Request for Expressions of Interest from applicants to participate in the ANU-Data61 International Fellowships Program for Indonesian Civil Servants

A. Background and objectives

On 31 August 2018, the Government of the Republic of Indonesia (GoI) and the Government of Australia (GoA) signed a Memorandum of Understanding on Cyber Cooperation. Subsequently, in November 2019 the Cyber Affairs and Critical Technology Branch of the Australian Department of Foreign Affairs and Trade (DFAT) and the Australian National University (ANU) agreed to establish an international data fellowships program, in partnership with Australia's National Science Agency, CSIRO, and their data and digital specialist data sciences arm, Data61. As an applied research and development partner, Data61's capabilities range from cybersecurity, confidential computing, robotics, machine learning and analytics, software and programming to behavioural sciences and more.

The program, funded by DFAT, will support two qualified Indonesian civil servants to undertake a three-month fellowship at CSIRO's Data61 in 2021. The ANU-Data61 International Fellowships program for Indonesian civil servants is the first such Data61 program for international participants.

The objectives of the program are to:

- provide Indonesian data specialists with access to high-end professional development opportunities in Australia, advancing their knowledge and skills;
- build data skills within their originating agency;
- help solve difficult, high-value development and data-related problems;
- develop long-term institutional links between Australian and regional organisations; and
- contribute to the COVID-19 pandemic response, economic development, poverty alleviation, security and stability across Asia and the Pacific.

B. Background to the ANU-Data61 International Fellowship program

The ANU-Data61 International Fellowships program is modelled on the successful Australian Public Service (APS) Data Fellowships Program, a partnership between the Australian Digital Transformation Agency (DTA) and CSIRO's Data61. The APS Data Fellowships are awarded to high performing data specialists through a competitive process. APS officers spend three months at Data61 or a partner organisation, drawing on advice from research and engineering experts to address an agency data-related problem. This approach is particularly well suited to data specialists with clear policy questions to answer.

Over the past three years, Data61 and its partners have hosted 30 APS data specialists from 20 Australian agencies. Data Fellows work in a self-directed manner with guidance from host agency mentors. Fellows are encouraged to make connections with relevant experts in the broader Data61 community and Data61 actively supports building this network by arranging presentations and one-on-one meetings. In April 2019, Data61 commissioned an external evaluation of the APS Data Fellowship Program. Chief among the report's findings were that:

- 100 per cent of APS Data Fellows recommend the program and wish to remain in contact with the Data61 network and continue to build relationships developed through the program.
- Many participants and home agencies have been positively impacted through participation in the program, reporting increased skills and expertise, enhanced careers and leadership, and improved work processes.

- Post-fellowship, four out of ten APS Data Fellows were appointed as CSIRO affiliates to continue their collaboration with Data61 and their mentors, outside of the program.

C. Overview of the ANU-Data61 International Fellowship Program

While the overall model of the ANU-Data61 International Fellowship program is based on the APS program, there are a number of important and unique features of the international program. For example, due to differences in language, culture and institutional norms, Fellows will be provided with additional and tailored support ahead of their departure for Australia and during their time in Australia to ensure they get the most out of their time with Data61.

Fellows will live in Australia throughout the three-month fellowship period and will be supported in obtaining relevant visas, insurances, accommodation, transport and orientation. Fellows will be hosted by ANU in Canberra, or Data61 offices in Canberra, Sydney or Melbourne.

D. Targeted GoI ministries and agencies

With respect to the first fellowship intake, agreed GoI ministries/agencies are being targeted. These agencies are strategic partners of the Cyber Cooperation agreement or are key agencies in dealing with the COVID-19 pandemic in Indonesia. The agreed targeted agencies are:

- National Development Planning Agency (Bappenas)
- National Cyber and Crypto Agency (BSSN)
- Ministry of Health
- National Disaster Management Agency (BNPB)
- Ministry of Social Affairs
- Statistics Indonesia (BPS).

E. Expected qualifications

There are a number of prerequisites for application to the program. Candidates must:

a. Be a civil servant from a targeted GoI ministry or agency.
b. Have significant cyber and/or data analytics (preferably AI/ML) capability.
c. Have a clearly defined problem and a viable proposal for how to address the issue.
d. Have full support from their ministry/agency, both during the fellowship and for implementation of outcomes upon her/his return.
e. Be in the appropriate position to implement the project upon return from Australia.
f. Be eligible to travel and stay in Australia for three months.
g. Be able to participate within the fellowship timetable.
h. Be fluent in English. The applicant's English language competency is part of the selection process; however, there will be no official language test. The assessment of language competency is based on a phone interview and any additional evidence provided by the applicant (for examples: proof of studies or living in an English-speaking country or working in an English-speaking environment; completion of studies in English, or language course or language tests).

F. Assessment criteria

- scope and quality of the applicant's data-related problem or opportunity

- feasibility of finding a solution to the applicant's problem or opportunity within the 3-month placement
- skills and experience needed to solve the problem within the 3-month placement
- how easy it would be to apply the solution on a larger scale
- how the placement could improve the applicant's data capabilities and professional development
- how the applicant could share the skills and capabilities they learn with their home agency
- benefit to other Indonesian government agencies.

G. Examples of past fellowship projects

Outputs and outcomes from participants in the program have been impressive to date, including:

- A Fellow from the Department of Finance built expenditure models for evidence-based policy design using a variety of health-related datasets.
- A Fellow from Treasury used machine-learning techniques to forecast real GDP growth in Australia and to compare the accuracy of this modelling approach to methods that are currently used.
- A Fellow from the Department of Health developed a microsimulation model for hospitalisation risk in chronic disease patients.
- A Fellow from the Department of the Environment and Energy developed an empirical model using machine learning algorithms with the aim to predict the changes of terrestrial soil carbon. This model is intended for use as a validation tool for the official estimates of greenhouse gas emissions from changes in soil carbon in Australia's crop and grass lands.
- A Fellow from the Department of Social Services examined the effectiveness of the Commonwealth Financial Wellbeing and Capability Activity towards improving wellbeing outcomes for financially disadvantaged Australians, using robust analysis of administrative data.

H. Timeline for expressions of interest and selection process

At present, the proposed timeline for the application and selection process and fellowship component of the program is as follows:

No.	Activity	Timeframe	Description
1.	Request for expressions of interest (EoI)	25 January - 28 February 2021	Applicants to submit their CV and up to two-page proposal of their research project by 28 February.
2.	Shortlisting of submitted EoI	1-12 March 2021	The shortlisting process is led by a joint selection panel.
3.	Request for detailed applications	15 March - 9 April 2021	Shortlisted applicants will be invited to submit detailed applications.
4.	Interviews of applicants and their managers	April 2021	Shortlisted applicants and their managers will be invited for online interviews by the joint selection panel.
5.	Announcement of selected fellows	May 2021	Applicants to be notified of the outcome of their application.
6.	Preparation for departure to Australia	June-July 2021	• COVID-19 status review and assessment of feasibility and risks to departure in August 2021.

			• Data preparation • Travel arrangement and visa application • Pre-departure briefing.
7.	Fellowships in Australia	August-October 2021	• Fellows regularly check-in with supervisors and teams at their originating agencies, providing a short progress report at a minimum of every four weeks. • Fellows secure agreement with supervisors on a post-fellowship plan of action.
8.	Post-fellowship activities	November 2021-March 2022	• Fellows present to their agency and relevant stakeholders on the outcome of the fellowship. • Implementation of post-fellowship plan.

Given the uncertainties regarding possible travel dates created by the COVID-19 situation, the proposed travel dates will be subject to ongoing review into 2021.

I. Submission of expressions of interest
As the first stage of the selection process, aspiring applicants from targeted GoI agencies are requested to submit their EoI. The EoI should comprise of following items:
   A. Response in relation to the expected qualifications (section E), which may include proof of English proficiency.
   B. An outline of the problem and proposal of the solution to the problem (point A and B should be no more than 2 pages combined).
   C. CV (no more than 3 pages).

The EoI shall be submitted in English via email to dpa@anu.edu.au no later than **28 February 2021**. A confirmation of receipt will be provided within 48 hours. All inquiries related to the selection process and other relevant issues can be addressed to the same email address.

J. Selection procedures
The two fellows will be identified through a competitive process. As indicated in the timeframe, the selection process is divided into two steps.

Step one involves submission and assessment of EoI. In this step, aspiring applicants submit their EoI comprising three main parts: i) Description of relevant qualifications; ii) an outline the problem and proposal of the solution to the problem; and iii) a current CV.

Step two involves submission of the detailed project proposal and interview. Only shortlisted applicants will be requested to submit detailed project proposals. Upon reviews of the proposals, the applicants and their managers will be invited to the panel interview. During the interview, the applicant will be asked to present and answer questions about their project proposal.

10. Assessment of expressions of interest
The submitted EoI will be assessed by a joint selection panel. The joint selection panel will comprise representatives from GoI (Bappenas and BSSN) and GoA (DFAT and CSIRO/Data61). The panel will pay specific attention to project proposals that are related to the COVID-19 pandemic response. Each shortlisted applicant will be requested to submit the detailed project proposal and to be invited to the interview session.