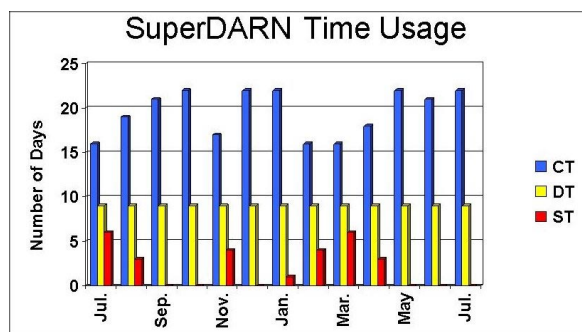


REPORT OF THE SUPERDARN SCHEDULING WORKING GROUP (SWG) (JULY 1999-JUNE 2000)

Catherine SENIOR

Thanks to everyone, the scheduling process has run quite smoothly during the last year, from July 1999 to June 2000. This document will be organised in two parts: first, the report on the radar time usage and requests, and then a summary of the discussions we had at the meeting about the scheduling process during CLUSTER operation, and of the decisions that were taken.

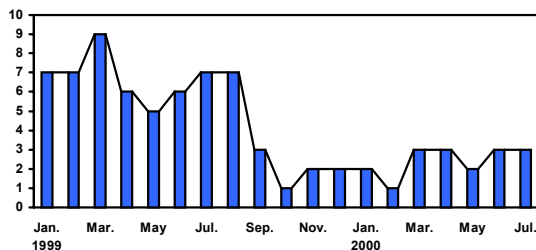
1. Scheduling Process



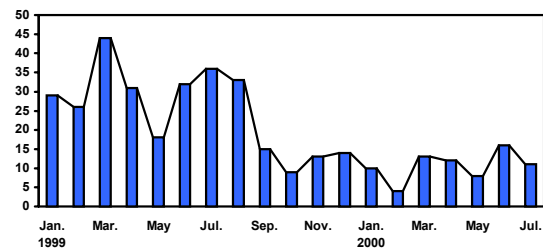
This figure shows the number of days that have been scheduled as Common Time (CT), Discretionary Time (DT) and Special Time (ST). CT is in blue. Almost every month, the number of CT days scheduled exceed the nominal time of 15-16 days a month. DT has been automatically scheduled for 9 days this year. The excess of CT compared to the nominal 50% is due to a low demand for ST.

The two following figures show the number of requests and the number of days requested from January 1999 to July 2000. There is a sudden drop of the number of requests and days requested, starting in September 99. This corresponds to the first schedule issued after the last SuperDARN meeting in Iceland, when it was decided that 9 days of DT would be scheduled automatically each month. This decision therefore made the job of the SWG chairman much easier!

Number of Requests



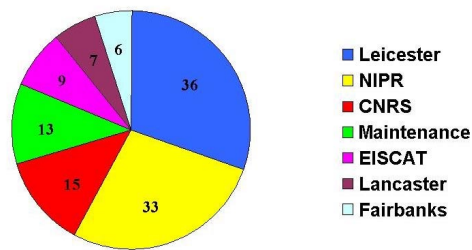
Number of Days Requested



The number of requests each month now varies between 1 and 3, while the number of days requested never goes above 15 days a month including CT, DT, ST and maintenance. This is very reasonable.

Finally, the following figure shows the number of days requested by the different groups in the 10 months following last year meeting in Iceland.

Total Number of Days Requested = 119
(09/1999-07/2000)



The total number of days requested in those 10 months is 119 compared to the nominal 120, (90 for DT and 30 for ST), including maintenance. This shows that almost all of the requests can be accommodated by the SWG. Leicester and NIPR have the largest demand, mostly for satellite conjunctions or co-ordination with other instruments. This demand remains very reasonable, with a mean of 3 to 4 days requested per month.

Last year decision of scheduling automatically 9 days DT each month have therefore proven to be very good one: there are no more routine requests; all requests can easily be accommodated; there is much more serenity in sharing between ST and DT. The work is thus much easier for the SWG chairman, and the responsibility for dealing with conflicts of interests have been mostly transferred from the SWG chairman to the individual groups, in particular for the use of the CUTLASS radar.

Other improvements compared to last year scheduling process include the decrease of the number of requests by non-SuperDARN groups, especially for long term runs, and the fact that individual groups favoured bilateral arrangements for requesting DT rather than ST when a limited number of radar were needed for a specific scientific objective.

2. Operation during the CLUSTER mission

With the near launch of the CLUSTER mission, there was several points that had to be discussed at the meeting. These included: 1) Shall we run Common Time during priority CLUSTER orbits, as will be done at EISCAT/ESR ? 2) Do we want to design new high-time resolution common modes for conjunctions ? 3) Shall we schedule on interval of less than 24 hours, and differently at the different radar pairs for priority conjunctions ? 4) Who will co-ordinate the requests for satellite conjunctions ?

After discussion, there was a general consensus among the SWG members on the following:

1. Type of Time

Common time should be scheduled during high priority satellite conjunctions.

2. Operating Modes

- New operating modes should be designed, with high time and/or space resolutions. We will call these modes "Common Satellite Co-ordinated Programs" (CSCP);
- The number of these CSCP should be limited to a few ones;
- These CSCP should be labelled clearly, both with a name and an experiment code;
- The radar control programs for these CSCP should be prepared and compiled for all operating systems so that they can be run at all radar sites.

3. Scheduling of CSCP

- Only those radar which are concerned with the satellite conjunctions should run the relevant CSCP, other radar should run normal scans;
- Schedule on less than 24-hour blocks should be possible, with a minimum of 2-hour blocks.

4. Co-ordination of satellite conjunctions

- A new working group should be created (Satellite Conjunction Working Group - SCWG). This group would be in charge of determining the conjunction priorities, of designing the new common operating modes, and of deciding which modes are to be run;
- Time requests for satellite conjunctions should be issued by this the SCWG and sent to the SWG.

At the final plenary session, there was a consensus on most of these conclusions. In particular, the PIs had already decided the creation of a new working group for satellite conjunctions, with representatives from all the countries. What was not clear at the end of the meeting was when the new SCWG would be created and who would be in charge of writing the new RCPs and make sure that they compile well for all the currently used operating systems.

3. Conclusions

It has now been 2 years and a half that I chaired this working group. I believe that it is now time for someone else to take over. Before the meeting, I had approached few members of the SWG from countries other than UK and France which already held the SWG chair. Dieter André, from Saskatoon, agreed to take over and this was accepted at the meeting. He will be starting in August (October schedule).

I want to thank everyone for their help during the last years, especially the members of the SWG, and Mark Lester who made the transition few years ago very easy for me. I wish good luck to Dieter, especially in the next few years where many changes will take place in the scheduling process due to the launch of the CLUSTER mission.