

SUBMISSION Smart Cities and Suburbs Program - Draft Guidelines

January 2017

Smart Cities Council Australia New Zealand



Sustainability is our goal. Smart cities is the accelerator.



Introduction

Smart Cities Council Australia New Zealand (SCCANZ) in its role as a connector of smart cities practitioners and policy makers, and accelerator of smart cities readiness, wishes to congratulate the Australian Government on its leadership in helping catalyse the smart cities market in Australia through its proposed Smart Cities and Suburbs program.

Since its launch in 2012 in Seattle, the Smart Cities Council has helped build capacity and catalyse projects within the world's largest smart cities markets – North America, India, and Europe. We want to make sure our impact in Australia is as transformative as elsewhere, and we are committed to working alongside the Department to ensure this program is as effective as possible.

Our day-to-day work is focused on facilitating peer-to-peer exchange, and ensuring the best resources are available to ensure we accelerate the planning, design, development, and management of sustainable cities through the use of technology, data, and intelligent design. Sustainability is our goal, and smart cities is the accelerator.

To supplement our ongoing engagement with the Department, as the Draft Guidelines have been prepared, we offer this detailed submission to help in shaping the final document.



Program Objectives

The Draft Guidelines note a clear objective to help local government and communities "become more liveable and urban service delivery becomes more efficient and effective", as well as support projects that are citizen-centric and link closely with strategic plans.

Having a robust set of program objectives is critical to the success of the program, as it provides the foundations for developing the eligibility and evaluation criteria for granting funds to applicants.

SCCANZ recommends the Program objectives include some key additional items, such as:

- Connection with the governments broader cities agenda, including City Deals, the Infrastructure Financing Unit, housing supply and affordability, etc. Using this \$50 million catalytic fund to strengthen the government's other core policy areas is a key opportunity.
- Potential to advance climate protection, and embed the governments commitment to the Paris Agreement. Having applicants demonstrate their alignment with the goals of this important agreement would be welcomed.
- Uplifting the communities most vulnerable populations could be a key outcomes of this program, and should therefore be seen as a core opportunity. Helping those in most need the elderly, the homeless, minority groups, persons with disabilities, and our first Australian's is at the centre of building compassionate cities, a key characteristic of the smart city.
- Building the regions, and ensuring that those economic engines of tourism, agriculture, and lifestyle-focused communities are not forgotten, and are offered the opportunity to participate and
 access support via the Smart Cities and Suburbs Program.

Program Outcomes

As with the Program Objectives, it is important that the program has explicit outcomes, to enable its success to be measured. It is recommended that are more detailed list of program outcomes be listed in the guidelines, which can also assist in the development of criteria for evaluating applications.

This level of transparency also supports the performance-based approach being developed through the City Deals process, which should closely align with funds distributed through this Smart Cities and Suburbs program.

Whilst 'improving liveability' is an admirable outcome of the program, a greater level of detail is required. Examples of program outcomes could include:

- Emerging employment opportunities catalysed
- City performance measured (across core metrics)
- Greenhouse gas emissions reduced
- Enhances physical and mental health

With respect to the outcomes of 'building smart city and smart technology capability', again, a greater level of specificity is encouraged, to help drive accountability and effectiveness of the program. This could include outcomes related to:

- Number of public, private and community-based stakeholders trained
- Formation of cross-sector partnerships and alliances
- New programs established (and funded)
- Research projects launched
- Education material distributed

Grant Amount & Grant Period

The noted minimum (\$100,000) and maximum (\$5M) grant amounts are considered sufficient to catalyse a diversity of opportunities within local government. Seeking at least a 50% contribution from the applicant (and its partners) is supported, however this may impact some rural and regional areas where the capacity to co-fund is not as high as major urban cities.

It is advisable that the Department maintain the opportunity to provide funding at its discretion where an applicant provides a value proposition that far exceeds the minimum 50% requirement, particularly where partners are engaged and long term capacity (and therefore) is being built.

The nominated project duration period of 24 months seems a little tight, particularly if procurement processes are factored in. Also, meaningful community engagement and the objective to establish citizen-centric projects can take time. Therefore, it is recommended that the 24-month period be exclusive of standard procurement processes.

Eligibility Criteria Who is eligible?

The conditions of eligibility (in terms of type of entity) are considered appropriate. However, regarding the 'encouragement' of collaborative proposals, we recommend that this wording be strengthened, to go beyond just encouraging and consider more incentivising this goal.

SCCANZ believes that collaboration, in its true sense, whilst a challenging process, is a fundamental success factor in not only delivering effective smart cities projects, but building long term capacity and opportunity beyond a single investment (project). Therefore, we recommend the Department consider the following wording (or similar) to replace the existing at the end of section 4.1:

Eligible parties who bring forward collaborative proposals involving multiple organisations through partnership or consortium arrangements will be given priority in the shortlisting process.

Additional eligibility criteria

The additional eligibility requirements are supported by SCCANZ, however where the recommended collaboration incentive (as detailed above) is applied, evidence by way of letters from consortium partners should be stipulated in Section 4.2.

Eligible projects

With respect to the 'Eligible Projects' requirements, the following comments are provided by SCCANZ:

- The term 'solution' is not defined in Appendix A Definitions of Key Terms, so it should therefore be explained in Section 4.3 that 'solution' can include a technology, method, process, application or similar.
- The requirement for projects to be a 'new solution', or for an existing smart technology to be deployed in an 'innovative way', should be clearly defined. For example, smart street lighting is not 'new', but is a highly effective and sustainable smart city solution/technology. Does this mean that the Department will not find any smart street lighting proposals that are deployment ready?
- The concept of the first funding round being focussed on 'deployment ready' projects is sound, and the commencement requirement of 'within two months' could be a little restrictive given procurement processes. SCCANZ recommend this be amended to 'three months', instead of two.
- The aspiration for each project to serve as a demonstration to Australian local government is equally applicable for State and Territory government. State and Territory government projects around the country involving urban transformation and infrastructure development could substantially benefit from the successful outcomes from the program, and equally the lessons learned could support the smart cities investment decisions of other tiers of government.

Eligible projects (continued)

- SCCANZ supports the Departments encouragement of direct citizen engagement, and user-testing, however further guidance should be provided to applicants on what outcomes the Department wants to see. Using the word 'underpin' indicates the critical nature of these issues, and therefore should be backed up with some clear guidance for applicants.
- The wording "projects must be endorsed by local government leaders....and integrated with existing strategies and plans" suggest this is a mandatory eligibility requirement (given the use of the word *must*). SCCANZ therefore recommends that a clear set of requirements be provided in the Final Guidelines that provides further information about what each of these requirements encompasses. The endorsement by local government leaders can be demonstrated by providing relevant commitment letters etc. With respect to projects aligning with Smart Cities Strategies/Plans, this is a critical, and is an important part of the capacity building process for local government in linking their smart cities projects with sustainable city building outcomes. SCCANZ has provided further comment and recommendations around this issue at the end of this submission.
- The Guidelines' reference to technology standards, and improvement of regulation, is an important one supported by SCCANZ. Further to this, we believe that the program provides a significant opportunity to advance the piloting of a number of standards in Australia. This includes the BSI suite of smart cities standards, Building Information Modelling, and internet of things interoperability through Hypercat. It is recommended that the Department take a leading role through the Smart Cities and Suburbs program to seek out opportunities for testing these standards, and documenting and sharing their experiences among public, private, and third sector. SCCANZ is happy to partner with the Department to undertake a more formal pilot program around these standards, in collaboration with other relevant entities (such as the Internet of Things Alliance Australia).

Eligible projects (continued)

- The Guidelines identify 'scalability' and 'transferability' as key outcomes the Department is seeking from the program, and therefore is willing to favour proposals that feature this.
- Projects that represent a contribution to identified City Deals will be favoured, indicating preference will be provided. SCCANZ is a strong supporter of the City Deals approach to sustainable city building investment, and agrees that the Smart Cities and Suburbs program should align with it where practicable. However, further information must be provided to allow applicants the opportunity to not only leverage and contribute to existing City Deals announced, but also help them scope smart cities investments that contribute to potential future City Deals for their city, town, and/or region. As a minimum, relevant City Deal information pertaining to infrastructure, programs, and investment types applicable to the City Deals process should be outlined, along with core performance metrics, performance monitoring approaches, and national outcome-based targets across key sustainability areas (eq. Housing, health, greenhouse gas emissions reduction, etc) should be specified.
- The final requirement under Section 4.3 Eligible Projects states that "project outcomes must be measureable against targets and through relevant metrics." For this to be achieved, SCCANZ recommend the Department provide a minimum level/requirement framework for doing so, potentially in template format so it can be completed with ease. This will allow the Department to gather important data to measure and report on, and for communicating the progress and performance on the program. See additional comments by SCCANZ at the end of this submission.

Eligible activities

SCCANZ provide the following comments with respect to the proposed eligible activities:

The framing of the eligible activities (which currently speaks of "novel smart technology and data solutions") could be strengthened by a clearer articulation, for the purposes of the program. SCCANZ recommends the Department consider the following:

The program will support projects which catalyse sustainability outcomes through the application of technology, embracing datadriven decision making, and embodying intelligent design.

These three components (technology/data/intelligent design) to a smart cities project are critical, and more than often rely on each other to be most successful. Being clear about these core definitional components will be critical in evaluating and prioritising project applications.

As a simple example, you can map this definition against Uber - the technology (smartphone), the data (google maps, GPS locational information, algorithms), and intelligent design (the app, and user interface).

Applying this framework to a micro-grid investment, smart buildings project, car fleet management platform, or smart waste deployment will highlight the universal application of it. The recommendation is not to redefine what smart cities is per se, but merely provide a simple underlying framework that builds the core components of a successful smart cities project. At the moment, this is currently missing.

Eligible activities (continued)

Having eligible applicants develop, apply, or implement a solution that addresses an urban issue is supported.

But the key question is, for guidance to potential applicants - what *doesn't* constitute an urban issue?

Would the Department not fund a valuable smart agriculture project that addresses the key issue of sustainable food production (often produced for urban consumption)? Whilst the intent of the use of the word 'urban' is acknowledged, the Department should be clear in the Guidelines about its definition of 'urban'.

The Department should consider embellishing it's definition of urban, possibly identifying key categories of urban issues that might be favoured. The Department may find it useful to draw from the <u>Smart Cities Readiness</u> <u>Guide V.2</u> (Smart Cities Council, 2015) to provide some structure to these urban issues – Transportation, Energy, Public Safety, Water and Wastewater, etc). For further definition on smart cities project examples that respond to these urban issues, the numerous case studies included in the Readiness Guide provide a further level of smart cities project types that might be useful to prospective applicants. These could be provided in a supporting appendix to the Guidelines.

Turning to the Priority Project Areas specified in Table 1 of the draft Guidelines, SCCANZ considers the four core priority areas – infrastructure, precincts, services, and planning – as being a good starting point. It is recommended however, that it be made explicit that 'smart infrastructure' is defined as both horizontal (eg. roadways, water management systems) and vertical (eg. buildings) infrastructure.

Furthermore, public spaces, places and landscapes (which are key pieces of civic infrastructure often funded and managed by local government) should be mentioned in either the Smart Infrastructure or Smart Precincts Priority Area. These areas are citizen-centred and help enhance the liveability of cities, in particular, supporting physical and mental health, as well as encouraging community interaction.

Eligible activities (continued)

The Smart Planning Priority Area seems to undersell the benefit of embedding smart cities approaches in our planning system. In fact, embedding a smart cities framework (technology, data, and intelligent design) into the way be plan our cities, towns, and regions could in fact be the biggest opportunity to enhance their sustainability.

Whilst the listing of the Priority Area's is not in any particular order, it is common place these days that our first point of discussion in discussing cities is around infrastructure. Much of our horizontal and vertical infrastructure investments are developed in response to the way we have laid out our cities, the location of growth areas, the zoning of land uses, and the connections we establish (or don't).

Urban and regional planners, architects, urban designers, and landscape architects occupy a critical space in the smart cities agenda, a space which is often well 'upstream' from technologists and other solution providers. Smart cities start with smart planning and design, and at the heart of this process is the use of data, and applying critical thinking and analysis to help in framing precinct, city, and regional plans and designs for development, and investment.

Also, these professions play a critical role in interfacing with the community, as they seek to shape our patterns of growth and development in a way that embraces the wisdom of the community, for greatest social benefit. The involvement of these professions, and the responsibility they have in shaping our cities to be more sustainable, highlights the critical importance of embedding smart cities into the planning system.

Eligible expenditure

No comments are provided on these requirements, SCCANZ consider them suitable for the program.

Eligibility Criteria Who is eligible?

The conditions of eligibility (in terms of type of entity) are considered appropriate. However, regarding the 'encouragement' of collaborative proposals, we recommend that this wording be strengthened, to go beyond just encouraging and consider more incentivising this goal.

SCCANZ believes that collaboration, in its true sense, whilst a challenging process, is a fundamental success factor in not only delivering effective smart cities projects, but building long term capacity and opportunity beyond a single investment (project). Therefore, we recommend the Department consider the following wording (or similar) to replace the existing at the end of section 4.1:

Eligible parties who bring forward collaborative proposals involving multiple organisations through partnership or consortium arrangements will be given priority in the shortlisting process.

Additional eligibility criteria

The additional eligibility requirements are supported by SCCANZ, however where the recommended collaboration incentive (as detailed above) is applied, evidence by way of letters from consortium partners should be stipulated in Section 4.2.

Merit Criteria

SCCANZ considers the merit criteria as one of, if not, the key success factor in attracting the best possible projects, who's participation in the program can have significant catalytic effects in the market place. We therefore provide the following comments and recommendations to strengthen the Guidelines.

The requirement to address each of the nominated merit criterion works most effectively where there is a clear and logical flow of the requirements, and its builds a narrative that can be used in communicating the project. It also helps the applicant structure their thinking and responses, in shaping their proposal.

It is therefore recommended that the following order be established for the criterion:

- Criterion 1 Define the Challenge the project will address and describe the benefits to your local government area and the broader community
- Criterion 2 Social, environmental and economic benefits of the project
- Criterion 3 Explain how the solution is innovative
- Criterion 4 capacity and capability to carry out the project

Further to this, some additional comments are provided about the criterion:

• The first two dot points in the criterion 'Explain how the solution is innovative' should be pulled out, and form part of an overall project information section. Also with this criterion, a reminder that the term 'technology' should be highlighted as one that encompasses the idea of applying knowledge, hardware, and software. It is a broad concept that can have many different interpretations, and given the extensive use of it in this criterion, it is important that the Department is clear on the scope it is applying to the term for the purposes of the Program.

- The three dot points used in the criterion 'Social, environmental and economic benefits of the project' seems a little disjointed, and do not really flow from the introductory sentence under that criterion heading. The three dot points do relate to some important overall issues that could relate to the applicant's submission, and therefore should be pulled out and included in a more generic section of the application form. The Department should then update this criterion with some clear guidance on the type of information it may want to see with respect to social, economic and environmental benefits of the project, such as:
 - Reduced greenhouse gas emissions, reduction is VMT of private vehicles, greater efficiency in processing community enquiries, enhancing safety in public places, acceleration of skills development in digital transformation across small businesses, etc. This criterion is about benefits that come from implementing the projects, but the existing three dot points are related more to how to implement the project, which is important, however doesn't really align with the criterion title.
 - This criterion should also ask for applicant's to assess their project for alignment with key national policy commitments, such as Government's commitment to the Paris Agreement of net-zero by 2050.
- The focus on innovation needs to be approached in a way that doesn't potentially result in 'excellent' and 'impactful' projects being denied funding because it doesn't use a new technology, and an old one in a new way. SCCANZ is an advocate for innovation, however for the purposes of the Program, we would not want to see a transformative and sustainable smart cities project that is 'shovel ready' and replicable, that meets all the other eligibility requirements, denied funding because its not new. For example, under this current definition, any smart street lighting proposals would be denied.

How Applications are Assessed

With respect to the Guidelines notes about the process for assessing applications, SCCANZ provides the following comments:

The use of 'subject matter experts' and 'independent technical experts' should be facilitated in a way that ensures the full diversity of sectors (private and non-profit/third sector) and disciplines (technology, design, planning, economics, construction) across which the smart cities movement embodies, is represented.

The ability for unsuccessful projects to submit for future funding rounds is supported, and SCCANZ has provided further feedback below at the end of this submission as to how such projects can be part of a Smart Cities Incubator Program to help prepare them for the future rounds of funding.

The Department needs to provide further information on the breakdown of scoring and weighting for each criterion. Without further information about why and how the equal weighting across all criterion was established, or is proposed to be established, further comment cannot be made by SCCANZ. This seems to be a critical part of the assessment process, which determines whether a project gets funded or not. Will the scoring be qualitative or quantitative? Will there be sub-criteria within each of the criterion that will have scores? These are some of the key questions that should be answered in the final Guidelines, as they will help applicants shape their submission. SCCANZ welcomes the opportunity to provide feedback on the weighting process.

How to Apply

No comments are provided on these requirements, SCCANZ consider them suitable for the program.

Conflicts of Interest

No comments are provided on these requirements, SCCANZ consider them suitable for the program.

How we use your Information

SCCANZ has provided some 'Additional Comments' at the end of this submission about a Smart Cities Exchange concept, and has recommended the opening up of the applications in the form of a marketplace, whereby additional interest, investment, and engagement around the projects could be further catalysed if the information was published, and accessible to the business and the community.

This is a recommendation by SCCANZ, which could substantially enhance the outcomes of the Program, and of course each of the projects for local government and their partners. SCCANZ is happy to discuss this concept further with the Department.

Additional recommendations for strengthening the Smart Cities and Suburbs Program

The Smart Cities Leadership Incubator

As SCCANZ travelled the country over the past six months, the interest from local government in the Smart Cities and Suburbs program has been significant. However, based on the current scope of the program (as outlined in the draft Guidelines), and the likely number of applications the Department may receive, not all applicants will be successful, at least in the first round.

The concept of a structured incubation program, as identified in the 'Program Rounds' section of the draft Guidelines, is of course strongly supported, and we recommend the Department consider embracing SCCANZ's proposal for a Smart Cities Leadership Incubator.

This Incubator is focussed on building leadership, as there is no smart cities success without smart leadership. The Incubator is proposed to implement a process of creating a unified approach to smart cities planning and action, by coaching and mentoring leaders on the use of smart cities standards, performance indicators, collaborative governance processes, solutions road mapping, and performance monitoring and reporting.

SCCANZ would be willing to work with the Department to pilot the Smart Cities Leadership Incubator as a supporting activity to the Smart Cities and Suburbs program.

The Smart Cites Project Exchange

The Smart Cities and Suburb program provides not only an opportunity to gather important data from project applicants, but also build a project exchange platform.

Through the application process, the Department will be obtaining intelligence on key issues, opportunities, trends, gaps, and investment interests that are critical to advancing the smart cities movement in Australia. SCCANZ recommends that the Department take this unique opportunity to create a Smart Cities Project Exchange.

The Smart Cities Project Exchange is platform that behaves like an on-line marketplace, and starts with the opening up the application material from the program, to help catalyse potential leverage opportunities, ultimately benefitting the the local government applicants who were seeking support.

This open data would encourage and attract the market (including the applicants) to innovate and potentially help further respond to and address the key challenges identified by the applicants. This Smart Cities Project Exchange is a great opportunity for local government in Australia to have a platform to not only receive catalyst funding from the Department through the Smart Cities and Suburbs Program, but facilitate ongoing investment, and involvement, from the broader market place.

The Australian Smart Cities Challenge

For smart cities, it is important, just like any core function or service within government, that a clear plan or strategy is in place for how the city, town, or region will prepare for smart city investment – being clear on its goals, objectives, metrics, enablers, resources, operational standards, risks, governance, and leadership requirements.

Therefore, in support of the government's commitment to catalysing the smart cities marketplace through the Smart Cities and Suburbs program, SCCANZ will be launching it's own grant program to support cities, towns and regions in Australia to build their 'readiness' for a smart cities future.

Cities, towns, and regions will be able to apply to receive one of a limited number of Smart Cities Council Readiness Workshops, along with in-kind support from the Council's global network of members and partners. These workshops are based on the Smart Cities Readiness Guide, one of the most used resources globally to support government in the task of preparing for their smart cities journey by providing a clear framework, directional templates, and hundreds of case studies that provide practical advice on the opportunities and benefits from adopting certain solutions.

SCCANZ will be releasing further information in the coming months on the launch of The Australian Smart Cities Challenge.

Thank You

On behalf of SCCANZ and its members, we appreciate the opportunity to help shape this important program.

The comments we have provided on the draft Guidelines, and our recommendation for establishing the Smart Cities Leadership Incubator, along with other critical opportunities, helps us build a vibrant smart cities market in Australia, and over the longer term realise the benefits that come with embracing technology, data, and intelligent design as an accelerator for more sustainable cities.

SCCANZ is the largest network of smart cities practitioners and policy makers in the world, and we are excited to bring to Australia global learnings that have benefited other nations over the past five years. Our day-to-day job is to develop resources and create programs that build smart cities readiness.

Sustainability is our goal, and smart cities is the accelerator. If facilitated in a collaborative, and effective way, the Smart Cities and Suburbs program has the potential to be a critical milestone in Australia's city building history, a moment when our cities, towns, and regions built the conditions necessary to unleash economic, environmental, and social opportunities through the use of smart technology, data, and intelligent design.

We would be happy to discuss further any of the information contained in this submission, and look forward to our ongoing relationship with the Department in catalysing the smart cities movement in Australia.

Sincerely

Adam Beck Executive Director Smart Cities Council Australia New Zealand

A city isn't smart because it uses technology. A city is smart because it uses technology to make citizen's lives better.

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