



Recommendations to  
enhance African – European  
research infrastructure  
partnerships

# Structure of PAERIP Recommendations



- Part of comprehensive report to be released following conference
- Focus how to enhance role of RIs in JAES Science, Information Society and Space
- Interrogates rationale for bi-regional RI partnerships (do we need them?)
  - Why international STI cooperation needs RIs
  - Why RIs need international RI cooperation
  - Why Africa-EU RIs cooperation
- Recommendations to enhance Africa-EU RI partnerships: (how to do it better?)
  - Objectives for bi-regional RI partnerships (enhanced for what purpose)
  - High-level recommendations (enabling environment)
  - Specific recommendations (operational)

# Target audience of Recommendations



- Input into JAES STI cooperation, recommendations transmitted to:
  - Africa-EU STI Policy Dialogue Bureau
  - Joint Expert Group of Africa-EU Science, Information Society and Space Partnership (Joint Africa-EU Strategy)
  - Other actors relevant to JAES implementation (public dissemination)

# Why international STI cooperation needs RIs?



- RIs key determinants competitiveness and development
  - STI for growth and development
  - Leveraging innovation potential and non-science benefits
- RIs essential for research address societal challenges
- RIs drivers for international cooperation
- RIs encourage multi-disciplinarian research
- RIs enablers for training and mobility (researchers / ideas)
- RIs foster excellence in research
- RIs platforms for science communication / science education
- Illustrative examples of RIs well-suited bi-regional cooperation
  - radiation sources, bio-banks, clean rooms, observatories, telescopes, databases, supercomputers, high-speed networks, etc.

# Why RIs need international cooperation?



- RIs are complex and costly – cannot do it alone – need to pool resources
  - Integrate equipment, services and data
- RI cooperation can leverage efficiencies of scale and scope
  - Avoid duplication of effort and investment – shared objectives
  - Coordinate and rationalise use facilities – e.g. where user community not merit new investment

# Compelling argument for Africa-EU RI partnership



- Long-standing and strong Africa-EU STI cooperation framework – RIs can enhance
- RI cooperation aligned with objectives of enabling JAES political and STI frameworks
  - Support shared sustainable development and capacity-building objectives
- Respective comparative advantages and complementarity to exploited for mutually beneficial RI partnerships
  - Geographic, resource or knowledge



# Objectives for Africa-EU RI partnerships



- Optimally leverage bi-regional RI partnerships for scientific advancement and innovation in Africa and Europe
  - Ensure availability of world-class RIs to African and European researchers to enable and support their cooperation
    - Establish reciprocal access and RI networking programmes
    - Build, maintain and operate RIs required for global and bi-regional STI cooperation
  - Harness RIs as instruments for capacity-building

# High-Level Recommendations: Enhance enabling environment for Africa-EU RI partnerships



- Facilitate cooperation and coordination between different national and regional RI programmes
  - Greater awareness of capacities / needs
- Encourage synergy between different funding instruments for RIs – optimal investment
- Introduce key policy objectives into cooperation frameworks:
  - Foster innovation potential of RI partnerships
  - Support provision of human capital development for RIs
  - Leverage RIs for human capital development, institutional capacity-building



# Specific Recommendation (1): Develop and agree “Roadmap” for Africa-EU RI partnerships in JAES



- Proposals for partnership in development new large-scale facilities
  - Inventory of opportunities and support required
    - Options include establishing regional partner facilities for existing large-scale facilities
- Guidelines for bi-regional integration and opening up (access) of RIs
  - Proposals for bi-regional RI networks, how to facilitate mobility, etc.
- Framework for e-Infrastructure cooperation (horizontal)
  - Inform policy (e.g. data / open access ) and investments (required capacities)
  - Development, deployment and operation
  - (Drawing on work of sister projects)
- Recommendations on different funding / cooperation instruments
  - Research and Innovation (Horizon 2020, African Research Grants, etc.)
  - Development cooperation (European Development Fund, Pan African Programme, Africa-EU Research Infrastructure Trust Fund, etc.)
  - National (bilateral) cooperation frameworks

## Specific Recommendations (2): Innovation potential of and human capital for RIs



- Further explore how best to foster and leverage innovation potential of bi-regional RI cooperation
  - Exploiting role of RIs early adopters of technology as platforms for bi-regional technology transfer
  - Promoting R&D partnerships RIs and industry (e.g. multinational companies footprint both Africa and Europe)
  - Facilitating industrial use of RIs (part of Africa-EU economic cooperation)
  - Stimulating creation of bi-regional RI-linked innovation clusters
  - Involving of EBI, AfDB (investment funding agencies)
- Establish Africa-EU cooperation programme / framework on human capital for RIs
  - Training and exchange programmes staff managing and operating RIs

# Finalisation of Recommendations



- Revision following input gained at conference
- Publication due with conference report
- Wide public and targeted dissemination, objective to ensure take-up and ownership



*Thank you for your  
attention*