Advocating for civil registration: guide to developing a business case for civil registration

Anneke Schmider
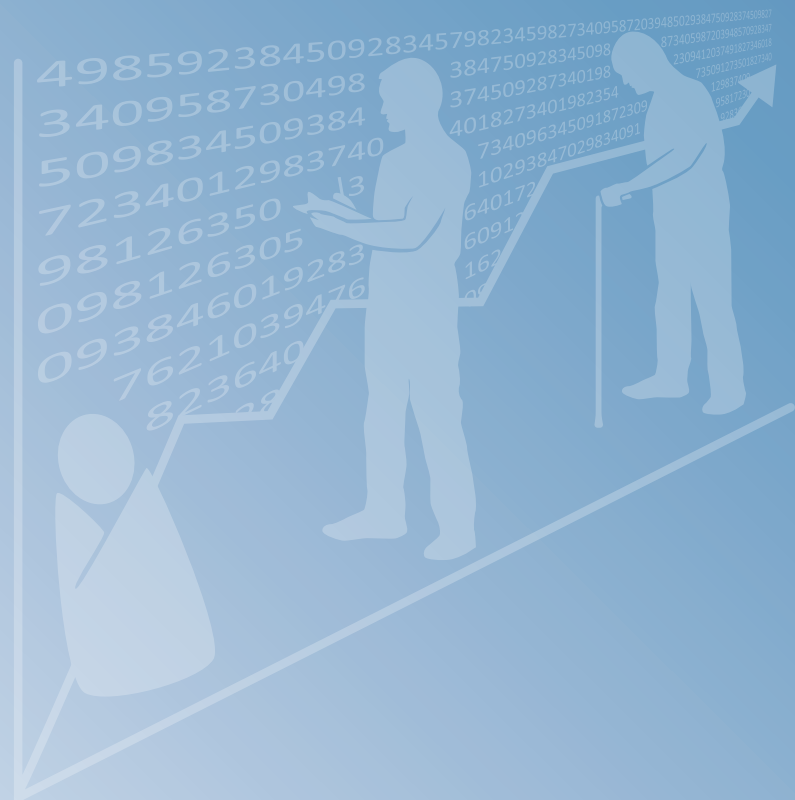
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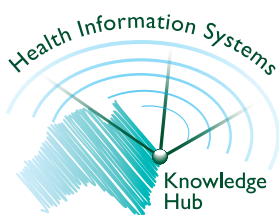
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*Strengthening health systems
in Asia and the Pacific through
better evidence and practice*

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The Health Information Systems Knowledge Hub's Working Paper Series is the principal means to disseminate the knowledge products developed by the hub as easily accessible resources that collectively form a lasting repository of the research findings and knowledge generated by the hub's activities. Working papers are intended to stimulate debate and promote the adoption of best practice for health information systems in the region. The series focuses on a range of knowledge gaps, including new tools, methods and approaches, and raises and debates fundamental issues around the orientation, purpose and functioning of health information systems. Generally, working papers contain more detailed information than a journal article, are written in less-academic language, and are intended to inform health system dialogue in and between countries and a range of development partners.

Many working papers have accompanying products such as summaries, key points and action guides. The full range of documents, as well as other resources and tools, is available on the Health Information Systems Knowledge Hub website at www.uq.edu.au/hishub/publication-tools.

[i]The views expressed in this working paper are those of the author, and do not necessarily represent those of the Australian Bureau of Statistics. Where quoted they should be attributed clearly to the author.

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Acronyms and abbreviations

MDG	Millennium Development Goal
OCG	Office of Government Commerce (United Kingdom)
WHO	World Health Organization

Glossary

Application to register a birth or a death	A form completed by relevant parties to register a birth or death.
Civil registration	The continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population as provided through decree or regulation in accordance with the legal requirements of a country. (United Nations definition, www.un.org)
Civil registration system	A system established for the purpose of legally registering and recording data on vital events related to the civil status of the population, including births, deaths, causes of death, marriages and divorces, on a continuous basis as provided by the laws and regulations of the country.
Legal registration	The formal cataloguing of a birth or a death in official records.
Verification of a birth or a death	Alternate forms of evidence used to verify a birth has taken place (eg a hospital form) or that a death has taken place (eg a medical certificate).

Introduction

High-quality, continuous and well-maintained civil registration and vital statistics systems provide significant benefits both to individuals and their communities and countries, as well as internationally.

> A civil registration system (or vital registration system) is a system established for the purpose of legally registering and recording data on vital events related to the civil status of the population, including births, deaths, causes of death, marriages and divorces, on a continuous basis as provided by the laws and regulations of the country.

Given the overall importance of recording accurate birth and death events, civil registration will focus on the birth and death registration processes for the purposes of this working paper. Marriage and divorce, although important to a country's knowledge of its population, can be added to an existing civil registration process. Birth and death registration, however, provides the foundations of legal staus and population and health statistics, and are therefore a priority for a civil registration system.

The process of civil registration can broadly be described in five stages:

1. The application to register a birth or a death.

2. Verification of the birth or death event.

3. The legal registration of the event and archiving of the registration as provided by the laws and regulations of the country.

4. The provision of a legal certificate for the event (eg a birth certificate).

5. The coding (eg for cause of death) and counting of these events/data for statistical or measurement purposes.

The process is shown diagrammatically in Figure 1, with detail provided about the actual registration events—application, verification and registration—which are the core functions of a civil registration system. Certification of each event, and counting and statistical processes are also a function of the civil registration system.

Overview of the benefits of civil registration systems

From the perspective of individuals and families, civil registration provides proof of identity and enables citizens to apply and benefit from legal, economic and social rights. It also provides proof that the state recognises and respects the lives of those for which it has responsibility. From a governance perspective, civil registration systems generate reliable data and statistics that in turn inform decision-makers for policies, programs and service delivery.

Health and other social sectors are major users of the statistics generated through civil registration. For example, data from the registration system are used as the evidence base on life expectancy, fertility, burden of disease and patterns of mortality. The formulation of health, development and social policies, and programs and planning for service delivery rely on these data. However, these data are also essential for broader financial planning by governments and other entities.

Data collected from the civil registration system also play an important part in attracting and distributing funding to countries, governments and private entities. Data from birth and death systems, for example, can be used to determine population estimates in the interim years between census collections, as well as for population projections. The data are also used as the basis of establishing quantum for grants and financial distribution mechanisms, where trustworthy and detailed population data are required.

An increasing number of countries use data from civil registration to establish population registers. When updated with addresses, this register provides a comprehensive tool for governance and can form the basis for individual identity numbers or cards. A population register provides important information for demographic purposes at the smallest geographical and administrative levels.

Although estimates of the number of births and deaths can be obtained by other means such as from censuses or surveys, only civil registration collects demographic and other information (eg cause of death) on a continuous basis. Furthermore, this is the only data source that can also provide individuals with legal documentation. In some countries, such as China and India, sample birth and death registration systems—

combined with verbal autopsy—are used to generate nationally representative estimates of fertility, mortality and causes of death. However, such systems do not cover the entire population nor do they benefit individuals in terms of legal certificates.

In short, civil registration systems provide not only a system for certification of births, deaths and marriages, but also generate critical information for governments and nongovernmental organisations, the international community, and academics and researchers. This information is essential to inform social and health policies, and make a strong contribution to economic information, and financial transfers and distributions.

Methods: building a business case for vital statistics

This paper provides practical information on the preparation and use of a business case in support of a civil registration system. The paper outlines a six-step approach to building the business case and comprises:

- assessing the current system

- conducting research and formulating the arguments

- identifying, analysing and engaging with stakeholders

- presenting the case to the relevant decision-makers.

The paper describes ideas for mobilising support for implementing civil registration systems. It includes a cost–benefit analysis to help decision-makers understand the short-term and long-term costs, benefits and impacts of a registration system. However, there is no blueprint— each country will have different governance systems, population structures and information needs, and every business case will be unique.

Countries are encouraged to develop their civil registration systems using best practice principles outlined in the United Nations Principles and

Health data and information
- Causes of Death;
- Mortality and Fertility;
- Life Expectancy;
- Infant, child, maternal mortality;
- Communicable and non-communicable diseases
- Specialist health topics: HIV/AIDS, tuberculosis, cancer, diabetes,
- .

Population Information
- Inter-censal population Information;
- Births, deaths;
- Estimated resident population
- Population projections;

Social Information
- Ageing population and planning
- Education and community planning
- Child and parental programs

Economic Information
- population growth
- ageing and economic impact;
- sub-regional growth and impact

**Births data
Deaths data
Causes of death data**

Individual Use
- identity confirmation;
- eligibility for social payments.

Legal Use
- Identity confirmation;
- Citizenship and passport
- Fraud prevention

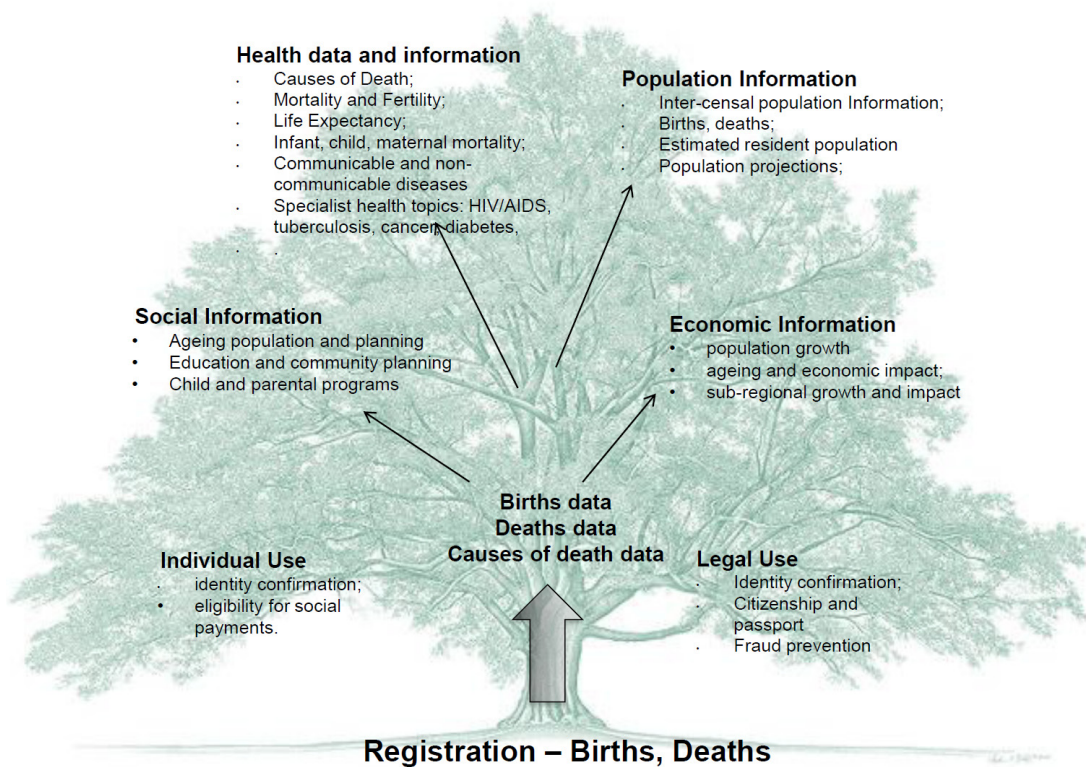**Registration – Births, Deaths**

Figure 1 Process of civil registration and key uses of the data

Phase 1
Preparation

Recommendations for a Vital Statistics System (UN 2001). However, they will need to do so in a way that best meets the needs of their country and citizens.

There are three main phases to developing any business case—preparation, development and presentation.

Within each of these three phases, key steps are required to ensure that the business case is established and based on the most credible evidence, has stakeholder support, and is presented in a logical and authentic manner. The specific steps within each phase are as follows:

- Phase 1: Preparation
    - Step 1: Self-assessing for the specific country
    - Step 2: Researching
    - Step 3: Identifying and engaging stakeholders
- Phase 2: Development
    - Step 4: Building the business case
    - Step 5: Modifying the business case
- Phase 3: Presentation
    - Step 6: Proposing the business case to decision-makers.

The process outlined focuses on significant work in the preparatory and business case stages—the foundations on which a successful case for a civil registration system is built.

Solid preparation is essential and should include the advocacy case for improving vital statistics. This will be a fundamental part of how the business case is structured and argued, and how stakeholders are identified and engaged. Much of the support for a civil registration system will come from stakeholders interested in the vital statistics derived from the system.

At the end of the preparation stage, people responsible for the business case will have full knowledge about:

- their country's readiness for a civil registration system
- registration systems in other countries that are at similar stages of development, as well as their structure and costs
- the key stakeholders needed to support the business case.

Step 1	Self-assessing using tools and guides
Step 2	Researching to establish the strategic importance (includes both international and country-specific research)
Step 3	Identifying and engaging stakeholders who have an interest in supporting the business case

Step 1 Self-assessing the current state of civil registration

A civil registration system requires both short-term investments and long-term commitment. Countries should assess their immediate and longer term ability and capacity to support a civil registration system.

Currently, country civil registration systems are at very different stages of development. Broadly speaking, countries can be divided into three categories:

- Nearly complete civil registration. The birth and death registration system is functioning, but some aspects may require attention to ensure that the system is working effectively and generating the expected outputs of acceptable quality. These aspects may include:
    - coverage (registration) of all births and deaths events, especially those in remote areas
    - quality of cause of death ascertainment and reporting

- detail of registration (eg key demographic information such as ethnic or indigenous status)

- improvement in business system support

- improvement of statistical counting systems.

• Incomplete civil registration. The basic registration system is in place, but there may be weaknesses in key components to support registration, certification and statistical processes. For example, countries may have a manual registration system, but lack computer assistance to support basic registration and counting processes. Certification may be manual, and these countries may be unable adequately to ensure individual identification. Statistical counting may be rudimentary and based on manual counting methods. It is also likely that the quality of cause of death reporting is inadequate due to absence of medical verification at the time of death, especially when deaths occur outside health care settings.

• Limited civil registration. There is only limited ability to collect and verify applications and certify registration. In such settings, there is no system to compile and count births and deaths, and no reporting of causes of death other than from a few main hospitals.

Available tools

Tools are available to assess the current civil registration and vital statistics systems in countries. These tools enable a better the understanding of the components of the system that are in place, of their functioning, and of the elements that are missing and need to be developed. Examples include the extent to which the current legal framework is adequate to support the establishment and maintenance of a civil registration system, and the availability of existing resources or infrastructure which could be used for a registration system.

The World Health Organization (WHO) and University of Queensland tool (HIS Hub 2009) provides guidance on how to systematically evaluate the structure, functioning and quality of civil and vital statistics systems. The tool draws upon the United Nations (UN) guidelines and recommendations on the establishment and operation of civil registration and vital statistics systems, and is informed by best practices in cause of death ascertainment as described in the *International Statistical Classification of Diseases and Related Health Problems* (ICD) (WHO 2010).

This tool addresses all aspects of the system, from the legal framework supporting the registration activities through to the eventual tabulation and use of the data. It covers the following five key components of the civil registration and vital statistics systems:
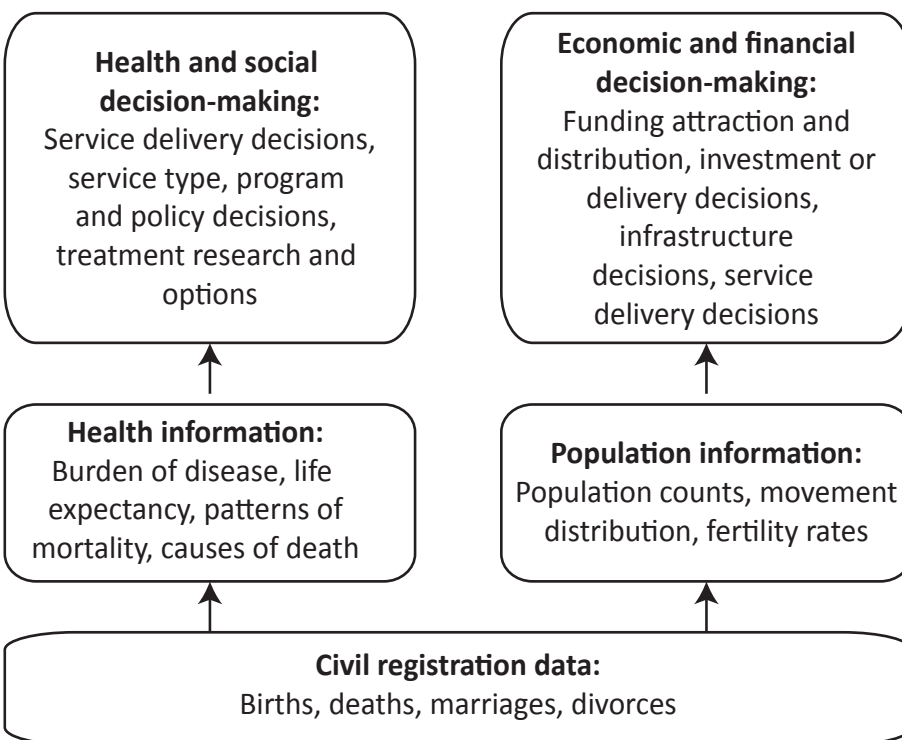
• inputs–legal basis and resources for civil registration

• registration practices, coverage and completeness

• death certification and cause of death

• ICD mortality coding practices

• outputs—data access, use and quality checks.

The tool is available in a rapid format as well as a more comprehensive and detailed version. The rapid assessment is intended to provide an overview of the current situation and to prepare the ground for the more detailed assessment, which also enables countries to identify key priorities for improvement.

Countries can use these tools to identify the strengths and weaknesses of their current systems, which highlights the areas that need to be improved. Lessons learnt from conducting a pilot test of the rapid and comprehensive assessment in two countries in the Asia–Pacific region, Sri Lanka and the Philippines are available as examples (Mikkelson 2009, Gamage et al 2009, Hufana et al 2009). Results of the assessment are important for input into the business case.

Since vital statistics are usually the responsibility of more than one stakeholder, the assessment should be conducted by a team representing all the main stakeholders involved in the collection, production and use of vital statistics. These include government departments, hospitals, health institutions, medical associations and academia. The review committee will then have all the evidence needed to formulate a strategic improvement plan detailing specific implementation steps that must be carried out to significantly improve the functioning of the civil and vital statistics systems.

The rapid assessment tool (HIS Hub 2009) consists of 25 multiple-choice questions on the functioning of

Health and social decision-making: Service delivery decisions, service type, program and policy decisions, treatment research and options	**Economic and financial decision-making:** Funding attraction and distribution, investment or delivery decisions, infrastructure decisions, service delivery decisions
Health information: Burden of disease, life expectancy, patterns of mortality, causes of death	**Population information:** Population counts, movement distribution, fertility rates

Civil registration data:
Births, deaths, marriages, divorces

the civil registration and vital statistics systems. It is recommended that this tool is used before undertaking the comprehensive assessment outlined here to evaluate quickly the strengths and weaknesses of the current system, and determine the advantages of undertaking the more thorough assessment. It will also help improve the understanding of the roles and responsibilities of all stakeholders.

Step 2 Researching

The development of a business case is a means of presenting arguments for change and for gaining support from the relevant approving authorities.

As a part of the business case development, research should be done to identify:

- evidence supporting the strategic importance of civil registration, based on experience in other countries

- relevant and appropriate models of civil registration based on experiences in other countries.

Strategic importance

The key strategic argument for civil registration is the benefits it provides for a country's population,

particularly in terms of citizenship and identity. Citizens and civil society representatives are therefore key stakeholders who must have confidence in the registration system and its purpose.

A different set of arguments may be used to mobilise other stakeholders, especially those able to influence decision-making, and to raise their awareness of the importance of civil registration from statistical, policy and planning perspectives. In developing a business case, two elements can provide a strong foundation to appeal to these decision-makers interested in these aspects:

- the importance of civil registration to inform health and social conditions

- the contribution of civil registration systems to governance, economic and financial systems.

Figure 2 shows how civil registration data inform a range of government economic, health and social interests. These multiple interests together may provide compelling reasons and support for civil registration, by appealing to a broad set of government decision-makers who will be fundamental to the successful and broadly supported argument of a civil registration business case.

Figure 2 Potential contribution of civil registration to decision-making

Research

Research will show the importance of civil registration to decision-making. The following examples show the importance of this information with reference to the international and Australian context:

- From an international perspective, information from civil registration systems can be used to measure the success of efforts to control specific diseases; for example, whether a reduction in mortality has occurred due to program interventions. At least six of the UN Millennium Development Goals (MDGs)[1] rely on accurate data on mortality and causes of death for monitoring progress. Reliable data provide the evidence base for the design, implementation, monitoring and assessment of health programs and policies to accelerate progress towards development goals.

- Improvements to population information made possible through civil registration systems may also provide information to support applications for international development grants and financial loans. Countries able to identify substantive changes or needs in populations—such as growth, decline, changes in demographic makeup, patterns of mortality or effects of disease—will be better able to illustrate and support arguments for grants and financial transfers to address population issues.

- Sound data on patterns of disease, life expectancy and fertility will improve arguments for financial transfers to address health issues. WHO and the UN strongly support the implementation of civil registration systems that help improve vital statistics generally and in relation to health topics.

- Countries around the world are working to strengthen civil registration and there are lessons to be learnt from their experiences to support and inform a business case. For example, the value of civil registration systems is currently being highlighted in Africa, where, in mid-2010, a ministerial level conference was held to support the more comprehensive implementation of civil registration

systems.[2] Civil registration systems are seen as important to building modern public administrations and supporting multisectoral development endeavours, especially supporting and measuring the results of the MDGs.

Examples of country-specific benefits (Australia)

It is possible to demonstrate the significant social, health and financial benefits of a civil registration system in the Australian context. These examples are provided as a resource for national research into how civil registration systems can assist country development:

- The collation of health publications and data made available through data agencies such as the Australian Bureau of Statistics and the Australian Institute of Health and Welfare rely heavily on data made available through registrars of births, deaths and marriages in each Australian state and territory. Publications such as *Causes of Death*[3] and the General Record of Incidence of Mortality (GRIM) books[4] provide significant health information to governments and the public, and are widely sought by health agencies and researchers. These data are then used to determine and measure progress in health priorities through national agreements such as the Council of Australian Governments National Health Agreement.[5]

- At a more applied level, these data are used by national, and state or territory health authorities to inform and plan service and program delivery. Agencies such as the cancer councils use this information to develop research programs, and to monitor incidence, survival, prevalence and mortality patterns. Examples of this research are contained in the 'Useful information' section.

- Local councils use population data for planning of services. In settings with small populations, there is an increased need for accurate population information, since fluctuations and volatility in population size may markedly affect service delivery. Likewise, population information can underpin financial transfers to local governments.

1 For more information on the UN MDGs, visit the website www.undp.org/mdg

2 See www.uneca.org/cr-ministerial-conference/index.htm for further information

3 ABS cat 3303.0

4 www.aihw.gov.au

5 www.federalfinancialrelations.gov.au

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- Through its contribution to resident population estimates, population projections,[6] civil registration data underpins the Commonwealth Grants Commission (CGC), charged with distributing goods and services tax revenue across Australian states and territories.[7] The CGC has recently released papers that detail new methodologies for assessing state capacity and financial distribution. These are heavily reliant on population information (CGC 2010).

- Financial allocations are also made on the basis of population information about subpopulation groups. For example, the Queensland Local Government Grants Commission[8] makes differential funding distributions to local governments in Queensland based on the number of people in certain age groups or Indigenous people identified in an area, see Queensland Local Government Grants Commission's Cost-adjustors fact sheet.[9]

Step 3 Identifying and engaging with stakeholders

Stakeholders are all those with an interest in a civil registration system. They can be drawn from a wide variety of health, social and economic agencies, including government agencies interested in better health, social, economic and statistical information, as well as nongovernment agencies and civil society. Stakeholders are critical to informing and sponsoring the business case.

Stakeholders' input may vary according to their level of interest and experience in a civil registration's system. Supportive stakeholders will include health agencies and international agencies. Other stakeholders may be able to inform the assessment of the country's ability to sufficiently implement such as system or provide insight into assessing the population's propensity to use a civil registration system. Authorising stakeholders are those that will authorise or approve the business case. Users of the information generated by civil registration systems, such as researchers, are also important stakeholders. Representatives of civil society, such as advocacy groups working to increase registration of births, are also potentially important stakeholders.

6   www.abs.gov.au/ausstats/abs@.nsf/mf/3222.0

7   www.cgc.gov.au

8   www.qlggc.qld.gov.au

9   www.qlggc.qld.gov.au/Docs/pdf/Fact%20Sheets/Fs_3_CostAdjusters2005.pdf

Information from a range of stakeholders will be needed to provide comprehensive inputs to the business case. Therefore, the development of the business case must start with identifying and appropriately engaging relevant stakeholders.

Critical to gaining a range of stakeholders to inform and sponsor the project is the understanding that the implementation of a civil registration system is not only a health, legal or research issue—it is a whole-of-government issue that impacts many government and nongovernment agencies. A proposal for funding for a civil registration system is more likely to succeed when relevant stakeholders:

- recognise the collective benefits of the system

- are committed to supporting and promoting the business case to key decision-makers

- are willing to address the challenges of implementation.

An initial identification of stakeholders should be undertaken and this list should be reviewed regularly. Stakeholders should remain engaged for the duration of business case development and into project implementation. There are a number of generic stakeholder classes that provide a useful starting point for identification of stakeholders. These are:

- Beneficiaries. Those who will benefit directly from the civil registration system.

- Champions. Senior executives who promote, support and facilitate the registration system proposal from start to end.

- Customers. Those who will use information from the civil registration system and who can generate outcomes based on this information.

- Funders/investors. Those who will fund the civil registration system. These stakeholders make funding decisions based on the business case and will want to see success measures at the end of the exercise.

- Impactees. Those who will experience some form of change because of a civil registration system.

- Influencers. Those who are not directly involved in the civil registration system project, but are able to raise or lower its profile through relationship with

other stakeholders. Broadly, influencers can be divided into supporters and opposers.

- Owners. Senior executives who are to be held accountable for the civil registration project. Typically, this may be the department that will 'house' the civil registration system.

- Sponsors. Senior executives who are not accountable for target outcomes (like an owner is), but are closely linked with project success or failure. Sponsorship is not as onerous as ownership.

- Clients/suppliers. External entities who will be contracted to provide inputs to the project including supply of data, technology and so on.

- Team members. Those who will be involved in the project work.

Potential stakeholders in the civil registration system project are listed in Table 1. This is an indicative list. It is important that, for each country, consideration is given to the social, political and cultural environment in which the system will be implemented to determine relevant stakeholders. One stakeholder group should be identified as the lead agency with the primary interest in the outcomes of the project to lead the project through to a successful conclusion. This will most probably be the agency that will be responsible for administering the registration system.

Table 1   Stakeholder identification template

Stakeholder	Generic class	Nature of stakeholding
Registration authorities	Owners	• The prime collection agency for source data • Need for a new legal framework covering registration • Will be required to make significant changes to registration processes • Have an interest in ensuring all of the outcomes expected from a system (eg legal and statistical outcomes are met) • Will require ongoing funding for additional staff, training of staff and new functions for the registration processes
National Statistics Office	Influencers and customers	• Have responsibility for the production of statistics, and statistical standards and frameworks • Will be able to advise on how to incorporate statistical needs into an administrative system • Will have statistical infrastructure in place to assist in implementation • May play a coordinating role

continued

Table 1 continued

Stakeholder	Generic class	Nature of stakeholding
Health departments	Customers and beneficiaries	• A prime beneficiary of more complete and timely data on health status in order to deliver services and infrastructure, and develop and monitor health programs • May play a large role in the collection of data (eg cause of death data from doctors, birth data from midwives) • May already have infrastructure in place (eg health clinics, hospitals) that could be used in system implementation
Central agencies—finance and treasury departments	Funders and beneficiaries	• Will be required to ensure adequate funds are available for implementation of a civil registration system both in the short and long term • Will benefit from better information enabling more effective resource distribution • Will benefit from better information on development and monitoring of policy and programs
People who certify deaths (eg doctors, coroners)	Impactees and suppliers	• Will be required to undertake additional training and take on new tasks; however, will also benefit from the availability of timely local data on health issues
Planning and infrastructure development agencies	Beneficiaries	• Will benefit from better information enabling more effective resource distribution
Health information management professional associations	Beneficiaries, champions and influencers	• By the nature of their profession, are interested in the collation and use of health information • Will have the skills to contribute to implementation
Academics and researchers	Beneficiaries	• Will benefit from better information, enabling more effective planning of education facilities and better research information
Education departments	Beneficiaries	• Will benefit from better information enabling more effective planning for new schools and education services
Rights agencies and NGOs working for birth registrations	Influencers	• Interested in the correct use of personal data
Civil liberties/ privacy groups	Influencers	• Interested in the correct use of personal data
Community groups	Influencers and champions	• The system must be culturally appropriate • May identify historical or cultural aspects that may affect the civil registration system (eg related to religion or ethnicity) and would need to be addressed with risks identified and overcome • Will be in a position to promote the value of the system, and to educate groups and individuals about the importance of registration

NGO = nongovernment organisation
Source: ABS and ESCAP (unpublished)

Table 2 can be used to map current and desired level of commitment of stakeholders. If commitment from stakeholders is less than the level desired, some form of intervention may be required to move that stakeholder to a more satisfactory commitment level. The table also provides suggestions about when intervention might be required.

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Table 2   Stakeholder commitment and interventions

		Current level of commitment		
		Low	**Medium**	**High**
Desired level of commitment	**High**	This stakeholder has a key role in the success of the civil registration system, but has little involvement or interest currently. Intervention is required.	The stakeholder has a key role in the success of the civil registration system, and some involvement or interest currently. Intervention is required.	The stakeholder has a key role in the success of the civil registration system, and is actively involved and supportive. Stakeholder could help facilitate change.
	Medium	The stakeholder has some role in the success of the civil registration system, but has little involvement or interest currently. Intervention is required.	This stakeholder has some role in the success of the civil registration system, and some involvement or interest currently. No action required.	The stakeholder has some role in the success of the civil registration system, and is actively involved and supportive. Stakeholder could help facilitate change.
	Low	The stakeholder has no role in the success of the civil registration system, and has little involvement or interest currently. No action required.	The stakeholder has no role in the success of the civil registration system, but retains involvement or interest for some reason. No action required (unless stakeholder is negative or deconstructive).	This stakeholder has no role in the success of the civil registration system, but is actively involved for some reason. No action required (unless stakeholder is negative or deconstructive).

Source: ABS (unpublished)

At the end of Phase 1: Preparation, you can:

Step 1: Source tools and assistance to assess your country's capacity to support a civil registration system.

Step 2: Undertake research, and identify key countries to investigate with respect to their civil registration systems.

Step 3: Identify and engage your key stakeholders who will have an interest in supporting your business case.

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Phase 2 Development

Step 4 Building the initial business case

Once a coherent argument and scope have been determined and stakeholders are identified, a business case can be developed. There are significant resources available to assist countries with not only developing the business case, but also with project management of the business case process.

This paper draws on resources that use the latest emerging best practice and internationally recognised standards. Examples of these resources are available from the United Kingdom's Office of Government Commerce (OGC)[10] established as an independent agency to help government deliver best value from its spending, and which developed the Prince2 methodology for project management.

The business case may go through a number of stages:

- A draft business case will detail what is proposed and why. This draft can be used as the basis for consulting with stakeholders to gain their support, and proposing (and testing) initial concepts and financial estimates. At this stage, a draft business case may provide the impetus to establish a stakeholder committee to sponsor and develop the business case, and to provide preliminary support for the final business case.

- An interim business case may be updated to include the results of consultation or provide further detail on the scope of the proposal.

- A final business case will be the main vehicle through which the proposal is presented to the key decision-makers.

The level of detail required at each stage depends on what form of business case is decided, and the scale or complexity of the project. OGC provides templates for the scoping aspect of the business case. A recommended structure for the business case is detailed in Table 3 and hypothetical case studies using this business case structure are in Appendix 1.

Further information regarding some important aspects of the business case—strategic importance, options appraisal, implementation planning and project management—are detailed after the table.

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10   www.ogc.gov.uk

Table 3   Recommended structure for a business case

Purpose

The business case is used to obtain management commitment and approval for investment in business change including projects and programs, through rationale for the investment. The business case provides a framework for planning and management of the business change. The ongoing viability of a project or program will be monitored against the business case.

The business case should contain information covering five key aspects: strategic importance, options appraisal, commercial aspects, affordability and achievability.

Strategic importance	• Description of the business need and its contribution to the organisation's business strategy Include results of research and scoping statement
Objectives	• Why it is needed now
	• Key benefits to be realised
	• Critical success factors and how they will be measured
Options appraisal	• High-level cost–benefit analysis of at least three options (ideally) for meeting the business need
	• Include analysis of 'soft' benefits that cannot be quantified in financial terms
	• Identify preferred option and any trade-offs
Commercial aspects	• This section is applicable where there is an external procurement and outlines the potential deal. Most of this information will be produced for the outline business case
	• Proposed sourcing option with rationale for its selection
	• Key features of proposed commercial arrangements (eg contract terms, contract length, payment mechanisms and performance incentives)
	• The procurement approach and strategy with supporting rationale
Affordability	• Statement of available funding and 'ballpark' estimates of projected whole-life cost of project
	• Includes departmental costs (where applicable)
Achievability	• High-level implementation plan for achieving the desired outcome, with key milestones and major dependencies (eg interface with other projects)
	• Outline contingency plans (eg addressing failure to deliver service on time)
	• Major risks identified and outline plan for addressing them
	• Provider's plans for the same, as applicable, skills and experience required
Source information	• Procurement documentation
	• Project management plans and documentation
	• High-level requirements
	• Business strategy

Strategic importance and scope

Evidence of the strategic importance of a civil registration system is a necessary element of the business case. It provides fundamental substantiation of the benefits of civil registration.

Scoping will identify the intended extent of a civil registration system and the type of supporting infrastructure the system will require. A scoping statement in a business case should:

- identify options for civil registration systems, drawing on known best practice, and include the operation of other civil registration systems

- identify the cost and benefits of the preferred civil registration options

- detail what needs to be done to implement the system, including activities that need to be undertaken, required resources (financial and otherwise), proposed management and governance structures, and how the change will be managed

- explain how the outcomes will be realised.

The preferred model may differ according to country type and structure. Again, research will be useful to determine the scope and most appropriate model, and estimated resourcing and cost. Research may include investigation into the experience and operation of similar systems—for example, recently established or mature systems. Some examples of civil registration systems are outlined below:

- In England and Wales, registration of births, deaths and marriages is carried out by local registrars at a district level, and administered by the General Register Office (part of the Identity and Passport Service).[11]

- Similarly, in New Zealand, the Department of Internal Affairs Births, Deaths and Marriages registers and maintains the registration of births, deaths and marriages.[12]

- In Australia, each of the eight states and territories has its own Registrar of Births, Deaths and Marriages governed by its own legislation.[13] There is no national registration office.

- By contrast, the Dutch[14] and Danish systems use a population register as a means of both counting populations for service delivery, and planning and monitoring for social welfare purposes.

The scoping of the business case should be in sufficient detail to give the reviewers and stakeholders a clear understanding of what the outcomes will be, why these outcomes are important, and the preferred model of operation at what cost and by when. This information will then feed into the business case, facilitating a strong point to start discussion with key stakeholders and political decision-makers.

Options appraisal

Options are routinely generated as part of a business case. Options may be distinct from each other—for example, distinctly differing business models of operation for civil registration systems. Alternately, the options may be versions—for example, the first option may be a civil registration system with a single office and following options may include regional office representation.

Options appraisal is a critical aspect of the business case. Cost–benefit analysis is a tool that can be used to quantify the costs and benefits of differing options. It is a quantitative assessment that evaluates opportunities by linking benefit streams to associated investment costs, and should be used to identify both the quantifiable and nonquantifiable (or soft) benefits that cannot be quantified in financial terms.

Examples of quantifiable benefits include:

- Improvements to finances; for example, population information made possible through civil registration systems may provide information to support applications for international development grants and financial loans to countries. In Australia, through its contribution to resident population estimates, civil registration data underpins the Commonwealth Grants Commission, charged with distributing goods and service tax revenue across Australian states and territories.[15]

- Data can be used to inform and plan health service and program policy and delivery, increasing the efficiency of the use of government resources. For

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11 www.ips.gov.uk/cps/rde/xchg/ips_live/hs.xsl/55.htm

12 www.dia.govt.nz/diawebsite.nsf/wpg_URL/Services-Births-Deaths-and-Marriages-Index

13 http://australia.gov.au/topics/law-and-justice/births-deaths-and-marriages-registries

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14 See www.voorshoten.nl for information on the Dutch population register

15 www.cgc.gov.au

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example, the Council of Australian Governments process in Australia relies in part on data made possible through civil registration for population estimates as well as measures of fertility, mortality and life expectancy.

Examples of nonquantifiable benefits include:

• Contributions to research. In Australia, agencies such as the cancer councils use this information to develop research programs, and to monitor incidence, survival, prevalence and mortality patterns at national level as well as local areas.

There are several steps involved in appraising options through cost–benefit analysis. Major steps include:

• determining costs and benefits for identified opportunities

• recognising the distinction between the costs that are relevant to any change decision versus nonrelevant costs that will remain regardless of the decision

• quantifying the benefits of each option

• identifying the preferred option.

Internationally, there are many examples of cost–benefit analysis as a tool for appraising government projects and proposals. Researching the uses of cost–benefit analyses across a range of public policy applications is recommended as a means of gaining the best possible information to guide the analysis of options for the business case. Further information on cost–benefit analysis can be found at the OGC website.[16]

Table 4 provides an outline of a cost–benefit analysis template. Part of this cost–benefit template is used to illustrate hypothetical case studies in Appendix 1.

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16   www.ogc.gov.uk/documents/Cost_Benefit_Analysis(1).pdf

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Table 4   Cost–benefit analysis template

A	Determining costs and benefits

The following is taken from information on cost–benefit analyses provided at the Office of Government Commerce website (www.ogc.gov.uk), and is intended as a guide to developing a cost–benefit analysis.

It is recommended that, when undertaking a cost–benefit analysis:

stakeholders are consulted regarding the positive or negative impacts of a civil registration system on their work

economic and financial expertise is employed to finalise the cost estimates discounts applied and sensitivity analysis.

Tips

Always include assumptions and sources for cost data as a part of the cost–benefit analysis.

Include the years in which benefits or costs will be realised (eg establishment costs are likely to be realised early in the life of the project, benefits from improved data are likely to be realised later).

Assign a probability for the realisation of each benefit and cost (eg highly likely, likely, unlikely).

Cost–benefit analysis process	Benefit	Detailed benefit	Estimated financial benefit	Estimate ($)
Identify benefits of implementing a civil registration system (include preferred options as well as alternate options)	Personal identification for individuals	Personal documents for individuals	Individuals (realised each year)	$
			Some revenue from civil registration process (realised each year	
	Improved data	Improved population estimates for use in financial budgets and grants applications	Treasury organisations (realised in which years?)	$
		Improved population information for health service delivery, planning and policy formulation	Health organisations (realised in which years?)	$
			Social organisations (realised in which years?)	
			Economic organisations (realised in which years?)	
	Other identified benefits		(realised in which years?)	$
Total net benefit estimate				$
	Cost	Detailed cost	Estimated financial cost	Estimate ($)
Determine costs of implementing a civil registration system (include preferred options as well as alternate options)	One-off: Establishing a civil registration system	Implementation of process and institutional support for a civil registration system, including technology	Direct estimate of budget cost, year(s), indexed, including contingency (realised in which years?)	$
	Ongoing: Continued funding of a civil registration system	Ongoing funding required to support staffing, process and institution for civil registration system	Direct estimate of budget cost (yearly, every 10 years, indexed)	$
	Other identified costs			$
Total net cost estimate				$

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Table 4 continued

B	**Create scenarios**

Develop various scenarios based on assumptions, risks and alternative decisions. This may be based on a best-case, expected-case and worst-case scenario.

Scenario	Best case	Expected case	Worst case
Civil registration system does not proceed	Civil registration system is deferred Impact Detail Financial impact	Civil registration system is not attempted but may be advanced in future years Impact Detail Financial impact	Civil registration system is not progressed Impact Detail Financial impact
Civil registration system is brought forward			
Financial situation impacts on civil registration implementation			

C	**Identify other problems and solutions**

Problems or issues unrelated to the proposal may impact on the value of your cost–benefit analysis. It is important that you identify these issues so that they may be addressed without impacting the veracity of the cost–benefit analysis.

Use outside research to complete a cost–benefit analysis (eg outside assistance may be needed to ascertain current population growth, which will be needed to estimate volume for the civil registration system in its initial stages, and to determine ongoing volume and possible revenues over the long term).

Other problem	Detail	Impact	Solution
Identify current population growth	Needed to identify possible immediate volume	Will determine size of staffing and resourcing required	Source population statistics such as Census
	Needed to identify ongoing volume and possible revenue streams	Will assist in identifying ongoing revenue streams	Contact statistical agency for assistance (eg population modelling)
Other issues identified			

Further technical information on cost–benefit analysis, including discounting and sensitivity analysis, can be found at the following sites:

- HM Treasury, The green book, United Kingdom
  www.hm-treasury.gov.uk/data_greenbook_index.htm

- NZ Treasury, Cost–benefit analysis primer, New Zealand www.treasury.govt.nz/publications/guidance/planning/costbenefitanalysis/primer

- Australian Government Department of Finance, Introduction to cost–benefit analysis and alternative evaluation methodologies and handbook of cost–benefit analysis, Australia www.finance.gov.au/publications/finance-circulars/2006/01.html.

Implementation plan

An implementation plan should be developed alongside the business case. It should outline the following aspects of implementing a civil registration system:

- Process. This breaks down the work that needs to be done in phases on the preferred option for civil registration.

- Activity schedule. A list of major activities within each phase, including target dates if known.

- Resourcing. Lists all major resources and project team members together with their roles and the effort that will be required from them.

- Budget. Table of major expenditure items and their timing, broken down by financial year. All costs that will be charged to the project if it succeeds should be tabled, such as staff, programmers, technical support, printing and contracted services.

- Management of change. Describe what changes are likely to happen and how they will be managed.

Project governance

In mobilising support for the business case, good project planning and governance are essential to ensure that stakeholders are consulted appropriately and continue to provide valuable advice and support to the project.

Modern project management methodologies, such as PRINCE2[17], employ governance mechanisms that incorporate stakeholder management and contribution to projects.

Project governance is a formal framework within which stakeholders' involvement can be properly planned and managed. Most commonly, stakeholders can be included as part of a project board, and are therefore critical to the ongoing governance of the project (in this case the business case for a civil registration system). A project board, or steering committee, comprises the project owner and representatives of major stakeholders in the project. The role of the project board is to oversee the exercise through to the generation of outcomes, and is therefore accountable for ensuring that outputs are fit for purpose at the time of their delivery. The project

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17   www.ogc.gov.uk

board facilitates the work of the project team and, later, supports the team by using the project outputs to generate outcomes. The project board can:

- establish strategic direction for the project

- set expectations and business outcomes

- take on responsibility for assessing and ratifying the project's feasibility, business plan and achievement of outcomes

- ensure the project's scope aligns with the requirements of the stakeholder groups and the budget provided

- provide those directly involved in the project with guidance on project business issues

- ensure effort and expenditure are appropriate to stakeholder expectations

- address any issues that have major implications for the project

- keep the project scope under control as emergent issues force changes to be considered

- reconcile differences in opinion and approach, and resolve disputes arising from them

- communicate expectations and critical decisions to executive management

- address project resource issues

- highlight statistical risks as a key factor where this is appropriate.

Further detail on project board roles and governance can be found in the PRINCE2 framework identified above.

Step 5 Modifying the business case

As stakeholders provide feedback and information to the original civil registration business case proposal, the business case will be refined. Managing this process will ensure that all relevant information is used to inform the business case, making the proposal more robust. Decision-makers can therefore be confident that the civil registration proposal is comprehensively informed and uses the best available information.

As identified in Step 4, many iterations of the civil registration business case may be developed. Business cases may be modified as a result of consultation with

stakeholders as further information is gained to inform the proposal. For example, stakeholders may identify additional benefits of the preferred option, or identify risks and generate ideas to either overcome or mitigate these risks. It is important that these are carefully considered and included in the business case.

In managing changes to a business case, a defined process for inclusion of stakeholder comment and information should be followed. Such a process might encompass:

- face-to-face consultation with key stakeholders, particularly during the research and information-gathering stage

- workshops with relevant stakeholders to gather further input

- providing a version of the business case for consultation, with comments from stakeholders formally requested and processed into the business case

- a consultation register that formally notes where information has been provided by stakeholders, and where it has been incorporated in the business case (or, alternately, why it is not included in the business case)

- depending on the degree of agreement or conflict among stakeholders over the proposal, the business case may be modified and reissued for comment on specific elements.

Final checklist

As the business case is likely to have gone through many iterations, the original content may change significantly. It is timely, once a final version has been produced, to check that the business case remains a document that provides a coherent and logical presentation of the facts and arguments for a civil registration system. The Office of Government Commerce in the United Kingdom[18] recommends a systematic review of the business case from the perspective of fitness for purpose:

- Is the business need clearly stated?

- Have the benefits been clearly identified?

- Are the reasons for and benefits of the project consistent with the organisation's strategy?

- Is it clear what will define a successful outcome?

- Is it clear what the preferred option is?

- Is it clear why this is the preferred option?

- Where there is an external procurement, is it clear what the sourcing option is?

- Is it clear why this is the preferred sourcing option?

- Is it clear how the necessary funding will be put in place?

- Is it clear how the benefits will be realised?

- Are the risks faced by the project explicitly stated?

- Are the plans for addressing those risks explicitly stated?

At the end of Phase 2: Development, you can:

Step 4: Draft the initial business case, including purpose, importance, objectives, options, costs and benefits, and affordability.

Step 5: Consult with your stakeholders and modify the business case.

18   www.ogc.gov.uk

Phase 3   Presentation

Step 6 Presenting the proposal to decision-makers

Each country will have a governance system through which critical public policy decisions are made. The business case for a civil registration system, as a public policy decision, will need to be shaped to suit the relevant decision-making process for each country. This paper cannot detail the decision-making process, as each country's circumstances will be different.

As a key public policy decision, any presentation will need to ensure that decision-makers are aware not only of the case for a civil registration system, but also the plans for actioning the system. That is, a medium-term to long-term plan that covers how the civil registration system will be supported and operate, and how it builds capacity (for systems and staff).

A civil registration system is a commitment that, once established, should be considered a normal operating part of the public sector environment.

Once again, stakeholders will be important to this process. Stakeholders will be able to advise the best method of presenting the business case in the relevant authorising environment, including appropriate timing and this will guide the final approach.

Selling the message

By this stage, the process of developing a business case will have established the key messages of interest to your stakeholders. Depending on who will make the decisions to implement civil registration, the business case overview or decision-making documentation will have to appeal to the key decision-makers. In presenting your business case, including full documentation, it is advantageous to provide the decision-makers with an overview of the business case. This overview should be the initial reading of the business case and should do the following:

- Create a compelling case for change. For critical decision-makers, the most compelling case will be the case that appeals to their decision-making role or to their governance responsibilities. The overview should cater primarily to the decision-maker's interests, yet also highlight other compelling cases that support the business case. The demonstrable benefits of having a civil registration system should be tailored to the key areas of interest for the decision-makers. Drawing on the interests noted in the earlier section on strategic importance

    – health decision-makers may be attracted by a compelling case that demonstrates the impact of civil registration on their ability to plan and develop policy for their health portfolio

    – financial decision-makers, such as treasuries, may be interested in the ability of a civil registration system to provide accurate population statistics, which may assist with getting or distributing funding. Additionally, they may be attracted by the fact that the civil registration system permits more accurate planning for service delivery, reducing the risks that essential health services will not be placed in areas of high population need.

- Overview the facts. Identify the key facts of the current situation, including the benefits foregone as a result of the weakness of the current civil registration system. These facts should be substantiated and not emotive; they should appeal to the factual basis on which a decision-maker must make an assessment. These facts should support the compelling case made above. For example, appealing to health-oriented decision-makers may require demonstrating how policies and planning systems could be improved through improved vital statistics. Appealing to financially oriented decision-makers may include detailing facts about financial arrangements impeded or missed because of lack of good population information, or international aid grants lost because of lack of adequate population or other demographic information.

- Use case studies to illustrate and create comparison. Case studies can be used to illustrate benefits, or create comparisons and support the need for change. Case studies, similar to those presented for Australia in earlier sections of this paper, can also be used to demonstrate how civil registration system data can be a part of the evidence base for decision-making or for financial allocation to jurisdictions within a country. Case studies in countries at similar levels of development or of similar size can be used to demonstrate the comparative advantage of a strong civil registration system.

- Appeal to the relevance and benefit of civil registration to the people of the country and to

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the nation as whole. The final case should be made regarding the benefit of civil registration to the people of the nation, as well as to the nation overall. For the people of a country, the key benefit of a civil registration system will be the certification of life events, and provision of an identity. For the nation, the relevance and benefit is in supporting the nation's governance and policy structure, thus providing better information for financial, economic, social and health decision-making.

At the end of Phase 3: Presentation, you can:

Step 6: Present the proposal to decision-makers, using facts, a compelling case and case studies.

Conclusion

A civil registration system will provide countries with a powerful database on which to develop reliable population information, and measure health and social progress on an ongoing basis. There is significant evidence of the benefit such systems have had in countries around the world.

Developing a civil registration system relies heavily on planning and commitment. Key to gaining this commitment is the presentation of a clear and articulate business case to decision-makers.

Developing a business case for a civil registration system is a task that draws upon research to make a strong case, and to mobilise the support and ongoing commitment of stakeholders. This paper presents an overview of critical aspects of developing a business case, focusing on research, structure and stakeholders, and the wealth of information available to inform the critical steps in this process.

Such information helps ensure that there is a comprehensive evidence base, and that countries are able to identify how this system will be developed and supported to become a key piece of governance and planning infrastructure for that country.

Finally, the work is not over once a decision is made. Implementation processes will require planning and specification. Most importantly, a civil registration office will require an ongoing relationship with its critical stakeholders, including health agencies and funding agencies. As shown in this paper, the benefits of civil registration extend not only to individuals, but to many agencies in the government and nongovernment sectors. Therefore, ongoing working relationships are to the mutual benefit of all parties.

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WHO (World Health Organization) (2010). *International Statistical Classification of Diseases and Related Health Problems*, 10th revision, WHO, Geneva.

Useful resources

Australian Bureau of Statistics

A guide for using statistics for evidence based policy, 2010 www.abs.gov.au/ausstats/abs@.nsf/mf/1500.0

Resources demonstrating use of civil registration data

Australian demographic statistics, estimated resident population, March 2010
www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0

Population projections 2006–2011
www.abs.gov.au/ausstats/abs@.nsf/mf/3222.0

Births, Australia, 2009
www.abs.gov.au/ausstats/abs@.nsf/mf/3301.0

Causes of death, Australia, 2008
www.abs.gov.au/ausstats/abs@.nsf/mf/3303.0

Deaths, Australia, 2008
www.abs.gov.au/ausstats/abs@.nsf/mf/3302.0

Life tables, Australia, 2006–2008
www.abs.gov.au/AUSSTATS/abs@.nsf/productsbyCatalogue/97E435FA3B82A89DCA2570A6000573D3?OpenDocument

Australian Institute of Health and Welfare

Information and resources demonstrating use of civil registration data for mortality analysis

Australian Health Ministers' Advisory Council (2008). *Aboriginal and Torres Strait Islander Health Performance Framework Report 2008*, AHMAC, Canberra.
www.aihw.gov.au/publications/index.cfm/title/10664

General mortality
www.aihw.gov.au/mortality/index.cfm

Infant mortality, in international health, how Australia compares
www.aihw.gov.au/publications/phe/ihhac/ihhac-c05d.pdf

Rural, regional and remote health: mortality trends
www.aihw.gov.au/publications/index.cfm/title/10276

United Nations

Information on civil registration, including handbooks produced by the UN can be found at http://unstats.un.org/unsd/demographic/sources/civilreg/default.htm

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Appendix 1 Cost–benefit analysis hypothetical cases

Current state of civil registration	Assumption
Almost complete civil registration	• Basic civil registration process in place • Quality issues require addressing

Hypothetical case 1: Almost complete civil registration

It is assumed that there is a basic civil registration process in place. This jurisdiction is seeking to address quality issues—in particular, improve the coverage of civil registration by ensuring that unregistered births and deaths are recorded.

Strategic importance	Improving the coverage of births and deaths in the civil registration process is important to ensuring:
	
	• adequate identification is provided to individuals
	
	• quality and accurate counts and statistics can be produced, including
	   - population counts and growth
	   - fertility rates
	   - mortality rates and causes.
	These data can be used to inform service delivery, policy and planning for health and social services. These same data can be used to disseminate funding (eg based on population growth in a particular area) or to attract funding (eg to counter increased mortality from specific diseases, or to address increased population growth and issues related to basic infrastructure).

Objectives	Improved coverage of civil registration is needed to: • improve timely registration and reduce late registrations to ensure population estimates are accurate • ensure adequate services are provided in areas of high birth rates, reducing infant mortality rates • improve the timeliness of important data by reducing late registrations • ensure that mortality from chronic diseases (eg diabetes) are able to assessed and incorporated into health planning • attract available funding based on accurate population counts for particular Indigenous or ethnic groups. Civil registration counts inform population information on these groups in the years in between census counts. Birth registration is currently estimated to be 50% of all births; death registration is estimated to be at 80% of all deaths. Key benefits will be improved ability to deliver health services and outcomes in remote areas, and also to attract appropriate funding based on good population information. Critical success factors will be: • reducing infant mortality rates and mortality from potentially avoidable diseases • attracting greater and more accurate funding to the jurisdiction.

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Options appraisal	• option is not considered as effective as the option of having a registration office within a hospital setting)
	Option 1: No change
	Hypothetical costs:
	• population counts will continue to be inaccurate
	• service delivery may be ill informed and potentially wasteful
	• jurisdiction will not receive full financial entitlement.
	Hypothetical benefits:
	• no initial outlay required.
	Option 2: Hospital registration office to support improved coverage
	The option 2 proposal is to ensure that there is a registration office in each hospital to ensure that most births and deaths registrations can be captured close to the time of the event.
	Hypothetical costs:
	• establishing and maintaining an officer in each hospital site
	• establishing and maintaining an extended IT capacity across hospital sites.
	• There would be no costs in establishing and maintaining an independent site.
	Hypothetical benefits:
	• improvement in birth and death registration counts at the time that they occur, estimated at improving the births registration to 80% of all births and death registrations to 90% of all deaths. Improvements of this magnitude will ensure that hospitals can be funded accurately for appropriate service delivery, and that population estimated from the additional births and deaths will inform local service delivery and planning
	• more accurate birth statistics will attract funding from international programs for maternal and infant services, as well as educational programs
	• more accurate information on births and deaths will improve the country's ability to provide accurate population statistics, fertility rates and mortality rates, again important to attracting international financial programs
	• close partnerships with existing hospital health and medical workers to effect registration processes.
	Option 3: Independent regional registration offices
	The option 3 proposal is to ensure that there is a registration office in each province or regional area to ensure that births and deaths can be registered directly by people close to where they live.
	Hypothetical costs:
	establishing and maintaining an officer in each regional area
	• establishing and maintaining an extended IT capacity across sites
	• establishing and maintaining an independent site (rent, furnishing).

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Options appraisal *continued*	Hypothetical benefits:
	• improvement in birth and death registration counts at the local level, estimated at improving the births registration to 70% of all births, and death registrations to 85% of all deaths (note that this. Improvements of this magnitude will ensure that hospitals and other local delivery agencies can be funded more accurately for appropriate service delivery
	• more accurate birth statistics will attract funding from international programs for maternal and infant services, as well as educational programs
	• more accurate information on births and deaths will improve the country's ability to provide accurate population statistics, fertility rates and mortality rates, again important to attracting international financial programs.
	Hypothetical preferred option
	The preferred option is option 2, since this delivers a better benefit in terms of improved birth and death registrations, with less initial costs for establishing an office compared to option 3.
Commercial aspects	No external sourcing required
Affordability	• 10-year cost of preferred option
	• Statement of available funding
	• Estimate of funding required to complete and run the project over a 10-year period
Achievability	Implementation plan
	• Date for business case approved and funding finalised
	• Date for office space negotiated, IT and staffing arranged for five major hospital sites (June 2012)
	• Hospital data collection starts (January 2013)
	Contingency plan
	• Hospital site not established on time—central registration will still be available
	Risks:
	• Hospital space not available—seek space in adjunct precincts to hospital
	• Funding withdrawn—seek support from hospital or treasury agencies based on impact on registration counts
Source information	• Procurement documentation
	• Project management plans and documentation
	• High-level requirements
	• Business strategy

IT = information technology

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Determining cost and benefits

Cost–benefit analysis process	Benefit	Detailed benefit	Estimated financial benefit	Estimate ($)
Identify benefits of implementing a civil registration system (include preferred options as well as alternate options)	Personal identification for individuals	Personal documents for individuals	Benefits to individuals may be regarded nonquantifiable	$
	Improved data	Improved population estimates for use in financial budgets and grants applications	Estimates will need to include the estimated improvement in revenue able to be sourced as the result of better population estimates (eg in Australia, CGC and local government grants are determined based on population counts)	$
		Improved population information for health service delivery, planning and policy formulation	Estimates may also include financial benefits, which may be able to be better sourced as a result of improved information about fertility rates or causes of death	$
Total net benefit estimate				$

	Cost	Detailed cost	Estimated Financial Cost detail	$ estimate
Determine costs of implementing a civil registration system (include preferred options as well as alternate options)	ONE-OFF (2013): Establishing registration system in five hospitals	Implementation of staffing, IT and office support for a civil registration system	Identify average salary per officer required for staffing Identify rent for premises Identify costs for IT establishment	$
	Central coordination cost	Cost of centrally coordinating hospital registration activity	Officer cost Rent IT required	$
Total net cost estimate				**$**

CGC = Commonwealth Grants Commission; IT = information technology

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The University of Queensland

Aims to facilitate the development and integration of health information systems into the broader health system strengthening agenda, and increase local capacity to ensure that cost-effective, timely, reliable and relevant information is available. The Health Information Systems Knowledge Hub also aims to better inform health information systems policies across Asia and the Pacific.
www.uq.edu.au/hishub

Human Resources for Health Knowledge Hub

The University of New South Wales

Aims to contribute to the quality and effectiveness of Australia's engagement in the health sector in the Asia–Pacific region by developing innovative policy options for strengthening human resources for health systems. The hub supports regional, national and international partners to develop effective evidence-informed national policy-making in the field of human resources for health.
www.hrhhub.unsw.edu.au

Health Finance and Health Policy Knowledge Hub

*The Nossal Institute for Global Health
(University of Melbourne)*

Aims to support regional, national and international partners to develop effective evidence-informed national policy-making, particularly in the field of health finance and health systems. Key thematic areas for this hub include comparative analysis of health finance interventions and health system outcomes; the role of non-state providers of health care; and health policy development in the Pacific.
www.ni.unimelb.edu.au

Compass: Women's and Children's Health Knowledge Hub

Compass is a partnership between the Centre for International Child Health, The University of Melbourne, Menzies School of Health Research and Burnet Institute's Centre for International Health.

Aims to enhance the quality and effectiveness of women's and children's health interventions and focuses on supporting the Millennium Development Goals 4 and 5—improved maternal and child health, and universal access to reproductive health. Key thematic areas for this hub include regional strategies for child survival; strengthening health systems for maternal and newborn health; adolescent reproductive health; and nutrition.
www.wchknowledgehub.com.au