

SPOOR meeting

7 February Harnack-Haus.

CASADO, Jacqueline	MPIfR
COLOMER, Francisco	Joint Institute for VLBI ERIC (JIVE)
CONWAY, John	Onsala Space Obs
FREIMANIS , Juris & DEDZE, Indra - video	VENT
GARRETT, Michael	UMAN
GARRINGTON, Simon	UMAN
MAUERSBERGER, Rainer	MPIfR
ROTTMANN, Izabela	MPIfR
TESTI, Leonardo	ESO
VENTURI, Tiziana - video	INAF
VERMEULEN, René	ASTRON
ZENSUS, Anton	MPIfR
SCHUSTER, Karl	IRAM



**SPOOR FACE-TO-FACE MEETING**

**FEBRUARY 7, 2019**

**MPG HARNACK-HAUS, BERLIN/DE**

**SIGNATURE LIST**

Name	Signature
CASADO IGLESIAS, Jacqueline / MPG	
COLOMER, Francisco / JIV-ERIC	
CONWAY, John / OSO	J.E. Conway
DEDZE, Indra / VENT	Video
FREIMENIS, Juris – video / VENT	Video
GARRETT, Michael / UMAN	as H
GARRINGTON, Simon / UMAN	Simon
MAUERSBERGER, Rainer / MPG	
ROTTMANN, Izabela / MPG	
TESTI, Leonardo / ESO	
VENTURI, Tiziana – video / INAF	Video
VERMEULEN, Rene / ILT	
ZENSUS, Anton / MPG	

Schuster Karl  
IRAM

1-6pm (CET): Meeting

Welcome and introductions - MAG/All

Notes from the last meeting.

## Status update SPOOR - MAG

MAG presented the current status of the SPOOR task (RadioNet WP 4.3). So far all milestones and deliverables have been met. The next deliverable is a progress report due at the end of this year. MAG considered what had changed since the Quesera WP was finalised 4 yrs ago. A lot has changed:

- SKA project is much more tangible -operational phase on the visible horizon (see also report from RadioNet Adv. Group)
- SKA operational costs are significant, impact on national RA programmes might be expected
- SKA is now established as an IGO
- RA facilities on a European scale continue to expand and flourish - membership of the ILT, EVN continues to grow, VLBI growing on a global scale (Asia) etc.
- RadioNet will not be funded in its current form.
- JIVE is now established as an ERIC, operating on a European scale.
- Exploitation mode of RA facilities is changing rapidly, with large collaborations emerging, huge data sets, increasing compute and data mining requirements etc. SKA Regional Data Centres are planned.
- Astronomers expectations have increased w.r.t. science ready data products and significant user support.
- Operating in an uncertain and rapidly changing political climate.

Some questions we should try and find answers to:

- 1) How do we ensure all (or a subset) of our (community) activities continue to be well organised beyond RadioNet?
- 2) How do we maintain vibrant national radio astronomy programmes in Europe ?
- 3) How do we progress the European Radio Astronomy collaboration in the era of SKA operations?

MAG's personal vision is to increase RA coordination in Europe via JIVE. The first step is to see the EVN and JIVE merge into a single entity and for JIVE to pick up the various activities previously coordinated by RadioNet (e.g. YERAC, CRAF, ERIS, EC projects etc).

SPOOR members contribution

FC: What would RadioNet do if it were still funded beyond RN4 ?

AZ: How does EC want to be involved in our field? TNA (NA and JRA - only if related to TNA and co-funding scenarios with national funders). RA Connection to related EC priorities (e.g. GW, Multi-messenger, OSC cloud) etc: ASTERICS, LOFAR EOSC, ESCAPE, Jumping JIVE, ++.

KS & LT: don't recognise the term "Industrial scale Radio Astronomy" used by MAG in their own domains.

RCV: Big things too (not just YERAC etc)

### **EC pilot project update – AZ**

Pilot going forward. TNA based. 15 Meuro total budget.

### **EVN & JIVE Board/Council meetings -JC/STG**

Joint meetings between EVN and JIVE. Recognition that every time we create a new activity, we create a new board... EVN and JIVE should merge - if we can't do that, we can't do anything.

Agenda item: merging JIVE and EVN - JEC presented paper. Credibility of organisation important when getting investment - we are competing with sleeker organisations.

JEC: JIVE EVN financial model would include in-kind contributions (telescopes and observing time) plus national cash contribution (as is). Full members contribute to both. Assoc. membership for those with no cash contribution - not on JIVE Council (== what is now the JIVE Council/EVN Exec). Operational matters would be discussed in forum open to all members - in an mgt committee (basically what is now the EVN board ; EVN exec stuff goes into Council). EVN and JIVE meetings will be back-to-back. In the future, EVN exec will be invited to JIVE council - making closer connections possible. Rafael Bachiller working on paper on how we make a closer connection between EVN and JIVE - RB is next EVN chair.

STG: EVN provides not only telescopes, also people. JIVE ready and willing to take on various central functions. JIVE review - strategic issues not in ToR, model of contribution and cost of correlation - needs work. Joint JIVE EVN meetings - functional analysis of EVN functions that JIVE can take on. Officers of the EVN - which could be placed at JIVE ? e.g. scheduler? TOG leadership? Can JIVE lead the technical dev. Of JIVE, and central deployment of equipment to stations?

FC: ongoing discussion at JIVE council - nothing decided - it will take some time - needs of all partners should be accommodated. Recognition that ERIC can be really useful - the legal form is being exploited by other communities with an ERIC - significant opportunity for us to further develop this - we should use it more in the future.

### **Update on Personal visions of the coordination/organisation of European**

## Radio Astronomy -

KS: coordination that includes all of RA important - lobbying EU, support of TNA users, radio users will be broad users of radio astronomy facilities from SKA1-low to ALMA - need a structure that operates for all of radio astronomy. Technical cm/mm partners should stick together, upgrade of ALMA on the horizon.

LT: common tools for data access important, also with optical. Forum for discussion for broad discussion on radio astronomy. Office for radio astronomy? JIVE office not viewed as being optimal by all.

JEC: proposed cm RA organised via JIVE. Coordinating forum needs an office. Use the JIVE legal entity to host the office. Different parts of JIVE do different things. Having a single body for a v. Broad cm/mm discussion forum - asking people to pay in - representation on European scale. Practical thing of using JIVE to get things done - just practical stuff. Office to address: CRAF?, JRAs, EC funding, administering the calls, etc.

FC: honest discussion - we've done a lot of things collectively (mm/cm). JIVE ERIC can help us. If we don't do something it will look very poor (from EC perspective). ERICs very flexible tool. How can we use this tool? Not only about VLBI ?

AZ: Aligning EVN-JIVE - Clarifying role of JIVE into the future - no common vision yet amongst the partners.

FC: We don't want to lose things RNet already does. We need to identify things that must be done. e.g. CRAF.

KS: new economic model required with no EC money.

RCV: m-wave similar to cm but also differences. 1 ERIC can't address all RA issues. Office for policy (EC), meetings, coordination, calls.

STG: harmonise the way we work - applying for time, all the way through to science exploitation. Don't forget LEAP, bringing telescopes together - lots of different ways to do this. How can we harmonise that? Important that any coordinating body is owned by us - jointly funded and able to receive funding.

AZ: vision is to form a loose, inclusive, flexible forum (MoU) - coordinating role - might need to build an office. 0.25M to staff an office (RadioNet) - partners - facilities, R&D institutes., ESKAC, CRAF, etc. etc.

JEC: foresaw role for office to bring EC consortia (projects) together - joint meetings.

TZ: this discussion needs to be had also nationally - incl. mm = TZ will report to INAF but encourages other Directors to consider how to ensure broader input from national communities.

YF (Yuris) would like to see a draft of the powers of any coordinating office, and its financial requirements. EVN upgrade was important. Worries about Brexit expressed.

## **Next Steps**

### **Partly summarised by TZ:**

1. Aligning EVN-JIVE - needs to be done - "emergency situation"
2. Maintain Broad Radio Astronomy collaboration across full wavelength range.
3. Coordination of activities (e.g. CRAF, YERAC, ERIS) - good starting point.
4. Office for Radio Astronomy (m/cm/mm).

### **In summary:**

SPOOR participants shared their visions of the future - quite a lot of the focus is on how better to organise metre and centimetre-wave radio astronomy - that's natural with the SKA era drawing closer towards us. A particular topic that is supported by several SPOOR group participants is the consolidation of the EVN within the JIVE ERIC. Some core group members would like to see the JIVE ERIC take on some central coordination and management activities associated with (for example) the CRAF FM, Training Schools, YERAC and other general joint RA activities. Many see the engagement of the various national research councils within the JIVE Council as being an important starting point for ownership and buy-in, especially as we and the community prepares for the era of SKA operations.

Other core group members would like to see a light-weight collaboration being set up along the lines of the MoU-based organisation originally proposed in the QueSERA White Paper ("RadioNet Work").

What we did agree on: that it was important to maintain the wide-ranging collaboration that RadioNet had achieved across the entire radio domain (from metre to sub-mm wavelengths). All of these ideas should be considered in more detail during the course of the next year.

Next meeting before summer 2019 in Schiphol.

**AOB**

None