Work package number 9	WP3	Lead beneficiary 10	1 - JIV-ERIC
Work package title	Building new Partnerships		
Start month	1	End month	48

#### Objectives

In order for JIV-ERIC to be an efficient and sustainable European entity, it must attract more partners in its first 5-year cycle. A number of opportunities exist to target new countries, involved or interested in VLBI. This WP implements support for the JIVE director and management in this process.

# Description of work and role of partners

# WP3 - Building new Partnerships [Months: 1-48] JIV-ERIC

Background. VLBI is collaborative and international by its very nature. The EVN was established by combining the efforts of European institutes and observatories, established primarily for activities other than VLBI. After exploring the scientific needs of astrophysical, astrometric and geodetic research for more than four decades, we think that the science case for VLBI necessitates true globalisation. On a European scale, it means involving new partners and connecting them to top-level science by integrating them with EVN and JIVE activities. As member of a VLBI network that one day will include the SKA, local, medium-size European facilities can participate in the on-going revolution in radio astronomy.

The aim will be to communicate the incentives to contribute to JIVE to national policy makers:

- Involvement in cutting-edge science research with links to global teams and organizations;
- Direct access to the intellectual property of the European VLBI collaboration and involvement in interdisciplinary innovation efforts;
- Joint exploitation of the science potential of VLBI for capacity building through exchanges, training events, schools and science meetings;
- Joint exploitation of the educational and public outreach potential of EVN and JIVE.

Task: Generate interest among potential new member countries to participate in JIVE. This WP has only a single task, but we adapt our strategy to the current level of involvement in the EVN and JIVE. We define three tiers:

Tier 1: countries and organisations already involved in one way or another in the EVN, JIVE, and/or JIVE-related FP7 or other joint activities. These are

- a) Finland: Aalto University, Metsähovi Radio Astronomy Observatory;
- b) Latvia: Ventspils International Radio Astronomy Center, Ventspils University College;
- c) Poland: Torun University, Center for Astrophysics.

Tier 1 countries are fairly close to attaining the status of full members of JIV-ERIC; all three are either full members of the EVN or are in the process of establishing a full EVN membership.

The main activity will be preparatory work for admission of the Tier 1 countries into JIV-ERIC. This may involve consultation on local policy roadmaps and funding proposals, as well as drafting collaborative agreements. In specific cases it may entail the implementation of joint science, educational, R&D and PO activities in these countries in close collaboration with the EVN.

Tier 2: countries/organisations that deploy VLBI activities consistent with the JIVE mission but not yet involved in JIV-ERIC:

- a) Hungary: FOMI Satellite Geodetic Observatory, with one of the leading VLBI users groups in Europe;
- b) Ireland: Cork University College, another one of the leading VLBI users groups in Europe;
- c) Russia: Institute of Applied Astronomy, a full member of the EVN, but with a disproportionally small users community.
- d) Ukraine: Radio Astronomy Institute, a well-established school of low-frequency radio astronomy with experience in VLBI technology and geodesy, but also with a disproportionally small users community.

We will start with establishing mechanisms to involve scientists, engineers and students from Tier 2 countries in JIVE activities. Note that this is related to WP2 activities, but also WP7.

Tier 3: countries/organisations with declared interest in radio astronomy and VLBI, but without established facilities and/or sizable user groups:

a) Israel: Weizmann Institute and Tel-Aviv University – radio astronomy groups being established, strong tradition in theoretical astrophysics;

- b) Jordan: National Meteorology and Geography Authority a declared interest in pursuing radio astronomy research;
- c) Norway: active involvement in geodetic VLBI (Ny Ålesund, Svalbard), but with a virtually nonexistent user community;
- d) Portugal: Institute of Telecommunications, Santiago University (Aveiro) strong tradition and interest in radio astronomy related technology (including SKA), VLBI antennas on Azores.

Specific activities in this category include assisting local contacts with creating a case to the respective national authorities for radio astronomy and VLBI activities. We also envision involvement in educational and nationally oriented PR actions, again in line with the activities in WP2.

The activities listed will start from collaborations along existing partnerships (Tier 1 and 2) and establishing new partnerships (Tier 3). These activities will range from preparing documents on science cases and legal frameworks (Tier 1) to preparing the initial input documents for initiating JIV-ERIC admission process (Tier 2) to assessing science potential of establishing national VLBI "seedgroups" (Tier 3).

The WP3 activity will be implemented by a policy officer, who will prepare engagement of national representatives with JIVE management and/or council members. Where applicable the work-package should be able to invoke legal expertise.

WP Leader: JIVE (Leonid Gurvits)

#### Participation per Partner

Partner number and short name	WP3 effort
1 - JIV-ERIC	11.80
Total	11.80

### List of deliverables

Deliverable Number <sup>14</sup>	Deliverable Title	Lead beneficiary	Type <sup>15</sup>	Dissemination level <sup>16</sup>	Due Date (in months) <sup>17</sup>
D3.1	Inventory of state of VLBI involvement	1 - JIV-ERIC	Report	Public	8
D3.2	Progress report on working with national representatives	1 - JIV-ERIC	Report	Public	24
D3.3	Final report on JIV-ERIC memberships	1 - JIV-ERIC	Report	Public	46

# Description of deliverables

As it is impossible to predict when and which country will make progress in this complex process, the deliverables will be limited to a number of evaluations:

D3.1: Inventory of state of VLBI involvement [8]

Inventory of state of VLBI involvement

D3.2: Progress report on working with national representatives [24]

Progress report on working with national representatives

D3.3 : Final report on JIV-ERIC memberships [46]

Final report on JIV-ERIC memberships

# Schedule of relevant Milestones

Milestone number <sup>18</sup>	Milestone title	Lead beneficiary	Due Date (in months)	Means of verification
MS8	Inventory of state of VLBI involvement	1 - JIV-ERIC	8	Inventory of state of VLBI involvement, shared with JIV-ERIC council
MS9	Progress report on working with national representatives	1 - JIV-ERIC	24	Progress report on working with national representatives, shared with the JIV-ERIC council
MS10	Final report on JIV-ERIC memberships	1 - JIV-ERIC	46	Final report on JIV-ERIC memberships, shared with JIV-ERIC council