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# **Deliverable D16.1**

# Providing access of 173 hours to the LOFAR infrastructure

Due date of deliverable: 2013-06-30

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Deliverable Leading Partner: STICHTING INTERNATIONAL LOFAR TELESCOPE (ILT)



## **1** Document information

Document name:	Providing access of 403 hours to the TNA LOFAR in the period 01/01/2012 – 30/06/2013
Туре	Other
WP	16
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#### **1.1 Dissemination Level**

Dissemination Level				
PU	Public	Х		
PP	Restricted to other programme participants (including the Commission Services)			
RE	Restricted to a group specified by the consortium (including the Commission Services)			
со	Confidential, only for members of the consortium (including the Commission Services)			

#### 1.2 Content

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# 2 TNA deliverable

#### 2.1 Information about the TNA – LOFAR

The Low Frequency Array (LOFAR) is a brand-new and uniquely powerful telescope operating at low frequencies, 10—240 MHz, for studies ranging from the Sun to the early universe, with a sensitivity order of magnitudes better than previous telescopes. LOFAR is an array of 40 antenna stations in the Netherlands and currently 8 stations in France, Germany, Sweden, and the United Kingdom. All stations are connected by fibre to the high-performance central data processing and archive facilities in Groningen, The Netherlands and further distributed systems. Dedicated LOFAR software has been developed to process and analyse the data for specific astronomical applications.

The International LOFAR Telescope (ILT) a foundation under Netherlands law (operating since 1 January 2011) is the access provider for LOFAR. The ILT Board sets the overall science policy for the exploitation of all LOFAR facilities, whereas ASTRON is the central operational organization for the ILT with the aim to provide the optimal support to the diverse multi-national user groups that will use the instrument.

Proposals are submitted via a dedicated version of the web-based tool NorthStar with Support scientists and software engineers at hand in the time leading to the submission deadline to provide expert information to proposers. The ILT Programme Committee (PC) members then grade each proposal on its scientific merit, and its technical feasibility and in a face-to-face meeting.

After an intensive construction and commissioning phase, the ILT has started its fist cycle of operations in December 1<sup>st</sup>, 2012.

#### 2.2 Report on the users & project in the period 01/01/2012-30/06/2013

During this reporting period, the transition between commissioning to the first cycle of operations occurred and this is reflected in the projects that materialised with the help of the TNA activity. We therefore explain the different proposal selection procedures below.

The commissioning observations during this period were overseen by the LOFAR Commissioning Coordination Group (LCCG) under the mandate of the ILT Board ( See http/::www.astron.nl:radio-observatory:astronomers:commissioning:commisioning-plan). A few commissioning proposals in early 2012 arose from the Early Access proposals submitted in late 2009 and judged by the LOFAR Programme committee. Since late 2011, new commissioning proposals were first discussed in the LCCG's Technical Advisory Group (TAG) and were selected on both their commissioning (development of observing modes, development and testing of software and analysis algorithms) as well as their scientific merits. Observation and subsequent analysis were followed by reports from the relevant teams. A list of all commissioning proposals with links to the existing reports can be found at:

(http://www.lofar.org/operations/doku.php?id=commissioning:commissioning\_observations).

Leading to the first operational cycle of LOFAR (called "Cycle 0"), initially Reserved Access Proposals were solicited for a deadline of 5 March 2012, to describe long-term, large-scale, astrophysically and observationally cohesive programs. The 7 proposals that were received, from (groups within) the LOFAR Key Science Project teams. Were reviewed by the observatory-led Technical Review Panel, that met face-to-face, and the independent ILT Program Committee, that met via telecon. The National LOFAR Consortia (GLOW, FLOW, NLLAC, LOFAR-Sweden, and LOFAR-UK) then decided on "umbrella" observing and processing time reservation for these projects, using part of their reserved access quota for Cycle 0.

Regular Proposals for specific focused observing projects to be carried out in Cycle 0 were then solicited in a follow-up proposal call, with deadline 17 September. In total, 43 proposals were received (229 individual authors (some participating in more than one proposal) with affiliations in 16 countries). The Technical Review Panel produced reports on each Regular proposal and then the ILT Programme Committee reviewed all proposals and awarded observing and processing time to 38 of the 43 proposals (sometime a fraction of their request).

The table below offers information on all projects that were eligible for TNA support during this reporting period.

Project Acronym	Name (Institute, Country) of the TNA user group leader	Number of eligible TNA users	Provided Access (Hours)
LCOM005	De Gasperin F. (University of Hamburg, DE)		20
LCOM010	Horneffer A. (Max Planck Institute for Radio Astronomy, DE)	2	12
LEA032	Fender R. (University of Southampton, UK)	4	12
LTST001	Broederick J. (University of Southampton, UK)	1	6
LCOM021	Bonafede A. (University of Hamburg, DE)	3	10
LCOM024	Vocks C. (Leibnitz Institute for Astrophysics, Potzdam, DE)	3	1
LCOM032	Tasse C. (Paris Observatory (LESIA), FR)	2	10
LC0_004	Neal Jackson (University of Manchester, UK)	3	20
LC0_007	Philippe Zarka (CNRS- Paris Observatory (LESIA), FR)	10	19
LC0_015	Philip Best (University of Edinborough, UK)	39	106
LC0_037	Marcus Brueggen (University of Hamburg, DE)	19	126
LC0_043	Rainer Beck (Max Planck Institute for Radio Astronomy, DE)	21	59
Total: 12		Total: 109	Total: 403

A total of 12 projects with 109 users have been offered TNA support and were provided with a total of 403 hours for the reporting period.

The detailed information about the committee providing access, projects and selection is given in the TNA database of the 1<sup>st</sup> periodic report.

#### 2.3 Information about the EC financial contribution to the travel

The following table lists the beneficiaries of the travel support and their associated project. (The table below shows the estimated cost. The travel budget is allocated by the RadioNet3 beneficiary No. 5 (JIVE). Therefore, the exact numbers will be presented at the 1st periodic report).

Project acronym	Person name	EC travel support [€]
LCOM021	Bonafede A.	356
LCOM010	Mulcahy D.	248
LCOM024	Breitlink F.	252
LCOM032	Tasse C.	415
LTST001	Broederik J.	366
LEA032	Stewart	98.5
LEA032	Pietka	394
LCOM005	De Gasperin F.	280
TAL estimated EC contribution		2409€