

Notes of the ILT TO Telephone conference 2015-03-26

Distribution list:

	Organization:	Date:
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1 Attendees

Chair	R. F. Pizzo
Notes	R. F. Pizzo
Participants	DE601: Andreas Horneffer DE602: Ado Arnolds DE603: Matthias Hoeft, Michel Pluto DE604: Christian Vocks DE605: - FR606: Jean-Mathias Griessmeier SE607: Henrik Olofsson UK608: Alan Doo DE609: Joern Kuensemoeller KAIRA: D. McKay POLFAR: - NL: Menno Norden, Henri Meulman, Roberto Pizzo

2 Minutes of the Previous Telephone Conference

- From a. Arnolds: 'Action 19.4 should be revived – no LBA arrived at DE602' *RP: Action has been re-opened.*
- Action 20/2: not listed in minutes of last meeting and preliminary notes of this meeting. *R. Pizzo: action 20/2 was listed in the minutes as action 20/3. The counting was wrong in the previous minutes. It is fixed now.*

3 Announcements

- The Cycle 4 proposal submission deadline has passed. 37 regular proposals and 1 envelope sheet have been received. Only one proposal (PI = Serylak) requests the use of a few international stations in stand alone mode for 24 h per week during the next Cycle. These stations are DE601, DE603, DE605, FR606, and UK608. In the proposal, the PI mentions that he followed the appropriate procedure and already verified with the owners of these international stations that local resources can be made available to support his project.

A few station owners mentioned that actually they hadn't been contacted by M. Serylak to verify the availability of local resources to support his LC4 project. These station owners will get in contact with the PI. Action 21/1.

4 Action Items

Nr	Description	Assigned to	Due date	Status
15/2	Write rationale concerning the wish of GLOW to have read access to the LOFAR switches on the GLOW stations	A. Horneffer	21/05	Closed
17/4	Derek will add info on the wiki about "Hunting" for RFI caused by a controller card	D. McKay-Bukowski	29/01	Open
17/5	Plan maintenance date for FR606	Laurent / Henri	29/01	Open
18/4	In order to run the station test locally, Menno will send a path with the script and documentation. Jean-Matthias will check this and get back to Menno	M. Norden/ J-M. Griessmeier	29/01	Open
18/8	Evaluation of local resource availability to run int. stations in single-mode during ILT time	R. Pizzo	Cycle 5	Open
19/1	Henri will send LBA spare parts to FR606 (Laurent)	H. Meulman	26/02	Open
19/2	Jean-Matthias will contact Klaas for practical network issues regarding "data-cloning"	J-M. Griessmeier	26/02	Open
19/4	Henri will send LBA (DE602)+ LBA repair sets (DE603 + UK608)	H. Meulman	26/2	Revived
19/6	Check if it is possible to make PVSS data on broken/flagged antennas available for a script running on the LCU in local mode.	R. Pizzo	26/02	Open
20/1	Wilfred/Menno to provide instructions on how to read the results of the station test available at https://proxy.lofar.eu/array_status/STATIONS/HTML	W. Frieswijk/ M. Norden	26/03	Open
20/2	W. Frieswijk to get in contact with J. M. Griessmeier regarding inconsistencies for FR606 on station health webpage	W. Frieswijk	26/03	Open
20/3	Check whether solution to polarization leakage for the ILT can be applied in single station mode	R. Pizzo	26/03	Open
20/4	Share with Laurent document on how to repair LOFAR antennas	H. Meulman	26/03	Open
20/5	Look into OoB (Out of Band) intranet connection issue at DE604 reported by K. Stuurwold	C. Vocks	26/03	Open
21/1	Get in contact with M. Serylak regarding availability of local resources to support LC4_025	DE601,3,5, FR606, UK608	23/04	Open
21/2	Put info on read-only access to the GLOW switches on a web page	K. Stuurwold	23/04	Open
21/3	Check if somebody is available to work with M. Brentjens on adapting station calibration procedure to be able to take care of polarization leakage for	A. Horneffer	23/04	Open

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	international stations.			
21/4	Put link on the Wiki to document for repairing the LBA antennas	H. Meulman	23/04	Open

Comments

15/2: *Action can be closed.* Klaas will put info on a web page - *New action open (21/2)*

17/4: Derek will put some general notes together and will make them available to the others. => *Action remains open.*

17/5: B. Bult, M. Norden and H. Meulman are preparing maintenance visits for all ILT stations at the moment. => *Action remains open.*

18/4: some tests have been running. They were still not successful and more testing is required.
=> *Menno is waiting for possibilities to test during local mode time. To be continued. Action remains open.*

19/1: The parts can be taken along during the maintenance visit, unless FR606 needs them sooner. Jean-Mathias will check whether the RCU is also needed. => *Action remains open.*

19/6: W. Frieswijk mentioned that this should be possible. The current script is extracting this info from the main database, but it can be adapted to read the local one.' Wilfred will do this during the next few weeks – he was unavailable during the last month => *Action remains open.*

20/1: W. Frieswijk will provide some documentation => *Action remains open.*

20/2: Wilfred will get in contact with Jean-Mathias asap => *Action remains open.*

20/3: The only way to correct for this is by adapting the station calibration procedure or, better, by adding an additional step at the end of it where the large X-Y phase offset that causes the polarization leakage is taken out by observing and analysing a pulsar with well known polarimetric properties - and which is detectable in short observing runs (~ 1 hour). This could be followed up by ASTRON personnel (M. Brentjens) in due course (the list of

high priority items is long) or by a volunteer (a station owner?), who could work on this in contact with Michiel. *Andreas Horneffer will check this. Action 21/3.*

20/4: A document for repairing the LBA antenna is available (*Henri will put link on the Wiki - Action 21/4 open*). A Document for the HBA needs to be made. Because Henri needs images for that, these images need to be taken during maintenance. Henri can do this together with Laurent during the maintenance visit and explain the actions.

Nr.	Resolution / Decision	Meeting
1	The director ILT will require a written request for data cloning. A permission from the ILT operations is required prior to each data cloning observation.	2014-12-11
2	For proposals requesting the use of the international stations in single-station mode during ILT time, it is the PI's responsibility to verify – before submitting the proposal - that local resources are available to run such projects at the international stations. In its deliberations, the LOFAR Program Committee will assume that the submission of such projects are indicating that local resources will be available to accommodate it.	2014-12-11
3	DE601, Rubidium/ Maser switchover: As long as we switch back to the Rubidium after using the Maser, this will not affect ILT operations. We will use the Maser only very infrequently, so Menno agreed that we will probably manage to remember to switch back to the Rubidium whenever we use the Maser.	2015-01-29
4	Airco unit require a complete overhaul every year including a check on the coolant level	2015-01-29

5 Station Roll Out

POLFAR (Menno Norden & Henri Meulman)

- Procurement phase of the missing parts ongoing. Most parts are ordered and work now in progress on the last remaining not critical components.
Also the PCB board test setup for HBA and LBA are ready and shipped to the manufacturer. In May we expect the digital boards and subracks.

6 Station statuses

6.1 Dutch Stations (Menno Norden & Henri Meulman)

- Nothing to report

6.2 DE601 Effelsberg (Andreas Horneffer)

- General performance: no major issues came up, the stations seems to work as usual.
- GLOW observing network: All 6 stations are regularly switched to GLOW mode. The connectivity between the interface computer and the LCU in DE604 still needs to be fixed.

- Network issues: Andreas had a phone call with Klaas:
 - The planned switch-monitoring webpage would fulfill our needs (see action item 15/2). (New action item for Klaas?)
 - As far as we know there is currently no conflict in the switch port usage on GLOW stations.
 - We will remove the switch in the Faraday room in Effelsberg in the next few weeks. (Probably Friday 17.4.)

6.3 DE602 Unterweilenbach/Garching (Ado Arnolds)

- Nothing to report, everything runs smoothly from our point of view.

6.4 DE603 Tautenburg (Matthias Hoeft)

- There isn't much to report (as usual) from our our side concerning DE603.
- Two more LBA antennas had a torn cord (may be bitten by rodents).
- Something what may come up later this year: our TEST-teloscope (30cm robotic optical telescope) will be refurbished and is supposed to go into continuous use again. We know that it causes significant RFI when in operation. We suggest investigating this in more detail during the maintenance visit. The aim should be to identify RFI sources remove them or shield them. *Menno mentioned that there might not be time to do this for him and Henri, therefore the local contacts might have to do this work themselves. It was mentioned that station calibration has been difficult when this telescope was active in the past. The suggestion is to plan station calibration sessions before the telescope becomes active, especially in LBA. Timeline to be communicated by Matthias to ASTRON. For production observing, it is expected that RFI generated by the test telescope will affect more pulsar observations and runs performed in stand alone mode.*

6.5 DE604 Potsdam (Christian Vocks)

- It turned out that the RSP board issue reported at the last ILT-TO telecon was caused by a broken board #6. We have received a new board on Monday, and will install it a.s.a.p.

6.6 DE605 Jülich (Arpad Miskolczi)

- No input received.

6.7 FR606 Nançay (Jean-Mathias Griessmeier)

- Nothing to report.

6.8 SE607 Onsala (Henrik Olofsson, Tobia Carozzi)

- Heavy logging activity going on in the vicinity of the station, sometimes very nearby (they are changing the whole biotope for the nature reserve north of the station, from forest to bushy moor). Our current information is that this will go on until mid-April at least. In the autumn, they will bring machines to grind the wood into chips. We assume that there is an increased risk of RFI associated with this activity. One advantage though is that the access road has been improved.

6.9 UK608 Chilbolton (Alan Doo)

- Nothing to report
- PVSS had tile 61 still disabled. Menno will check the results of the stationtest and, in case of no problems, he will switch it on again.

6.10 DE609 Hamburg/Bielefeld Station (Joern Kuensemoeller)

- Exchanged rubidium on Feb 27th.
- Still only HBA usable due to too much RFI.
- On-site measurements by Bundesnetzagentur, results were not very helpful.
- RFI telecon on March 24th: Consolidating results from RFI investigations at Astron, Bielefeld, Bonn, and Hamburg concerning our station identified three main issues:
 1. electric fences; 2. 24/7 continuous source in 120° direction; 3. strong DAB signal.
 Agreed actions are A) a coordinated test measurements with switched on/off electric fences; B) mobile measurements to eventually locate source in 120° direction; C) maximize attenuation to reduce saturation caused by DAB.
- Ordered spectrum analyzer, are planning temporary 24/7 spectrum monitoring.
- Olaf (Bonn) thankfully tries to create an LBA calibration table for the time being.

6.11 KAIRA (Derek McKay)

- D. McKay will be stepping down from the role of KAIRA Project Scientist/Engineer. His replacement will be Ilkka Virtanen. He has a history of working on both LOFAR and KAIRA.

7 Questions, Issues, Remarks

- DE601:
 - The "backdoor" access to DE601 on glowx (and the other glow60x) apparently works. If there are issues, please let me know.
 - We had a (AFAIK) successful observation during the solar eclipse last week. Thank you to everyone involved.
- SE607:
 - There was a late change to the Stand-Alone schedule during the week of the solar eclipse. In the future, we ask for a longer lead time whenever changes are made that take away time originally scheduled for stand-alone use, especially if it occurs during office hours. *RP: the change was due to the fact that SE607 was requested to participate in a urgent DDT observation (solar eclipse). The associated DDT proposal was received, judged and accepted by the Director of the Radio Observatory right before we communicated to the station managers the necessary changes to the stand alone schedule. While we understand the inconvenience of such a short notice warning, we cannot promise that this might not occur in the future under similar exceptional circumstances.*

8 AOB

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9 Date of next conference

Schedule for ILT telephone conferences in 2015:

- Thursday, April 23
- Thursday, May 21
- Thursday, June 25
- Thursday, July 23
- Thursday, August 27
- Thursday, September 24
- Thursday, October 22
- Thursday, November 26
- Thursday, December 17