

Development through Radio Astronomy Global Network



Melvin Hoare

University of Leeds

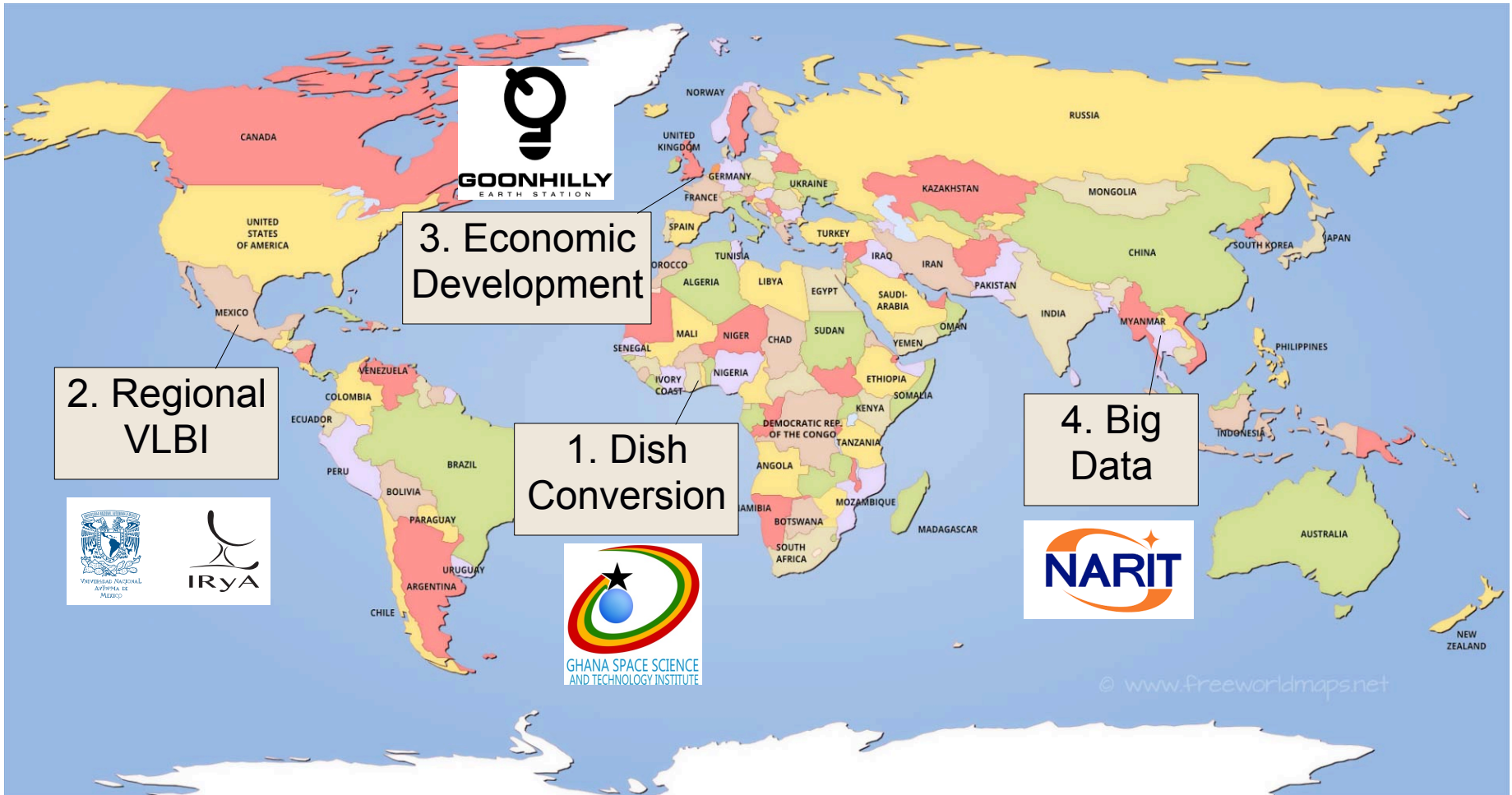
UK

<https://dragn.info>



Four International Workshops

UNIVERSITY



Dish Conversion Workshop

UNIVERSITY



- 21-25 January 2019, Accra, Ghana
- 24 different countries represented



A GCRF Project

UNIVERSITY



- The Global Challenges Research Fund uses the UK Government's Overseas Development Assistance (ODA) budget to fund research that addresses challenges in low- and middle-income countries



GCRF Delivery Partner

UNIVERSITY



Science & Technology
Facilities Council

UK Research and Innovation

- Additional support from EU H2020 project Jumping JIVE



Origins of this Project

UNIVERSITY



- Bringing together several bilateral projects that are funded by the UK's Newton Fund – another ODA programme – that are ongoing in:
 - Africa
 - Latin America
 - S E Asia



The DARA Project

- UK- South Africa radio astronomy training project in 8 AVN/ SKA Partner countries

UNIVERSITY



DARA UK Partners

UNIVERSITY



Newton Fund Projects

- UK – Thailand
 - Radio astronomy training project
- UK – Mexico
 - Radio astronomy instrumentation
 - Dish conversion project at Tulancingo
- UK – Colombia
 - Big data training project

UNIVERSITY



S E Asia

Global

Newton Fund
STFC-NARIT Capacity Building for Thai Radio Astronomy
 Feb 2017-Mar 2018
 £59k

Newton Fund
STFC-NARIT Capacity Building for Thai Radio Astronomy Phase 2
 Apr 2018-Mar 2020
 £440k

Global Challenge Research Fund
Development through Radio Astronomy Global Network
 Jan 2018-Dec 2019
 £300k

Royal Society
Radio astronomy capacity building in Ghana prior to the SKA
 Aug 2014-Jul 2017
 £179k

Newton Fund
Radio Astronomy for Development in Africa
 Jan 2015-Sep 2017
 Apr 2017-Mar 2019
 £835k + £202k

Newton Fund
Development in Africa with Radio Astronomy – Phase 2
 Apr 2017-Mar 2021
 £2.75M

Newton Fund
A UK-Africa Data Science Network
 Apr 2017-Mar 2021
 £1.48M

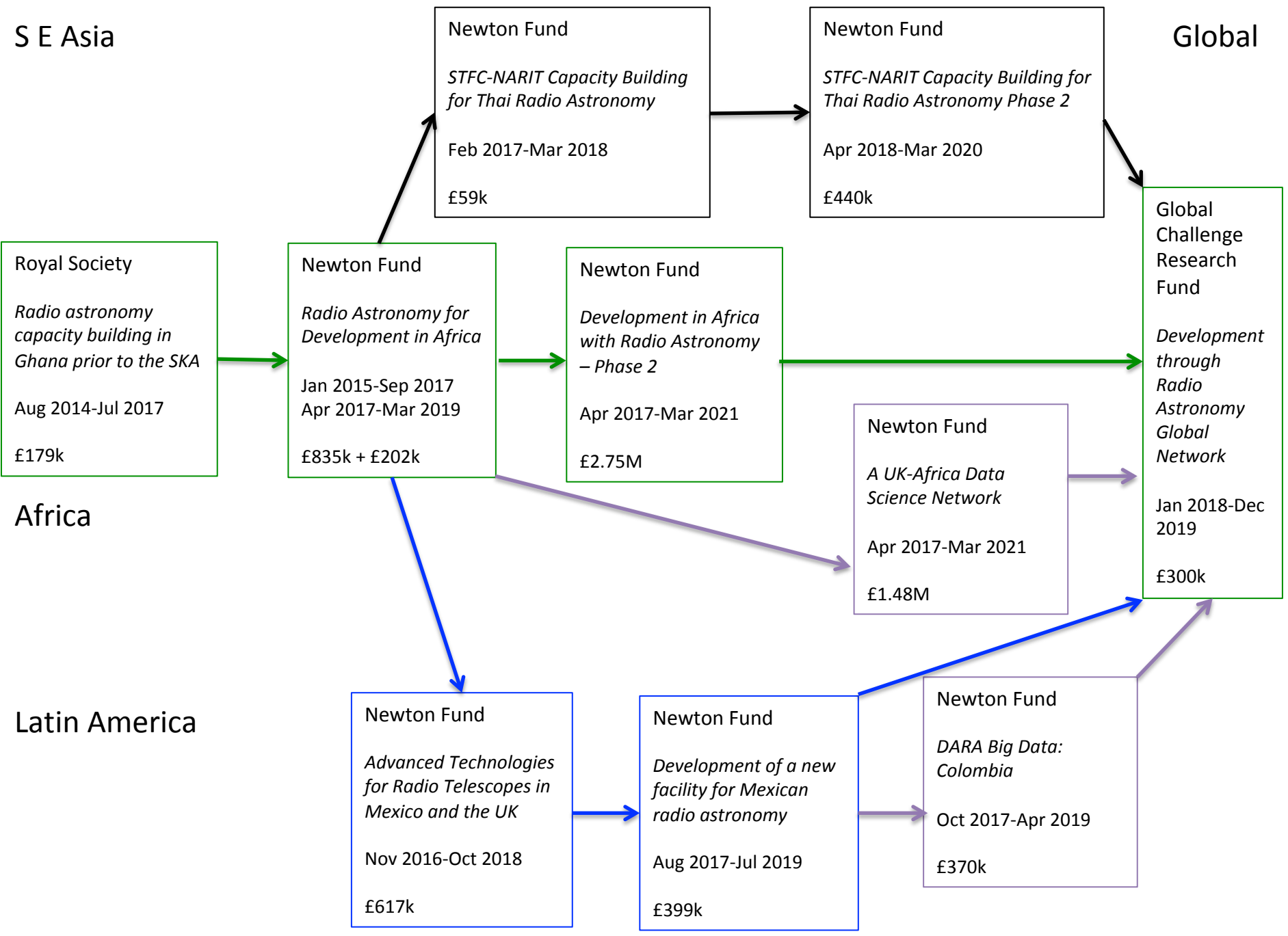
Africa

Latin America

Newton Fund
Advanced Technologies for Radio Telescopes in Mexico and the UK
 Nov 2016-Oct 2018
 £617k

Newton Fund
Development of a new facility for Mexican radio astronomy
 Aug 2017-Jul 2019
 £399k

Newton Fund
DARA Big Data: Colombia
 Oct 2017-Apr 2019
 £370k



Regional VLBI Workshop

UNIVERSITY



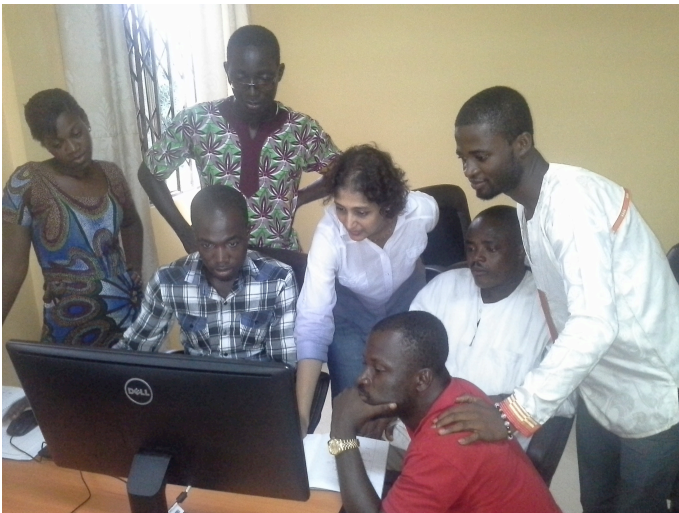
- What science can you do with an array of radio telescopes on continental baselines?
 - EVN, VLBA, EAVN, LBA
 - African VLBI Network
 - Latin American VLBI Network?
- ODA Compliance
- What economic benefit can be gained from a network of radio telescopes?

UN Sustainable Development Goals

UNIVERSITY



- 4.4 to “substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship”



UN SDGs

- 9.5 to “enhance scientific research, upgrade the technological capabilities of industrial sectors,...encouraging innovation and substantially increasing the number of research and development workers,...and...research and development spending”.

UNIVERSITY



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



UN SDGs

- 17.6 to “enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms”.

UNIVERSITY



17 PARTNERSHIPS
FOR THE GOALS

