Action Item [2022.09-04] – WG3 will have a general discussion of missions of opportunity of the future and provide feedback for the IDA Board.

Action Items

A list of open items with those in charge highlighted:

- Action Item [2022.09-01] **HK** will circulate the corrected document with the strategic goals ('målplan')
- Action Item [2022.09-02] JLR will send an e-mail to the IDA-maillist asking for new members to join WG9
- Action Item [2022.09-03] **JLR** will update the IDA webpage with the new chair.
- Action Item [2022.09-04] **WG3** will have a general discussion of missions of opportunity of the future and provide feedback for the IDA Board.