

# WP2/JA1: Toward a strategic vision of astronomical Research Infrastructures in Europe [all partners involved]

JA1.1 Strategic vision of the relation between  
astronomical Research Infrastructures and the  
European Commission

JA1.2 Piloting the Pilot

JA1.3 Analysis of funding models

JA1.4 Accessibility, equal opportunities and  
diversity

JA1.5 Preserving the sky for future generations



# JA1.1 Strategic vision of the relation between astronomical Research Infrastructures and the European Commission

- Covid has delayed ambitions for meetings between stakeholders – RI funders, operators, users
- One large ORP hybrid meeting held Dec 2021
- Produced a valuable discussion document
- Already clear agreement that reducing funding will reduce TA and VA
- Discussions started between the 3 PILOTs, with Astronet, and with national funding agencies
- There are several other EC-funded astronomy I3 groups (AHEAD for high energy; ChETEC in nuclear astrophysics, Europlanet-RI2024 for planetary science).
- There are other closely-related communities, as dark matter, dark energy, multi-messenger blur the physics/astrophysics distinctions.
- Each community trying to be lead interface with EC
- Some discussion options unclear – can lump-sum funding survive high inflation?
- **Major issue – very limited communications with the EC**

# JA1.1 Strategic vision of the relation between astronomical Research Infrastructures and the European Commission

- **EC-interfaces: fewer and simpler?**
- Fewer contracts supporting federated communities?
- Discussions started between the 3 PILOTs, with Astronet, and with national funding agencies
- The other EC-funded astronomy I3 groups (AHEAD for high energy; ChETEC in nuclear astrophysics, Europlanet-RI2024 for planetary science) have independent ambitions
- There are other closely-related communities, as DM, DE, MMA blur the physics/astrophysics distinctions
- Complex distinction between RI operators and user communities
- Communities are not stable fixed groupings
- The biggest RIs do not take TA funding
- For all RIs EC TA/VA is a few percent of budget – too little to change systems to address
  
- Without the I3 model there are fewer direct activities working on behalf of the user community
- Combining communities while maintaining autonomy, ambition and creativity is not a solved challenge

# JA1.1 Strategic vision of the relation between astronomical Research Infrastructures and the European Commission

- **Reduced access funding?**
- Discussion with RI operators → Damaging
- Some RI would stop open access.
- Most would reduce quality of support for open access, focus on funder communities.
- Reduce support for innovative TA/VA developments
- Some countries require an international “seal of approval” to support their national RI. Significant positive leverage at risk.
- Would fail EC role to be international
- Reducing EC support would be unambiguously damaging
- There is no available “co-” to “co-fund”
- Cuts are cuts

# JA1.1 Strategic vision of the relation between astronomical Research Infrastructures and the European Commission

- **Widen access?**
- Most effective proven growth in real partnership has come from linking local communities' facilities into distributed networks.
- EVN and TDA are examples. Many more.
- Under-supported science communities join as valued equals
- Contributors not takers
- Local investment raising local skill base
- Building on (old?) local capital
- Complemented by specialist support for new users of the most complex mega-facilities: ALMA, VLT
- Big potential in other specialist fields – VA to surveys, adaptive optics, instrumentation,

## JA1.2 Piloting the Pilot

- The Call requires “*activities to monitor the related progress. Proposals should include clear indicators allowing the assessment of the progress towards the general and specific objectives, other than the access provision.*”
- This activity is planned to begin following an ORP-initiated review after PR1 and the review of ORP’s performance by the EC.
- Consider minimal administrative steps beyond ORP. OPTICON and RadioNet are merged for mostly historical reasons. What is/is there a rational set of communities to consider in a proof-of-concept expansion?
- Are there viable synergies across “multi-wavelength multi-messenger” astrophysics?

# JA1.3 Analysis of funding models

## JA1.3.1 Map and analyse the access modalities across RIs & Countries

- Primary topic at Consortium meeting 12/21 (& 11/22)
- Many processes, one aim – generous, science-based, open

## JA1.3.2 – Develop possible co-funding models for TA initiatives

- EC funding is the only supra-national funding source which supports “open skies” access purely on science merit
- No “co-fund” source identified in astronomy
- Deliverable D2.1: “Inventory of access modalities provided by the research infrastructures” done.

# JA1.4 Accessibility, equal opportunities and diversity

coordinated by Francesca Primas ESO

- This group has been very active, as detailed in the report.
- A core team formed, and identified three main areas for action:
  - Data collection (focusing on basic gender disaggregated statistics concerning the usage of the various facilities operating under ORP, policies and best practices).
  - Training schools for early career scientists.
  - Improvement of processes (e.g., introducing best practice methodologies in the evaluation of telescope time requests).

# JA1.4 Accessibility, equal opportunities and diversity

coordinated by Francesca Primas ESO

- Balancing and integrating the activities in the optical-radio communities does not go without thought and effort towards the balancing of gender and the diversity of our communities.
- Gender balance is a well-known challenge in the physical sciences.
- Education and best practice being key, gender and life-balance issues are flagged in Pilot-supported workshops and training schools.
- Attendees at our various training schools are merit-selected, and are approximately 50% male 50% female
- To underpin these activities with knowledge-based decisions we work to quantify our status quo, define ambitious but realistic goals, and recommend improvement paths for our future.

# JA1.4 Accessibility, equal opportunities and diversity

coordinated by Francesca Primas ESO

- **Achievements:** The ORP Code of Conduct and the JA1.4 Action Plan have been drafted and are under the approval process of the Consortium.
- The ORP **Code of Conduct** takes inspiration from similar documents already available adapted to the main activities of the ORP consortium. Not re-inventing wheels.
- The **Action Plan** includes 8 practical steps we can implement.
- A **Questionnaire for ORP TNA facilities** has been drafted and will be finalised in the coming months to provide quantitative information.

# JA1.5 Preserving the sky for future generations

coordinated from MPIfR Bonn/MPG

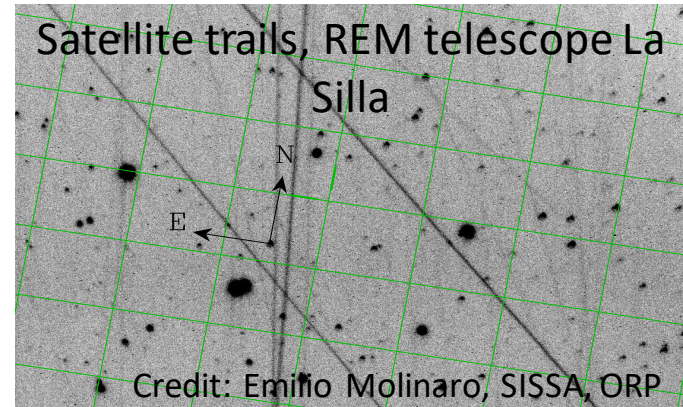
- The focus of this policy-driven forum is on coordination of efforts to preserve access to the sky for astronomical observations.
- This group is active on a regulatory, political, and public level. Technical solutions are sought by JA 2.5.
- Global awareness of threats, especially from satellite constellations, led to establishment (April 2022) of the Centre for the Protection of the Dark Sky from Satellite Constellation Interference (CPS) by the International Astronomical Union, co-hosted by the SKAO and NOIRLab (NSF), strongly supported by CPS and members.
- JA1.5 members participate in the CPS (co-director and in the Policy Hub of the CPS).



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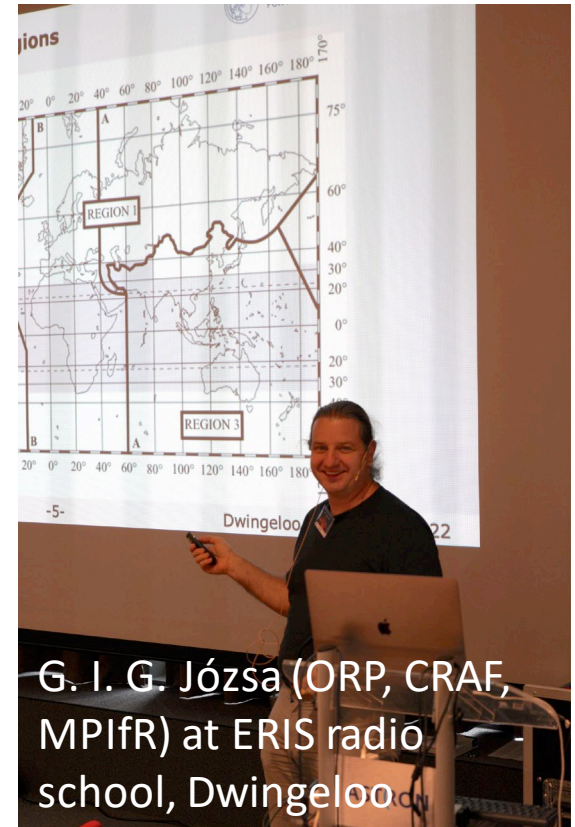
- Also active in IAU commission B7 Protection of Existing and Potential Observatory Sites, in the IAU site protection group, in spectrum regulatory organisations (ITU, CEPT, as well as national level) and provides members (and current Chair) of the ESF Committee on Radio Frequencies CRAF.
- JA1.5 acts through networks, by raising awareness, and through establishing advocacy and lobbying tools
- JA 1.5 started to raise awareness in public talks, and by informing students in schools (including ORP schools) about D&QS protection



# JA1.5 Preserving the sky for future generations

coordinated from MPIfR Bonn/MPG

- JA1.5 is currently further collecting information about and contacting relevant national and international organisations, such as national professional and amateur astronomical unions, to potentially increase the coordination between those groups.
- In the next periods, JA1.5 foresees to intensify, based on experience gained, the participation in several events (public and professional) to raise awareness about the protection of the dark and quiet skies, further establishing contact to national and EU organisations, and the development of a position paper.



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