

# Notes of the ILT TO Telephone conference 2015-05-21

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	Organization:	Date:
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**LOFAR Project** 

ASTRON-FO-018 2.0



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## 1 Attendees

Chair	R. F. Pizzo
Notes	R. F. Pizzo
Participants	DE601: Andreas Horneffer DE602: - DE603: - DE604: Christian Vocks DE605: - FR606: Jean-Mathias Griessmeier SE607: - UK608: - DE609: Joern Kuensemoeller KAIRA: Ilkka Virtanen POLFAR: - NL: Bianca Bult, Menno Norden, Roberto Pizzo

## 2 Minutes of the Previous Telephone Conference

 Jean-Mathias: 'Action 18/4: This action was closed, but the description reads: "Menno will send a path with the script and documentation." Can we keep the action open until this is done?'

Menno: E-mail with this info was sent to Jean-Mathias on <u>March 30</u>. The suggestion was that Jean-Mathias would test the procedure on FR606 and would then upload notes on the Wiki so others could use it.

## 3 Announcements

 The Cycle 4 PC meeting took place at ASTRON on May 6-7. 36 proposals were accepted for the next Cycle, including LC4\_025 (PI = Serylak). The allocations are published on line at

http://www.astron.nl/radio-observatory/cycles/cycle-4-final-allocations/cycle-4-final-allocations

The preliminary Cycle 4 observing schedule is available here:

http://www.astron.nl/radio-observatory/cycles/cycle-4-schedule/cycle-4-schedule



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# 4 Action Items

Nr	Description	Assigned to	Due date	Status
17/4	Likka will ask Derek to add info on the wiki about	llkka	29/01	Closed
	"Hunting" for RFI caused by a controller card	Virtanen		
17/5	Plan maintenance date for FR606	Laurent / Henri	29/01	Closed
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	J-M.	26/02	Open
	network issues regarding "data-cloning"	Griessmeier		•
19/4	Henri will send LBA (DE602)+ LBA repair sets (UK608)	H. Meulman	26/2	Open
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.	W. Frieswijk	26/02	Open
20/4	Share with Laurent document on how to repair LOFAR antennas	H. Meulman	26/03	Close
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	Make usage and error statistics of station switches available 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 international stations.	A. Horneffer	23/04	Close
21/4	Put link on the Wiki to document for repairing the LBA antennas	H. Meulman	23/04	Open
22/1	Clarify whether station test results from local and ILT mode end up on the same place	M. Norden	21/05	Open
22/2	Check https://proxy.lofar.eu/array_status/STATIONS/HTML /index.html and send any comments to W. Frieswijk	All station managers	21/05	Open
23/1	Put on the Wiki document on how to repair HBA antennas	M. Norden	25/06	Open
23/2	Send link to Joern (DE609) with info/documentation on UPS system at FR606	J.M. Griessmeier	25/06	Open
23/3	Check who is the contact person for EMBRACE	B. Bult	25/06	Open



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# Comments

17/4: Derek has written the documentation on the wiki,

http://www.lofar.org/wiki/doku.php?id=singlestation:start&#sniffing\_for\_rfi\_inside\_the\_rfcontainer

Action can be closed.

17/5: Jean-Mathias reported the maintenance visit was cancelled and postponed to next year. He wondered whether this is wise, as also last year there hasn't been a maintenance for the station.

*'If a visit is really impossible, they would need detailed information and help 1) on how to read the output of the stationtest (how to diagnose what has to be done) 2) for the repair of the broken antennas and elements following this diagnosis. Maybe someone can take pictures during the maintenance at some of the other stations, showing how to open and replace which parts? Also, is it possible (and realistic) to get "online assistance" during the operation?* 

Menno reported that:

- 1) Last year a remote maintenance was performed
- 2) For this year, a maintenance visit to FR606 was high in the agenda, but Laurent was unavailable during the proposed weeks. Polfar is the highest priority in the summer. It was then agreed to plan the maintenance visit for next year.

Jean-Mathias requested to have a remote maintenance this year. To allow this, Laurent needs to setup a transmitter antenna. Time for Laurent is very limited, so it is not clear when this could be done. Conclusion: if some antennas are known not to be ok, Laurent can try to repair them independently and get in contact with Menno/Henri in case of problems. To do so, he needs some instructions (see Action 20/4 and 23/1). Action closed

19/1: The parts will be taken along during the maintenance visit. Action remains open.

19/2: No progress. Action remains open.

19/4: DE602 needs 3 LBA's – Menno and Henri should know. Also UK608 is still waiting. Bianca will check with Henri. *Action remains open.* 

19/6: W. Frieswijk: 'Currently there is no way to directly read this information locally from the PVSS database because these are not active in local mode. This may be made available in the future, also combined with stand-alone Navigator functionality.

The solution for now is, that the information will be dumped in a file in a /localhome directory every day. Such a file can be used in local mode to get the desired information.'



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Jean- Mathias: 'need more information on the filename and a description of the format.' Wilfred and Jean-Mathias will discuss this offline and will give an update at the next telecon.

Action remains open.

20/4: A document for repairing the LBA antenna is available (*Henri will put link on the Wiki* – action 21/4 - not done yet; Bianca will check).

A Document for the HBA needs to be made from scratch. Pictures were taken during the maintenance visit to DE609. These have been collected in a document that Menno will put on the Wiki (Action 23/1 open)

Action 20/4 closed, as replaced by 21/4 and 23/1.

20/5: Christian has not heard yet from Klaas Stuurwold whether the email exchange with Andre Saar has resolved this issue. *Action remains open.* 

21/1: Done by DE601, FR606, and UK608. Still Open for DE603 and DE605. Action remains open, but SHOULD be closed next time.

21/2: from K. Stuurwold: 'we now have a logging system running for the "zero measuring" before the network reconfiguration starts. So we know how the system behaves before the reconfiguration will take place. Andreas asked me a couple of months ago that they wanted access to their switches so they can get information about incoming and outgoing traffic and errors during GLOW mode. I told him(in a later stage) that it should be possible that we use the developed logging system for this purpose too. We can put the information they want on a web page which they are allowed to access. This will be done after the reconfiguration and maybe the summer holiday season. I will go on holiday a week after we have finished the network reconfiguration.' Action remains open.

21/3: Andreas did not find anybody who could help Michiel with this. Michiel will work on this when his other priorities will allow. *Action closed.* 

22/1: could not be done due to Network reconfiguration activities. To be followed up offline. *Action remains open.* 

22/2: The link is inaccessible during the Network Reconfiguration. Action remains open.

Nr.	Resolution / Decision	Meeting
1	The director ILT will require a written request for data cloning. A permission from the ILT	2014-12-11
	operations is required prior to each data cloning observation.	
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

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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)

- 3 containers available need to be filled with hardware (June-July).
- Planning is still on track to have 3 new Polish stations part of the array before the end of the year.

# 6 Station statuses

#### 6.1 Dutch Stations (Menno Norden & Henri Meulman)

• Maintenance is in progress.

#### 6.2 DE601 Effelsberg (Andreas Horneffer)

- 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.
- We tried to remove the (now superfluous) switch in the Faraday room in Effelsberg today (20.5.). This didn't work, so we changed the configuration back to the previous.

#### 6.3 DE602 Unterweilenbach/Garching (Ado Arnolds)

• The station is operating normally – nothing to report.

#### 6.4 DE603 Tautenburg (Matthias Hoeft)

- The station had maintenance. A few elements were replaced.
- Not properly tightened nuts caused a lot of summator noise.
- Looked into RFI monitoring instructed local people on how to do it
- Coordination needed when planning station calibration dish should be switched off during calruns.



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#### 6.5 DE604 Potsdam (Christian Vocks)

• The station is operating normally – nothing to report.

#### 6.6 DE605 Jülich (Arpad Miskolczi)

• No input received

#### 6.7 FR606 Nançay (Jean-Mathias Griessmeier)

- The station is operating normally nothing to report.
- lofar-ops@obs-nancay.fr instead of lofar-obs should be e-mailed in the future.

#### 6.8 SE607 Onsala (Tobia Carozzi)

- The station is operating normally nothing to report.
- Maintenance received status ok.

#### 6.9 UK608 Chilbolton (Alan Doo)

• The station is operating normally – nothing to report.

#### 6.10 DE609 Hamburg/Bielefeld Station (Joern Kuensemoeller)

- Station maintenance visit on 4<sup>th</sup>/5<sup>th</sup> (Fixed broken hardware, TBB memory upgrade) Unable to run final verification tests due to close thunderstorms -> still to be confirmed as soon as the system comes online.
- RFI measurements with scheduled switching of suspected sources on April, 29<sup>th</sup>. Analysis results (by Olaf Wucknitz) indicate that one of the nearby electric fences is the main source of pulsed RFI (bad connections in the fence and shorts with plants were verified during maintenance). The source in 120° changed, it is not continuous any more ("welding"-like periodic activity, 100Hz modulation) and seems to be located at the nearby power lines. Dieter is looking into this and will coordinate further moves. Assistance by tiger team might still be beneficial in due course.

#### 6.11 KAIRA (Ilkka Virtanen)

- · SGO technical unit is at the site, checking it after winter
- No issues to report



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# 7 Questions, Issues, Remarks

- DE609:
  - Is Astron officially recommending the use of a UPS to prevent damages of the rubidium clock in case of power failures? How is this handled at other stations? (Who has one? Model? Setup?). Menno: it is better to have UPS system. FR606 and SE607 have implemented this. ASTRON does not have an advice on which type of system should be adopted. There are no guidelines on how to implement this. Jean-Mathias will send link to Joern containing some info/documentation (*Action 23/2 open*).

# 8 AOB

• It was asked who's the contact person for Embrace at ASTRON – Bianca will investigate and report back (*action 23/3 open*).

# 9 Date of next conference

Schedule for ILT telephone conferences in 2015:

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



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