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Office of the Minister of Statistics

Chair, Economic Development Committee

Confirmation of timing of New Zealand's next Census of Population and Dwellings

Proposal

1 This paper informs Cabinet of the Government Statistician's decision to deliver the next census in 2023 and provides an update on the development of a more resilient census model as part of Stats NZ's work on the future of the Social and Population Statistics Programme.

Executive Summary

- 2 In March 2022 Cabinet agreed to amend the Data and Statistics Bill (now the Data and Statistics Act) to build-in a contingency mechanism that safeguards the timing of the next census, by extending the timeframe in which the next census could take place from '2023' to '2023 or 2024' [CAB-22-MIN-0054 refers].
- 3 At that time, I outlined my intention to return to Cabinet with the Government Statistician's decision on whether to proceed with the census in 2023 as planned, or to delay the next census to 2024 [CAB-22-MIN-0054 refers].
- 4 This paper outlines the Government Statistician's decision to proceed with the next census in March 2023. Among other factors considered, the results of the 2022 census test demonstrate a sufficient level of readiness to operationalise the 2023 Census design. Further, the Government Statistician does not consider delaying the next census to 2024 to be warranted given this is unlikely to:
 - 4.1 provide notable benefit,
 - 4.2 significantly reduce the level of uncertainty or risk stemming from the external environment as 2024 may not provide improved conditions for a census operation, or
 - 4.3 provide for a demonstrable improvement in the quality of data produced.
- 5 While the advantages of proceeding with a census in 2023 are considered greater than those associated with delaying to 2024, a 2023 Census is not risk free. Key risks, including the on-going presence of COVID-19 within communities; tight labour market conditions and inflation; and some operational factors, are being actively managed in the lead up to the census

operation – contingency plans are being established, and exploration of effective mitigations is ongoing.

- 6 Preparations for the 2023 Census will continue to be overseen by the 2023 Census Programme Board, and Stats NZ will continue to report to me on a regular basis in the lead up to the 2023 Census. This includes reporting on work to explore mitigations for key risks, any new or emerging risks, and any additional testing being completed.
- 7 Overall, Stats NZ is driven to deliver a census in March 2023 that safeguards the production and provision of high-quality data for and about all communities across New Zealand.
- 8 In this paper, I am also updating Cabinet on Stats NZ's programme of work on the future design of the Social and Population Statistics Programme – which includes development of a more resilient census model for New Zealand. This work involves understanding future data needs and how best to meet them utilising an 'administrative-data first' approach. That is, greater use of data already held by government agencies and lessening the reliance on traditional collection methods. This programme of work aligns with work being done internationally to create efficiencies in census delivery.

Background

Context

- 9 Stats NZ has been steadily building and preparing for the delivery of New Zealand's next census. This work includes ensuring collection sites are ready; processes and data collection methods are sound; census staff and communities are prepared; technology solutions are fit-for-purpose; and service supports can be delivered effectively.
- 10 However, the rapidly changing external environment in New Zealand (including the evolving COVID-19 pandemic) has impacted Stats NZ's ability to test some components of the census design and processes in a real-world simulation of the census itself.
- 11 In light of the outbreak of the Omicron variant of COVID-19 in early 2022, Cabinet agreed to amend the Data and Statistics Bill (now the Data and Statistics Act 2022) to build-in a contingency mechanism that safeguards the timing of the next census, by extending the timeframe in which the next census could take place – from '2023' to '2023 or 2024' [CAB-22-MIN-0054 refers].
- 12 In seeking agreement to amend the Bill, I outlined my intention to return to Cabinet with the Government Statistician's advice on whether to proceed with the census in 2023 as planned, or to delay the next census to 2024 [CAB-22-MIN-0054 refers].

Lessons learned from 2018 Census has informed the design of the 2023 Census

- 13 The design of the 2023 Census has been informed by the lessons learned from the 2018 Census – targeting the elements which did not work well in 2018; while also delivering for a bigger, more diverse, and changing population.
- 14 Some of the key features and shifts planned for the 2023 Census are:
 - 14.1 more, earlier, and ongoing community engagement activity, including community influenced collection and engagement initiatives aimed at supporting communities, including Māori, Pacific and other population groups, drive their own response to the census (e.g., through utilising cultural expertise and community connections);
 - 14.2 increased focus on building data capability with iwi-Māori and communities;
 - 14.3 more census field staff at census time (around double the number of census collectors employed in 2018);
 - 14.4 providing the option of completing the census online or on paper forms (with 44 percent of all dwellings provided paper forms before census day, compared with three percent in 2018);
 - 14.5 increased in-person assistance to complete the census, including help at doorstep and across the doorstep (the Assist stream);
 - 14.6 increased focus on accessibility, with different formats supporting a wider range of people in New Zealand.
- In addition, 2023 Census will utilise a combined census methodology, whereby responses collected through the census operation are supplemented with administrative data¹ to maximise the quality and coverage of census data. While this approach was used for the 2018 Census to retrospectively address data quality issues, a combined methodology is an intentional part of the design of the 2023 Census.

Decision on the timing of the census - key inputs

- 16 In taking a decision to proceed with delivering the next census in 2023, the Government Statistician considered a range of factors, including:
 - 16.1 the external environment (see paragraph 18);
 - 16.2 results from the 2022 census test and whether these demonstrate a sufficient level of readiness to operationalise the 2023 Census design (see paragraph 21);

¹ Administrative-data is data collected by government agencies or other organisations in the course of conducting their business or services, as opposed to data collected primarily for statistical purposes.

- 16.3 additional assurance work for the Assist stream of the 2023 Census design following its removal from the scope of the 2022 census test (see paragraph 24);
- 16.4 advantages and disadvantages associated with delaying the census (see paragraph 28); and
- 16.5 key risks associated with proceeding with the census in 2023 (see paragraph 37).
- 17 Prior to the Government Statistician's consideration, these factors were scrutinised and tested by the 2023 Census Programme Board. The 2023 Census Programme Board consists of independent members, including an independent chair, a member from the Australian Bureau of Statistics and a representative from the Data Iwi Leaders Group.

The external environment

- 18 Stats NZ has actively monitored the external environment and looked to record the state of, and identify any changes in, the national and international health, political, environmental, social, technological, legal, and economic contexts. Monitoring the external environment has allowed Stats NZ to canvass environmental factors that could impact the 2023 Census and consider what mitigations are needed, or suitable for managing these impacts.
- 19 The impact COVID-19 is having on communities across New Zealand has recently shifted as a result of the vaccination programme, reduced public health restrictions and lower case numbers. However, as experienced previously, this could change rapidly if a new variant of COVID-19 emerged or there is an increase in cases. This may pose additional or different challenges for the 2023 Census operation such as workforce availability, community preparedness and willingness to participate.
- 20 Stats NZ is currently paying close attention to changes in the economic environment and considering the impact that pressures stemming from a tight labour market and higher levels of inflation could have on the 2023 Census – including on recruitment of field staff and costs of resources.

2022 census test operation

- 21 Testing is a critical part of preparing for a census, and the need for adequate testing was identified as critical by the Independent Review of New Zealand's 2018 Census. The purpose of the 2022 census test operation was to provide assurance that operations that support the design of the 2023 Census, will deliver the objectives sought, and that the processes required for the full census come together once deployed in the real world.
- 22 Stats NZ executed the 2022 census test operation through February, March and April 2022 across locations in Auckland and Tauranga – although some elements of the test (such as face-to-face support for respondents) were removed due to the presence of COVID-19 in our communities. Overall, the

2022 census test operation demonstrated that the systems in place work in an integrated way to support households and individuals to complete census forms. This included the processes for the supply, collection, and processing of paper census forms.

23 The 2022 census test operation also provided confidence in the delivery of key communication services, such as information on the website and the production and delivery of information in alternative formats. Delivery of precensus day reminder letters² were also considered effective at prompting earlier responses to the census, therefore, reducing the need for non-response follow-up activity. Additionally, non-response follow-up approaches (contactless due to COVID-19 restrictions) increased responses, confirming the benefit of having field staff present in communities, even in a contactless environment.

Results from additional assurance work for the Assist stream of the 2023 Census design

- 24 The Assist stream is the most intensive collection approach in the design of the 2023 Census and involves the provision of personal and close-contact support for respondents. It has been designed to lift response rates in areas and communities where response to the census is typically low, particularly in the 2018 Census.
- 25 In the lead up to the 2022 census test and following New Zealand's move to 'Red' settings of the COVID-19 Protection Framework, Stats NZ received strong messages from communities (South Auckland and Eastern Bay of Plenty) regarding their preparedness to participate in testing. Recognising these concerns, and in support of the relationships built within communities, the Assist stream was removed from the test.
- 26 In place of testing through the 2022 census test, alternative work has been completed to better understand the potential effectiveness of the Assist stream and provide some assurance and validation. This work included targeted engagement (with communities and customers), market research, statistical modelling, and a review by experts from other National Offices of Statistics all of which provided assurance that the Assist stream was likely to be effective at encouraging and securing responses to the census.
- 27 Key assurances coming out of this work include that:
 - 27.1 the majority of the customers who participated in targeted engagement expressed general confidence in the approach and its effectiveness at improving response rates for priority population groups;
 - 27.2 the market research indicates that the Assist stream appears to be targeted towards the right population groups and is likely to be effective

² Pre-census day reminder letters are delivered after households are provided a way to complete the census, but prior to census day. They function as a prompt for early participation, aiming to reduce the need to non-response follow up (both via mail and field collectors).

IN CONFIDENCE

at increasing the likelihood of participation in the census, particularly for Māori and Pacific populations – compared to a 'mail-out' option where participants are provided a method to participate, but without face-to-face support;

- 27.3 the statistical modelling work independently identified areas of New Zealand that would benefit from the Assist stream confirming that the Assist stream is targeting the right areas; and
- 27.4 engagement with international counterparts, including the Offices of National Statistics in Australia, Canada and the United Kingdom confirmed that based on their experience, the design of the Assist stream appeared appropriate for maximising response rates from groups that are typically harder to enumerate in the census operation.

Potential advantages of delaying the census

- 28 In addition to the above assurance work, the Government Statistician also considered the advantages and disadvantages of delaying the census by 12 months.
- 29 The advantages of delaying the census to 2024 largely relate to the additional work that could potentially be undertaken by Stats NZ with the additional 12 months ahead of the census operation. These include:
 - 29.1 further testing of systems, processes, and field design;
 - 29.2 managing or reducing risk related to the quality of the operational frame (address database), data processing system and data dissemination tools; and
 - 29.3 further opportunity to partner with iwi and additional community groups to support data collection including learning from and utilising features of the COVID-19 vaccination roll-out that were successful in uplifting participation of priority population groups.

Potential disadvantages of delaying the census

- 30 The disadvantages associated with delaying the next census to 2024 are more wide-ranging. These include:
 - 30.1 delayed provision of data from the census and flow-on delays to the New Zealand Disability Survey and Te Kupenga³, resulting in an ongoing reliance on data that is increasingly out of date;
 - 30.2 reduced ability to utilise and strengthen workforces or community groups that have assembled as a result of the COVID-19 vaccination programme to support the census operation; and

³ Te Kupenga gives a picture of the social, cultural, and economic wellbeing of Māori in New Zealand, including information from a Māori cultural perspective.

30.3 the significant level of additional funding required to support a delay and its flow on impacts.

Decision of the Government Statistician

- 31 On balance, the Government Statistician considers that the potential advantages associated with delaying the census are not sufficient to justify the level of additional work or funding that would be required to support a delay – simply put, the benefits are not considered to outweigh the costs.
- 32 The Government Statistician does not consider delaying the next census to 2024 to be warranted given this is unlikely to provide notable benefit, significantly reduce the level of uncertainty or risk stemming from the external environment – the external environment in 2024 may not provide improved conditions for a census operation – or provide for a demonstrable improvement in the quality of data produced.
- 33 The results of the 2022 census test demonstrate a sufficient level of readiness to operationalise the 2023 Census design, while also providing an understanding of what improvements and further testing can be undertaken.
- 34 The additional assurance work completed for the Assist stream indicates its likely effectiveness at helping secure census responses for traditionally harder to reach populations. Stats NZ will continue to engage with key agencies on ways to increase participation across priority population groups and harder to reach populations.
- 35 The Government Statistician therefore confirms his decision for the next census to take place as planned in March 2023, noting a 2023 Census is not risk free, and key risks will be actively managed in the lead up to the census operation.
- 36 In taking this decision, the Government Statistician acknowledges that the Data and Statistics Act 2022 provides the ability to hold the next census in 2024 and that this safeguards the census in extenuating circumstances that are incompatible with the census operation (as was the case with the 2011 Census following the Christchurch Earthquake).

Key risks and contingency planning for delivery of the 2023 Census

37 In taking a decision to proceed with the next census in 2023, the Government Statistician notes that key external risks remain, and that these are being actively managed. A description of these and the mitigations and contingencies being put in place to manage these, or further work being done to explore mitigations, are described below.

Impact of COVID-19 on delivery

- 38 The COVID-19 pandemic has impacted Stats NZ's preparation and planning to date and is expected to have an ongoing impact through to the 2023 Census operation.
- 39 To mitigate the risk of COVID-19 impacting the ability to engage directly with communities to secure responses to the census, or mobilise and enable community groups to drive responses, Stats NZ has designed 'step-down' contingency approaches. These step-down approaches can be executed in response to an increased presence of COVID-19 in the community during the 2023 Census operation.
- 40 The designed step-down approaches involve progressively reducing the amount of face-to-face contact that is provided to support people and communities to complete the census – with face-to-face contact eventually being removed, if required. The presence of COVID-19 in our communities during the operation, and the removal of the Assist stream from the 2022 census test provided the opportunity to test elements of these step-down approaches, including contactless non-response follow-up with respondents.
- 41 While these step-down approaches are similar to those utilised by Canada, Australia and the United Kingdom, and the ability to execute them effectively was tested during the 2022 census test, it is important to understand what impact using the step-down approaches might have on the outcomes of the 2023 Census.
- 42 Given this, scenario planning is being undertaken to assess the likely impacts of implementing the step-down approaches – including for priority population groups. This planning will include exploration of what mitigations might be available, or additional or alternative support could be wrapped around the step-down approaches to make them more effective and lessen any impacts.

Labour market and recruitment

- 43 Tight labour market conditions and wage inflation are posing challenges for the recruitment of staff to support the 2023 Census within planned timeframes. These are challenges expected to continue in the lead up to the 2023 Census operation and is being managed as a key risk.
- 44 Stats NZ has contracted specialist recruitment firms to recruit the field staff needed (approximately 3,500) to support the 2023 Census operation. Reflecting that recruitment of field staff is a key component of the 2023 Census design, and also a key risk, Stats NZ continues to test, scrutinise and refine the recruitment strategy – aiming to remove known barriers to successfully recruiting the right people, in the right places, at the tight time.
- 45 Work to refine the recruitment strategy is leveraging experience and insight gained through recruitment of field staff for the Dress Rehearsal operation, which was successful in Auckland, but below target in Tauranga. This includes:

- 45.1 engaging with other recruitment agencies to discuss how they can support the recruitment approach;
- 45.2 reviewing the terms and conditions set out in contracts such as hourly rates, hours of work and length of contract, and other contract terms and conditions; and
- 45.3 working with Te Puni Kōkiri to test partnership opportunities such as with the Māori Women's Welfare League and Māori Wardens.



48 In addition, contingency plans that are being considered include the redeployment of Stats NZ's existing field collectors or Stats NZ's office-based staff, as well as deploying the wider public service, and extending the collection period for the 2023 Census (noting that this will have flow-on impacts for Stats NZ's broader survey programme including the New Zealand Disability Survey).

Operational risks

- 49 Other key risks that are being managed are more operational in nature and are related to processes to support the delivery of quality and timely data following the 2023 Census operation – rather than risks to the successful operation itself. These risks are being actively managed, with resource being deployed where necessary to ensure delivery.
- 50 For example, Stats NZ will undertake testing of the data processing system and data dissemination tools that were unable to be fully tested in the 2022 census test operation. These systems and tools are required to support the timely release of 2023 Census data.
- 51 In addition, following challenges with the accuracy of the Operational Frame⁴ in the 2022 census test operation, work is underway to assess and improve the quality of the Operational Frame to address under coverage (missing dwellings). Monthly assessments of the quality of the Operational Frame will

⁴ The Operational Frame is a list of all dwellings and addresses in New Zealand. It is considered the 'backbone' of the census collection operation and is the starting point for the published count of dwellings in New Zealand following the collection operation.

be undertaken, prior to its final extraction for use in the 2023 Census operation (expected in October 2022).

- 52 These risks will continue to be closely monitored by Stats NZ, and overall preparedness will continue to be assessed and scrutinised leading up to the census. For example, in late 2022 there will be a period of scenario testing, which will involve simulating a number of potentially serious operational incidents to ensure systems are robust. Example scenarios will likely include a cyber incident; a COVID-19 outbreak resulting in increased restrictions; and a serious health and safety incident.
- 53 Overall, mitigations and controls are being carefully planned and are in place to enable the 2023 Census to be delivered in March 2023. Stats NZ will continue to report regularly to me in the lead up to the 2023 Census operation.

The approach to the 2023 census is a key step towards the future census model

- 54 Alongside preparing for the 2023 Census, Stats NZ continues its work on the future design of the Social and Population Statistics Programme –which includes development of a more resilient census model for New Zealand. The low response rates in the 2018 Census meant considerable progress in methodological research was required to enable Stats NZ to use administrative data to fill gaps. The former Minister of Statistics previously updated Cabinet on this work [GOV-19-MIN-0047 refers].
- 55 Through this work, Stats NZ is seeking to understand future data needs and how best to meet them utilising an administrative-data first approach. This will be informed through an extensive engagement process which aims to gauge the receptivity of New Zealanders to use administrative-data in this way and looks to build trust and confidence in the approach.
- 56 Stats NZ's work on the future of the Social and Population Statistics Programme, and administrative-data first approaches aligns with work being done internationally to address common challenges associated with the traditional census model, and with data collection through surveys more generally. Increasingly, governments are looking for modern alternatives to the traditional full field enumeration censuses and surveys. A new model that uses administrative-data first would help to reduce reliance on field collection which is becoming increasingly harder to undertake; and improving efficiency by re-using data that government agencies have already collected. It will allow for more timely data and should provide better value for money.
- 57 A new model will also allow for better understanding of data needs and establishing alternate sources for data on smaller groups to address essential data gaps such as iwi affiliation. The ability to provide essential Māori data requirements such as Māori ethnicity, Māori descent, iwi affiliation, and the health of te reo Māori is critical for any future census.

- 58 Stats NZ's work in methodological research enabled the first release of an experimental Administrative Population Census (APC) in August 2021. This showed the effectiveness of using administrative-data to produce population data and demonstrated that administrative-data is available for approximately half of the data variables currently collected in the census survey. The APC demonstrates the value of using administrative-data to inform our data needs as a nation that we would typically use a census for, producing more frequent outputs in a more efficient way, and providing better value for money as the cost of production is low.
- 59 The next phase of this work is to consider what additional survey components may be required in support; to continue work on methodological research; undertake targeted engagement to inform the approach to building trust and confidence; delivering to the nation's data needs, delivering for Māori and iwi; and ensuring value.
- 60 I have directed Stats NZ to continue to update me as census design work progresses, and as the organisation develops a preferred method and design for future censuses.

Appointing the timing of the census

- 61 The Government Statistician will take a census on 7 March 2023.
- 62 Section 34 of the Data and Statistics Act 2022 requires the period of time in which the census will be taken to be appointed by the Governor-General by Order in Council on the recommendation of the Minister of Statistics.
- 63 I propose Cabinet authorises the Parliamentary Counsel Office to draft an Order in Council to appoint 7 March 2023 as the period of time in which the next census will be taken. Soon after this, I will seek approval (from the Cabinet Legislation Committee) for the Order in Council to be submitted to Executive Council.

Impact Analysis

Regulatory Impact Statement

64 A Regulatory Impact Statement is not required for this paper.

Climate Implications of Policy Analysis

A climate implications of policy assessment is not required for this paper.

Financial Implications

66 The budget for the 2023 Census is \$210 million, with an additional \$33 million contingency fund. s 9(2)(f)(iv)

67 s 9(2)(f)(iv)

Population Implications

- 68 The census provides a point-in-time record of all people in New Zealand that allows us to tell the story of social and economic change over time and provides critically important data about the priorities the Government needs to invest in.
- 69 The census provides detailed information about all population groups and communities in New Zealand including information on population demographics, attributes and behaviours. In doing this, census data is able to help central and local government, iwi and Māori organisations, community groups and businesses make decisions (such as resource allocation, investment planning, policy development, and research) to contribute to positive economic and wellbeing outcomes for all New Zealanders. Census data also supports reporting and monitoring against key population-based strategies and conventions e.g., climate mitigation and adaptation programmes and the New Zealand Disability Strategy 2016-2026.

Human Rights

- 70 The proposals in the paper are consistent with the New Zealand Bill of Rights Act 1990, the Human Rights Act 1993 and the Privacy Act 2020.
- 71 The census provides population-level data which is needed for policy decision-making and to meet international reporting obligations, including reporting against human rights treaties.

Consultation

72 The following agencies have been consulted on this paper: the Accident Compensation Corporation, Te Arawhiti, the Ministry of Business, Innovation and Employment, the Department of Conservation, the Department of Corrections, the Crown Law Office, the New Zealand Customs Service, the Ministry of Education, the Electoral Commission, the Ministry for the Environment, the Ministry of Foreign Affairs and Trade, the Government Communications Security Bureau, the New Zealand Security Intelligence Service, the Ministry of Health, the Ministry of Housing and Urban Development, the Inland Revenue Department, the Department of Internal Affairs, the Ministry of Justice, Land Information New Zealand, the National Cyber Security Centre, the Ministry for Disabled People, Oranga Tamariki, the Ministry for Pacific Peoples, the Ministry for Primary Industries, the New Zealand Police, Te Puni Kōkiri, the Reserve Bank, the Ministry of Social Development, the Social Wellbeing Agency, the Public Service Commission, the Treasury, the Department of the Prime Minister and Cabinet, the Ministry for Women, the Office of the Privacy Commissioner, the Office of the Auditor General and the Ombudsman.

Communications

Following the Order in Council appointing the timing of the 2023 Census, census communications and marketing campaigns will commence.
Communications material related to the census will progressively increase in public visibility as the date of the census approaches.

Proactive Release

74 If agreed, I intend to proactively release this paper as soon as practical following the Order in Council that appoints the timing of the 2023 Census. Alongside this, Stats NZ will proactively release advice related to the Government Statistician's decision. Any redactions made will be consistent with the Official Information Act 1982.

Recommendations

I recommend that Cabinet:

- 1 note that in March 2022 Cabinet agreed to amend the Data and Statistics Bill (now the Data and Statistics Act 2022) to build-in a contingency mechanism that safeguards the timing of the next census, by extending the timeframe in which the next census could take place – from '2023' to '2023 or 2024' [CAB-22-MIN-0054 refers].
- 2 **note** that in seeking Cabinet's agreement to amend the Data and Statistics Bill, I outlined my intention to return to Cabinet with advice from the Government Statistician on whether to proceed with the Census in 2023, or a proposal to delay the next census to 2024 [CAB-22-MIN-0054 refers].
- 3 **note** that the Government Statistician has decided to proceed with delivering the next census in 2023 as planned with the census taken on 7 March 2023.
- 4 **note** that among other factors considered, the Government Statistician considered that the results of the 2022 census test demonstrate a sufficient level of readiness to operationalise the 2023 Census design.
- 5 **note** that in taking a decision to proceed with the next census in 2023, the Government Statistician acknowledges that key external risks remain and that these will be actively managed in the lead up to the 2023 Census operation.
- 6 s 9(2)(f)(iv)
- 7 note that Stats NZ is also undertaking work to assess the likely impacts of implementing the step-down approaches – including for priority population groups – and this includes exploring what additional or alternative support could make the step-downs more effective and lessen any impacts.

- 8 **note** that section 34 of the Data and Statistics Act 2022 requires the period of time in which the census will be taken to be appointed by the Governor-General by Order in Council on the recommendation of the Minister of Statistics.
- 9 **authorise** the Parliamentary Counsel Office to draft the Order in Council that appoints 7 March 2023 as the period of time in which the census will be taken.
- 10 **note** the Government Statistician will continue to regularly report to the Minister of Statistics on preparedness for the 2023 Census, including on any emerging risks and additional testing being completed.
- 11 **note** the Minister of Statistics was invited to report back to Cabinet on the future of the census model in New Zealand [GOV-19-MIN-0047 refers].
- 12 **note** the longer-term programme of work underway by Stats NZ to move towards a different model of data collection, including for future censuses, which aims to make greater use of data already held by government agencies and less reliance on surveys.

Authorised for lodgement

Hon Dr David Clark

Minister of Statistics