

# NORDIC OPTICAL TELESCOPE SCIENTIFIC ASSOCIATION

## The Future Role of the NOT and the European 2-4m Telescopes

### 1. The ETSRC report

In 2008 ASTRONET, in cooperation with OPTICON, appointed a *European Telescope Strategy Review Committee* (ETSRC) to review the complement of European 2-4m optical/IR telescopes. Its task was to propose measures to deploy these telescopes more rationally and cost-effectively in the overall effort of European astronomy, including their coordination with ground and space-based facilities at other wavelengths.

The draft report of the ETSRC has now been made public, and comments and suggestions are welcome via the web site <http://www.strw.leidenuniv.nl/2to4mtelescopes/> **until April 18, 2010**. A pdf file of the report is available [here](#).

***NB: The report recommends sweeping changes in the way we use the NOT and other 2-4m telescopes, and comments and advice from the user community are essential. This is your opportunity to influence the final recommendations of the committee!***

### 2. Background and Current Context

It is generally recognised that Europe has reached its current front-line position in astronomy by learning to cooperate and to coordinate and pool its resources. ESO and ESA are the most prominent and successful examples of this, but more can and should be done to exploit the available resources more effectively. The ASTRONET network of funding agencies for astronomy in Europe was formed to advance towards that goal, and, in close interaction with the community, has developed first *A Science Vision for European Astronomy* (2007) and subsequently an *Infrastructure Roadmap* describing a comprehensive strategic plan for the means to reach the scientific goals described in the *Science Vision* (see <http://www.astronet-eu.org>).

The Roadmap takes a very broad view of the developments necessary for a competitive future for European astronomy, from the projects for very large observing facilities through theory and computing to education, recruitment and outreach. This also implies a review of the existing facilities that compete with the rest for the same human and financial resources. We are now entering the implementation phase of those recommendations.

### 3. Revisiting the Nordic strategy for the NOT

A key recommendation of the ETSRC report is that the planning, equipment, scheduling, and operation of all modern European 2-4m telescopes should be coordinated, with joint operation of those on La Palma as a minimum acceptable step towards progress. This is indeed the strategic goal for the NOT as defined by our user community already in 2006 (see the final report [here](#)), together with a sharper scientific focus, streamlined instrumentation, more flexible scheduling, and a more systematic approach to educational activities. Achieving this is the essence of the *Development Plan 2008-2010* which we have subsequently followed, and it is gratifying that the ETSRC report corroborates this strategy in remarkable detail (see Chapters 4-7).

But these are not laurels on which to rest: Europe will soon consider large new investments in astronomy, with foreseeable financial consequences for existing facilities. Tough negotiations are impending, and we must be prepared to face the challenges to the NOT with an informed and united constituency behind us. The following is our blueprint for doing so.

#### 4. The challenges

Coordinated operation of the telescopes on La Palma - and maybe others as well - assumes that their instruments will become more specialised and optimised, and that observing time will be allocated in a single process for all telescopes. Ignoring technical issues, this implies that current national (here Nordic) user communities will give up time on their own telescopes in return for access to others, and that some time may be allocated to specific ground-based programmes in support of space missions etc. The model will also allow to admit new partners for shorter or longer periods according to a flexible financial model.

Assuming that this becomes reality, we must be able to answer questions such as those below:

- What is the highest-priority science that Nordic astronomy will want to do with such a consortium, including the NOT, in parallel with other facilities, optical and others?
- For which types of science will the NOT be good/best, and what developments are needed?
- What is the priority science to be achieved through access to other telescopes in the group (notably the wide-field science discussed by the ETSRC)?
- What is the tradeoff between access and autonomy at the NOT vs. access to other facilities?
- What new partners (public or private) might be invited, who could promote our science goals as well as contribute new funding?

We thus encourage you to start thinking about these issues, provide your input at the ETSRC web site now, and be ready to answer our questionnaire when it comes!

#### 5. Schedule for the NOT consultations

The following schedule for our consultations with the Nordic user community has been agreed by the NOT *Scientific Technical Committee*:

- April 18: End of public consultation period for the ETSRC report
- May 5: Announcement of a questionnaire survey of the Nordic user community
- May 31: Deadline for replies to the questionnaire
- June 15: Release of a draft synthesis of the input received for public comment
- August 31: Deadline for comments; release of a revised strategy document
- September: National discussion meetings on the strategy document
- October 8: Submission of final strategy document to the Nordic Research Councils.

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