The ING Service Scheme: Performance and Feedback from Users

Stephen J. Smartt (ING Service Manager)

The operational running of the ING service scheme was changed at the beginning of 1997, with the implementation of several novel features. Since proposals live for one full year since their submission date, we now have complete data on the proposals submitted during semesters 97A+97B which have all completed their life cycle. We have resisted compiling a report sooner (e.g. just for the full lifetime of 97A proposals) as the limited statistics involved may not have given a true reflection of the success of the scheme. This short report summarises the main features of the ING Service scheme, gives the relative chances of a proposal being completed, and the feedback from the user community who have had data from the scheme.

The main features of the scheme which has been fully running since February 1997 are:

1. The proposal submission procedure is completely automated through a set of web based fill-out forms.
2. All proposals are sent to nominated members of the respective TAG panels for scientific grading.
3. Service night information from the ING support astronomer carrying out the observations is sent promptly (usually next-day, again using automated software procedures) to all applicants whose proposals had been attempted.
4. The service data is available for anonymous ftp immediately applicants are informed that their proposal has been attempted. From Spain, UK and the Netherlands the band-width is suitable for distributing the data in this way, and is indeed preferable judging from user feedbacks (see below).
5. The progress of individual proposals is visible on a set of ING Web pages, together with a running total of time used by each of the three nationalities broken down by the colour of the Moon.
6. The availability of these statistics allows the Service manager to quickly correct any imbalances in the nationality time quotas.
7. Service applicants are given the opportunity to comment on the quality of their data in particular, and ING performance as a whole, on each occasion that data was taken for them.
8. Urgent requests for Targets of Opportunity (ToO) are dealt with quickly and fairly. Many ToOs for which it has been logistically possible to get data for have been carried out (often after immediate refereeing).

Naturally applicants want to know when their observations will be attempted, and what priority will be given to them after they are informed of the science grade. All proposals are given a grade of either α, β or *reject*. The α and β graded proposals are put into the 'queue', while the *rejects* are not. We are not running a full queue-observing scheme – this would require significantly more ING and assessment panel resources. Proposals to be attempted on each ING service night are at the discretion of the Support Astronomer who first notes directives from the Service Manager on nationality priority (to maintain the appropriate balance of time allocated from the different TAGs). Hard-copies of the proposals are kept in each telescope control room, and the SA attempts to complete as many α graded proposals as possible while keeping the overheads of instrument adjustment and calibrations to a minimum. Due to instrument availability restrictions, and sky/weather requirements of applicants, we cannot (in the present scheme) guarantee to complete all α-graded proposals. As support astronomers try to make as efficient use of the Service nights as possible by minimising changes of optical components during a night (e.g. number of grating/dichroic changes on an ISIS night for example), and given that prevailing sky conditions need to be matched to those requested it would be impracticable for us to work with grading on a finer scale. We can discriminate on the basis of a 2 grade system as shown in the statistics below, but further grade categories *within the present model* would not in reality contribute finer selection criteria.

A key to the success of the scheme is the completion rate of proposals – where the data quality is necessarily of satisfactory scientific use. Of all the proposals counted as completed in the following statistics, applicants have been satisfied with the quality of their data, and those which were not had additional or replacement data taken.

Completion rate statistics for UK Service time

For the WHT the completion rate for α proposals was 75% over the two semesters 97A and 97B. For the β ranked proposals the rate was naturally lower, with a 50% completion rate. Some of the non-completed proposals were for instruments which have limited exposure to Service time. For example, instruments such as AF2, TAURUS, WHIRCAM and LDSS may have one service night each per semester, but much of this is used for setup before the scheduled runs as the Service night is generally the first after an instrument change. Although at the time of press we have only complete data for 97A and 97B (some 98A proposals still being 'active' at this time), an estimation of the ongoing completion rate on the WHT for α's is above the 75% value. One should note that we had to carry over some proposals submitted in 96B to be fair to the applicants during this transitional 1 semester period, and nominally considered them α grades. The figures in Table 1 do *not* include these proposals. Given

this factor, and considering the (as yet incomplete) statistics of 1998, we estimate that the chances of an α graded proposal being completed on the WHT within its 1 year lifetime is approximately 80%. On the INT an even better completion rate for α graded proposals (86%) is achieved. Although on the JKT UK Service was probably under-used in these two semesters, the demand has risen considerably since then (a total of 24 proposals have been submitted during 98A–99A), and we still estimate that we are completing 100% of JKT α proposals. The completion rate for β's is approximately 50% across the board, reflecting that the grading certainly does differentiate between proposals. Some β proposals are completed due to, for example, α's not being available for a particular RA, sky conditions and instrument setup.

Completion rate statistics for NL Service time

The completion rate for the Dutch α grades on the WHT was 90%, with the incomplete application requesting observations on 5 simultaneous nights which was not feasible. On the INT, only three Dutch proposals were submitted during the semesters 97A and 97B and all three were completed. On the JKT there were only two proposals submitted and one was completed while the other was approximately half done. This admittedly appears to be a failure of the scheme to not get the only two Dutch JKT proposals completed, but it is probably more a case of bad luck! As there are few JKT service nights each semester the requested observing conditions at usable RA ranges were not available to get this proposal done when the weather was agreeable. On a more encouraging note, 5 more Dutch JKT proposals have all been submitted from 98A to the present time, and these have been completed satisfactorily. The Dutch use of Service has risen significantly since 97A and 97B, and ING are continuing to complete the proposals at around the 90–100% level on all three telescopes. We would encourage the Dutch community to make use of the scheme, as in the past there has been a feeling that their required time quota within the overall Service time is not being realized. The Service scheme is certainly completing the submitted Dutch proposals on a continuing basis, and the amount of total time spent is dictated by the number of submitted proposals.

Completion rate statistics for CAT Service time

The Spanish community regularly submits large numbers of proposals to the WHT, requesting much more time than is generally made available to Service by the CAT committee. This results in large pressure on the Spanish time within Service and the relatively low (compared to the UK and NL) success rates of α proposals (50%). It is clear from Table 3 that the we are indeed using the α/β discrimination, as the β completion rate is much lower. However to achieve a greater completion rate of α proposals on the WHT, the CAT committee should either increase the amount of time they give to the Service scheme, or be more selective in awarding their α grades (hence targeting the proposals they see as particularly worthy of time). The statistics for the INT and JKT indicate that there is a very good chance of α rated CAT proposals being completed on these telescopes, and the scheme appears to be working well for the Spanish community.

Feedback from applicants who have had data taken

After each service night, a night-report form completed by the Support Astronomer is mailed to each applicant whose proposal has been attempted.

Tables 1-3. Completion rate statistics for UK, NL and CAT (in descending order) Service proposals in the Semesters 97A and 97B.

Status	α	β	*reject/withdrawn*
WHT Completed	33 (75%)	4 (50%)	0
WHT Not completed	11 (25%)	4 (50%)	6
WHT Total	44	8	6
INT Completed	24 (86%)	5 (55%)	0
INT Not completed	4 (14%)	4 (45%)	2
INT Total	28	9	2
JKT Completed	4 (100%)	2 (55%)	0
JKT Not completed	0 (0%)	1 (45%)	2
JKT Total	4	3	2

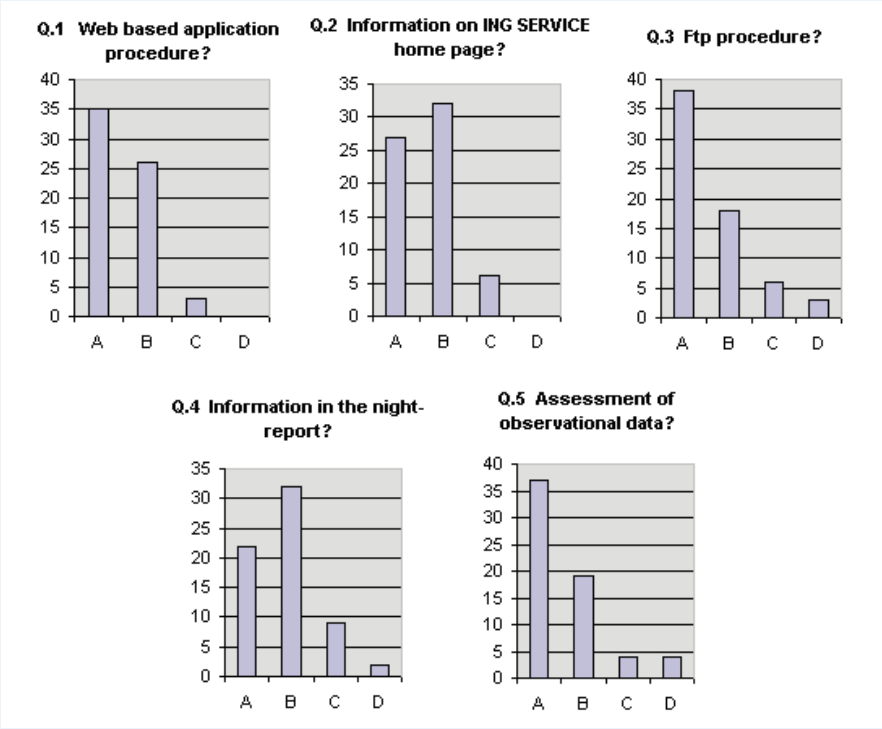
Status	α	β	*reject/withdrawn*
WHT Completed	9 (90%)	0 (0%)	0
WHT Not completed	1 (10%)	3 (100%)	0
WHT Total	10	3	0
INT Completed	3 (100%)	0	0
INT Not completed	0 (0%)	0	0
INT Total	3	0	0

Status	α	β	*reject/withdrawn*
WHT Completed	11 (50%)	2 (22%)	0
WHT Not completed	11 (50%)	7 (78%)	2
WHT Total	22	9	2
INT Completed	6 (75%)	5 (50%)	0
INT Not completed	2 (25%)	5 (50%)	4
INT Total	8	10	4
JKT Completed	4 (100%)	0	0
JKT Not completed	0 (0%)	0	0
JKT Total	4	0	0

This includes details of the instrument setup, what was observed, weather and sky conditions, comments on the individual exposures which may be helpful in assessing and reducing the data, and finally how to connect to our site and ftp the data home. A copy of the night log is also made available. A further email is automatically sent with each night-report containing a feedback questionnaire to allow the applicants to comment on different aspects of our scheme. We specifically ask them 5 questions, and further allow free comment on these or any other aspect they see relevant. The feedback has been overwhelmingly positive, as can be seen in Figures 1–5. We are particularly encouraged that such a high percentage of applicants consider the data provided to them to be of 'excellent' quality for their scientific purposes.

We are currently looking at ways to improve the scheme and welcome comments from the community, and suggestions on how we can provide a better service to you. ¤

Stephen Smartt (sjst@ing.iac.es)
Service Programme (service@ing.iac.es)



Figures 1-5. The bar charts show the number of responses to each of the five questions. The statistics were compiled from responses over the last year and a half. The questions we ask in the feedback questionnaire are:

1. *How did you find the application procedure with the Web based form?*
2. *How do you rate the information provided on the ING SERVICE home page?*
3. *How did you find the procedure of ftp as a means of getting hold of your data quickly?*
4. *How would you rate the information provided in the night-report? (Including additional comments by the Support Astronomer).*
5. *Give an assessment of the quality of your observational data, considering what you have requested and what the Support astronomer has provided. (Please take into account the weather conditions, and use your answer as an assessment of OUR performance).*

The applicants were given the option of choosing responses from a: excellent, b: good, c: satisfactory, d: unsatisfactory.

Other Recent ING Publications

Technical Notes
Available at
http://www.ing.iac.es/~manuals/man_tn.html

- *No 123. Wavelength Dependent Pixel-to-Pixel Response Variations of a Typical EEV42-80 CCD: the role of flat-fielding astronomical data,* F Crompvoets (Katholieke Universiteit Nijmegen) and S Smartt (ING), August 1999.
- *No 122. Star Pairs for Blind Offset Check,* R Laing (Univ of Oxford and RAL), J Sinclair (RGO), June 1999.
- *No 121. ING Bibliography and Publication Rate (1998),* J Sinclair (RGO), May 1999.
- *No 120. CCD Camera EEV#13,* S Tulloch (ATC), February 1999.

Annual Reports
Available at:
http://www.ing.iac.es/PR/annualreports_index.html

IV Site Managers' Meeting

Gordon Talbot (ING)

The Isaac Newton Group has recently hosted the IV Site Managers' Meeting in La Palma. The aim of this meeting (as with the previous ones) is for the principals of operations at various observatories to share common problems and their solutions with others who have similar challenges. The meeting's organisers are: Bruce Gillespie – Apache Point, Dave Sawyer – WIYN (Kitt Peak) and Mark Adams – McDonald Observatory.

The history of the meeting was explained by Bruce Gillespie: "A small handful of us happened to be at the same SPIE meeting in Hawaii a couple of years ago, and over beers or breakfast we discovered it would be useful to periodically get together at each others' observatories to discuss common ground and problems. Observatories tend to 'live' in relative isolation, and we discovered that we had all re-invented the wheel more than once, and that by sharing our