



31 October 2020

Attention: A/g Assistant Secretary Improving the telecommunications powers and immunities framework
Rachel Blackwood
A/g Assistant Secretary, Spectrum and Telecommunications Deployment Branch
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 594
Canberra ACT 2601

Dear Ms Blackwood,

SUBMISSION: IMPROVING THE TELECOMMUNICATIONS POWERS AND IMMUNITIES FRAMEWORK

Seqwater is a:

1. Statutory Authority of the Queensland Government established under the *South East Queensland Water (Restructuring) Act 2007*;
2. a registered service provider of critical infrastructure in South East Queensland; and
3. 'public utility' as that term is defined in Schedule 3 of the *Telecommunications Act 1997* (**the Telco Act**).

Seqwater is one of Australia's largest water businesses with the most geographically spread and diverse asset base of any capital city water authority in Australia. Our operations extend from the New South Wales border, to the Toowoomba ranges and north to Gympie. We manage up to \$12 billion of bulk water supply infrastructure and natural catchments of the region's water supply sources to ensure a reliable, quality water supply for more than 3 million consumers. Seqwater has an extensive network of dams, plans, pipelines and associated infrastructure across South East Queensland.

Seqwater is under a legislative duty pursuant to:

- the *Water Supply (Safety and Reliability) Act 2008 (Qld)*;
- the *Public Health Act 2005 (Qld)* and the *Public Health Regulations (Qld) 2018*;
- the *Australian Drinking Water Guidelines* (published by the National Health and Medical Research Council and the Natural Resource Management Ministerial Council); and
- *Security of Critical Infrastructure Act 2018*,

to provide (at all times) safe, secure, resilient and reliable bulk drinking water for South East Queensland.

Seqwater also provides essential flood mitigation services and supplies water for irrigation to rural customers, manages catchment health and offers community recreation facilities. Seqwater is also



responsible for the long term planning of the region's future water needs, a function that was formerly undertaken by the Queensland Water Commission¹.

The provision of a safe and reliable drinking water supply is critical for the health and wellbeing of Queenslanders. A cost-effective bulk water supply is also essential for Queensland's strong economic development. A key principle for Seqwater is protecting public health, it must be the paramount objective for managing drinking water systems, which must not be compromised for any other objective.

Introduction

Thank you for this opportunity to provide submissions on the Federal inquiry into Improving the Telecommunications powers and immunities framework.

Please note that Seqwater has previously lodged submissions:

- with the Australian Government (through Department of Communication and the Arts) (**DOCA**) opposing the *Possible amendments to telecommunications carrier powers and immunities – consultation paper* dated June 2017 (*Possible amendments*);
- on changes to the Mobile Phone Base Station Deployment Industry Code (C564:2011) (**Existing Deployment Code**) and set out in Industry Code DR C564:2018 Mobile Phone Base Station Deployment (**Proposed Deployment Code**);
- with Parliamentary Committee for the inquiry into and report on the deployment, adoption and application of 5G in Australia. A copy of these submissions is annexed to these submissions as **Annexure A**; and
- the Federal inquiry into Consultation on proposed temporary facilities and other amendments.

Seqwater has also appeared before the House of Representatives, Standing Committee on Communications and the Arts Federal Inquiry (House of Representatives)².

To the extent relevant, Seqwater repeats and relies on the above submissions for raising its concerns with the roll out of 5G and existing telecommunication equipment. This reasoning is based on what Seqwater views as a deficiency in the regulatory legislative framework surrounding telecommunication deployment in general and unacceptable risks to water quality, public health, asset protection, worker safety and Seqwater's ability (as a public utility (as that term is defined in the Telco Act)) to meet its legislative obligations and statutory functions.

We set out below our general concerns with the roll out of 5G and provide response to each of the proposals set out in the Consultation along with feedback on what steps can be undertaken to balance the roll out of 5G, addressing current telecommunications equipment and landowner needs.

General Concerns

Seqwater does have concerns regarding the roll out of 5G, especially how it may potentially impact critical water supply infrastructure, system operations, health and safety of workers, site security and risks to drinking water quality and public health.

¹ Further information can be obtained in Seqwater's 'Water for Life' document (version 2) located at <http://www.seqwater.com.au/sites/default/files/PDF%20Documents/Publications/Water%20Security%20Program%20-%20Regulated%20Document%20-%20WEB%20version%20with%20clickable%20links.pdf>.

² Held on Tuesday 19 November 2020.

As a member of the Powers and Immunities Working Group (**PIRG**)³ and its association with peak bodies such as the Qld Water Directorate, NSW Water Directorate and Water Services Association of Australia (**WSAA**), Seqwater has outlined (in the abovementioned submissions) some of the issues impacting on its water supply reservoirs from telecommunication installations that related to telecommunication regulatory regime including the deployment of past and current technologies. In this regard, Seqwater makes the following comments.

Any roll out of 5G in Australia must be done in a regulated legislative framework and in a safe manner and without adverse impact to Seqwater's operations, its statutory functions and ability to operate infrastructure thus ensuring protection of landowner interests. It has been noted at the PIRG, that many water services providers are not resourced to deal with the technical implications of telecommunication installations – in particular the long-term impacts to the asset owner/landowner. In most cases, telecommunication installations do not support water regulation – public health does not appear to be a factor taken into consideration. Alternative needs to be looked at.

It is critical that any telecommunication equipment including the roll out of 5G should not:

1. reduce the protection of drinking water supplies from any risk of contamination or loss of continuation of drinking water supply to the community;
2. interfere with a water service provider's statutory functions and its ability to maintain and operate its assets (including its own telemetry equipment) – there should be a consideration of both existing and future requirements of the water service provider – like telecommunications, water service providers have a requirement of meeting community demand and expectation;
3. impact on critical infrastructure;
4. place unnecessary risks to worker and site safety;
5. require the landowner to absorb the costs associated with the new wave of infrastructure investment and removal of redundant infrastructure for which public utility landowners are not budgeted for – there is also associated costs with legal (including court action), operational maintenance, engineering and EME assessments, safety consulting and governance – accelerated degradation of assets. This is unacceptable expense and not in line with community expectations. Seqwater views the compensation provisions provided under the Telco Act are deficient.⁴

It is also critical that considerations set out in Seqwater's previous submissions (refer to **Annexure A**) are addressed and implemented. Some of these are repeated below in response to certain proposals.

³ Seqwater is also a member of Working Committee 90.

⁴ Water service providers incur costs having carriers upon their land and/or infrastructure. These costs are not budgeted for and consequently absorbed by the business and passed onto consumers which is unreasonable.

Seqwater submits that compensation provisions (for example under section 42 of Schedule 3 to the Telco Act) as currently drafted does not provide adequate remedy. Seqwater submits that the provision be expanded to include commercial arrangements in lieu of compensation between the parties – this will alleviate a water service provider being put to unnecessary expense to quantify its compensation claim if a dispute involves for example, multiple carriers, or if a carrier refuses to pay rent or acknowledge that the water service provider has suffered a financial loss or damage.



Proposals

1. Safety and notification

It is noted that issues related to potential health and safety of electromagnetic energy (**EME**) emitted by telecommunications installations are outside the scope of the Consultation Paper on the basis of a separate work program being undertaken.

From a reading of the Consultation Paper, it is unclear why EME emissions from telecommunication installations is being considered in isolation of other safety matters) for example, separate to worker and site safety. EME emissions from telecommunications installations is being forced onto the environment of a public utility landowner which would not normally be the case. Seqwater submits that EME emissions are:

- an interrelated factor that needs to be fully considered and is seen as integral to the process of installation of telecommunication facilities on or within public utility infrastructure of a water service provider;
- other safety factors are subordinate to EME – for example, on a risk assessment, EME would be classified as a high risk along with falling from heights, drinking water contamination etc.
- impact on landowner's ability to perform electrical isolations⁵.

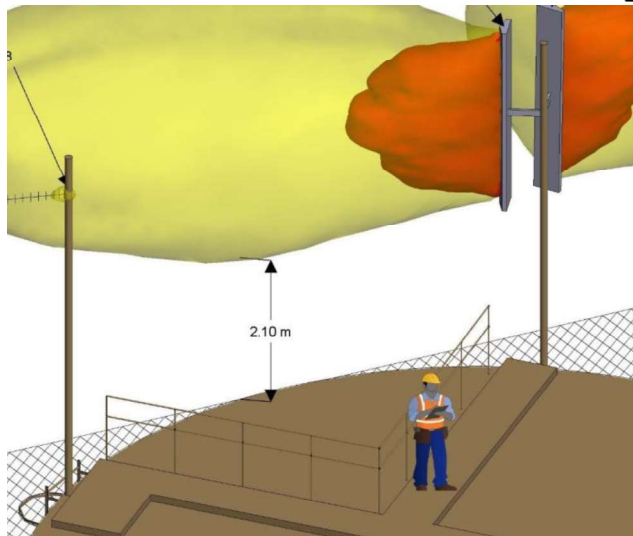
In any event, Seqwater repeats and relies on its submissions regarding EME risks made in response to the deployment of 5G: (refer to paragraph 13 of the submissions at **Annexure A**)⁶.




These submissions included a requirement for carriers to accurately update the EME Guide for Site Safety (via actual site inspection as opposed to a desktop analysis to ensure accuracy) for the deployment and to include additional information for sites of water service providers such as:

- a. EME Guide should specify:
 - i. detailed EME exclusion zone clearances (suggested example is below);
 - ii. location of cables, cable trays;
 - iii. details as to how power is sourced;
 - iv. which antennas are live/un-live;
 - v. location of isolation switches.

⁵ A formal requirement should be made to the Code of Practice to allow landowners (for example, water service providers) to undertake shut-downs to perform maintenance of its own assets or during emergency events. Water service providers have previously experienced significant difficulties with obtaining carrier consent to perform electrically shut-downs (where carriers have tapped into the same water service providers power source). This can become a protracted and costly process for water service providers with delays in accessing and performing maintenance or emergency work. This is further complicated with the presence of facilities where the owners are unknown. See submissions made before the House of Representatives on 19 November 2019.

⁶ It is noted that an Environmental EME report when issued prior to carrier installation only provides information based on ground level around the base station, this does not provide an indication of the exclusion zones upfront therefore the asset owner is unable to assess the operational risk until the Site EME guide is produced after installation. It is submitted that an asset owner should have powers to request that equipment be modified or removed if the EME affect the normal operations and safety of the land/asset owner operation.



-  **Red Zone** = Exclusion Zone. No access without confirmed transmitter power reduction or transmitter shutdown.
-  **Yellow Zone** = Exclusion Zone. Limited access to specially trained personnel (RF Workers).
-  **White Zone** = General access
-  **Height of Aaron** = 1.75m

- b. It should be mandatory for a carrier to provide a copy of the EME Guide for Site Safety to the water service provider within a certain timeframe (for example, within 10 business days of updating).

A. Creation of a primary safety condition (Issue 10)

Seqwater supports the creation of a primary safety condition subject to the considerations of the following.

The Consultation Paper states that the “*powers and immunity framework gives a carrier right to install facilities on another person’s land*”. It is noted that a number of carriers are using the powers and immunities to install facilities directly onto (or within) public utility infrastructure (for example, drinking water reservoirs). A public utility landowner does not have a legislative right to specifically object to facilities being installed directly onto public utility infrastructure⁷. Legislative amendment is required to provide adequate protection of public utility infrastructure – this protection should also provide a public utility landowner the right of first refusal to install telecommunication⁸. In the absence of landowner consent from a water service provider, 5G roll-out should not be done outside this process.

This should also include, to the extent a landowner is a public utility, the installation on or affixed to public utility infrastructure. If not done so already, Seqwater recommends the Department adequately

⁷ It is noted from discussions with the Department, that drinking water reservoirs remain a ‘facility’ for the purposes of the telecommunication regime despite objections from the water industry.

⁸ Seqwater has experienced that section 192 of the *Water Supply Act* cannot operate concurrently with the *Telco Act* despite the provision of section 38 of Schedule 3 to the *Telco Act*. There is a disconnect between operating legislation and this view appears to be supported by other water utilities in Queensland (see previous submissions). In our view, an amendment is urgently required to section 37(f) of Schedule 3 to the *Telco Act* to overcome court determinations to exclude interference with public utility infrastructure from the ambit of its operation.

consult with Comcare with regards to the safety concerns raised in this and previous submissions with regards to the roll out of 5G. This will assist with the creation of a primary condition and specify requirements to comply with applicable state/territory legislation including WHS, Building and Professional Engineering legislation.

In relation to the prompt questions, Seqwater responds as follows:

- the current safety arrangements embedded within the telecommunication regulatory regime do not provide a landowner (in particular in the case of a public utility) with assurance for the safe and effective implementation of telecommunications. It is noted that the industry standards and codes do not specifically deal with the impacts (both safety and structural) upon public utility infrastructure. It is likely that any proposed industry code would take a long period to be negotiated and drafted and most likely be skewed in favour of carrier installation to the detriment of public utility infrastructure on the basis that telecommunication installations are afforded higher protection (in the order of priority) over the supply of drinking water. As a water service provider, other safety concerns for Seqwater have included:
 - installation of carrier batteries and communication racks within a restrictive site of a reservoir structure can lead to fire risks⁹ and smoke and toxic fume hazards for workers (i.e. associated with carrier's battery/electrical installations which can overload the inside of a high-level drinking water reservoir that has been designed with one access route, meaning the main entry (escape route) can be compromised).
 - Fire can heat the surface of the concrete structure - this can then decrease the strength of the concrete.
- additional regulatory mechanism (included into the Code of Practice) to provide adequate protection of public utility infrastructure is required. Previous submissions have been made to expand the jurisdiction of Australian Communications and Media Authority (**ACMA**)/TIO to deal with matters of safety¹⁰. This is still supported.
- the addition of the above primary safety condition to the Code of Practice would provide a public utility landowner with a level of assurance and specify to carriers requirement to comply with applicable state/territory legislation including WHS, building and professional engineering legislation.

B. Standard notifications across industry (Issue 11)

Seqwater would support a condition be included in the Code of Practice that the ACMA must prescribe the form of a notice.

⁹ A carrier battery hut on a site operated by Seqwater has been impacted by smoke.

¹⁰ Seqwater (along with water industry) previously submitted that sufficient jurisdictional powers be provided to ACMA and/or the Telecommunications Industry Ombudsman (TIO) to deal with water service provider's concerns including a system of penalties and fines be introduced to ensure carrier compliance. We recommend that as part of the expanded powers of ACMA and/or the TIO that it has jurisdiction to order against carriers:

- the removal of any installed low-impact facility at the carrier's sole cost and expense (for example, if public utility infrastructure is impacted by the installation);
- reinstate the land and the infrastructure (if infrastructure is impacted by the installation) at the carrier's sole cost and expense;
- where infrastructure of a water service provider has been impacted, reinstatement is to include a full engineering assessment and engineering certification of the infrastructure impacted.
- the basis of the above is to prevent the unauthorised deployment proceeding in the first instance and the carrier giving consideration to co-locating to freestanding telecommunication poles/towers.



Other information and process that could be included in notices (i.e. LAANs):

1. in the case of a notice being delivered to a public utility landowner, the notice must be delivered by a carrier to the registered/head office and/or to the appropriate delegate of the public utility or their general enquires email address. . At no time, should a notice be left on an unmanned site etc¹¹. Public utilities operate critical infrastructure and any intended activity needs to be fully considered so that critical infrastructure is not compromised or public health put at risk. Carriers are encouraged to contact the water service provider in advance to discuss their intentions before issuing a LAAN. They are also encouraged to contact the water utility to confirm whether the landowner has received the LAAN.
2. if so requested by a water service provider, provision of:
 - a. evidence of insurance – in many instances, a water service provider’s policy of insurance is unlikely to respond to an incident caused by a carrier or by a carrier’s equipment. In most cases, it is standard practice that prior to allowing any contractor onto the land of a public utility landowner that they produce evidence of insurance with the water service provider noted¹². Therefore, any claims should they occur due to the carrier’s work/deployment can be directed to them. It is unreasonable for these costs to be borne by a water service provider;
 - b. an indemnity and release in favour of the water service provider to limit the exposure for a water service provider caused by the deployment;
 - c. an assurance that the carrier will at, its cost and expense:
 - i. maintain the up-keep and good working order of equipment for its full lifecycle;
 - ii. updates to the EME Site Safety report with respect to Radio Frequency National Site Archives (**RFNSA**) sites (this should also include non-RFNSA sites); and
 - iii. carrier personnel carrying out the deployment are trained in the requirement/s relevant to the activities and operations of water service provider (for example, water quality training and site access requirements).
3. a third-party consent process be adopted (as is common for most industry groups) to ensure any proposed roll-out of 5G on a water service provider’s land or infrastructure is done in accordance with a water service provider’s process for accessing and installing third party infrastructure. When infrastructure is likely to be impacted, this would ordinarily include:
 - a. engineering assessments (pre and post installation) carried out by a registered professional engineer in the relevant discipline. We have provided some examples used by Queensland Government, Department of Housing and Public Works and Seqwater, please see Annexure B, C, D and E. Technical drawings/plans provided to public utility landowners need to be accompanied by/include engineering certification and/or building certification to demonstrate compliance with State/Territory laws;

¹¹ During Covid19, water service providers across the Country have limited workers accessing sites/sites shut down etc. and notices may not be received.

¹² A contractor would also be required to maintain insurance throughout the relevant period.

- b. engineering specifications for proposed installation (including for a State's engineering registration) of the certifying engineer or manufacturer's instructions for each installation;
- c. engineering certification for the structural impact of each installation including:
 - i. a State's registration of the certifying engineer;
 - ii. a statement that the:
 - 1. water service provider's infrastructure is not structurally impacted by the deployment;
 - 2. the deployment does not impede a water service provider's use of its infrastructure for its operational and business purpose and to meet its statutory functions;
 - 3. the deployment does not interfere with a water service provider's telemetry equipment (an operational requirement for a water service provider);
 - 4. mains power supply to the deployed equipment is independent of a water service provider's power supply (similar to the requirements of Site Sharing Agreement/Arrangements of Telstra Corporation Limited);
- d. provision of a risk assessment and risk mitigation strategies undertaken by a carrier pertaining to the proposed installation (and ongoing maintenance) onto public utility infrastructure. This should include "Safety in Design" – a review / risk assessment (similar to requirements under section 22 of the *Work Health and Safety Act 2011 (Qld)* addressing risks to persons during construction, commissioning, operations and decommissioning and how they have been mitigated);
- e. provision of an end of life/decommissioning strategy for each telecommunication equipment including buried infrastructure¹³ – this would extend to not only 5G but previous technology (for example, 3G and 4G etc.);
- f. provision of a commissioning report or equivalent sign off for each telecommunication equipment installation;
- g. carrier being required to lay appropriate underground identification tape over the underground services halfway between the service and the surface in the trench to the satisfaction and requirements of landowner/occupier. Utility marking posts should also be used in the fence line;
- h. all deployed 5G equipment is sufficiently labelled (see response further below to proposal issue 18 (removal of redundant equipment)).

¹³ Buried infrastructure from carrier installations can impact on public utility landowners – for example, where a water service provider is required to access a main trunk water main to carry out maintenance or repairs, or carry out upgrades. Redundant buried infrastructure from carrier installations will cause havoc of a water service provider. Also, telecommunications facilities (both above and underground installed within easement and corridor for specific public purposes are acquired to cater for the current and future needs of the public utilities, statutory authorities and local/state governments. It is unreasonable for the owners/occupiers of these easement and corridors to be burdened with the cost of relocating telecommunication installations/encroachments into these areas.



In the absence of landowner consent from a water service provider, the roll out of 5G should not be done outside of this process.

4. In relation to timeframes, an amendment to the prescribed statutory timeframes to enable water service providers to respond to deployment requests (for example, a LAAN issued by a carrier) – current timeframes are unworkable. 20 business days is common in other industry groups – this should be introduced for water service providers to assess and provide a permit for approved deployment activities. In the case of complex or unusual applications, a water service provider can request further time to assess the proposed deployment including whether the water service provider (as a public utility) requires the carrier to enter into an agreement. The onus should be on a carrier to demonstrate that it has made reasonable efforts to engage with the water service provider (in particular in the case of a public utility). A carrier would not be able to commence the deployment specified in the LAAN until it seeks and has obtained the written approval from the water service provider to do so. If a carrier is dissatisfied with a decision (objection) from water service provider not to proceed it can then refer the water service provider's objection to the TIO (please see request for expanded power for TIO jurisdiction above and below);

Seqwater submits the provision of the above information would provide clarity on the proposed installation process and timeframes.

It is likely that the inclusion of a standard notification process would decrease the regulatory burden for public utility landowners (less business down time, expense and disruption).

C. Withdrawal of notifications (Issue 13)

Seqwater would support Option 2 namely, formal requirements for a carrier to withdraw a notice. Seqwater's preference is for a new requirement to be introduced into the Code of Practice over an industry code registered by the ACMA requiring carriers to follow a procedure to withdraw a notice when the proposed activity is cancelled or indefinitely delayed.

In addition to the above, Seqwater would like the further new requirements as follows:

- that a carrier cannot issue multiple LAANS for the same activity where a public utility landowner¹⁴ has previously delivered an objection to a previous LAAN delivered. Any subsequent LAAN should be deemed invalid until a determination is made by either ACMA/TIO (as the case may be).
- where a carrier issues a LAAN for activity which is covered under an existing agreement with a public utility, then the LAAN is to be deemed invalid. This is to cover the situation where a carrier or its subcontractor (who may or may not be a licensed carrier) issues a LAAN for which an agreement governs the activity specified in the LAAN.
- where a carrier has not commenced the activity within a deemed number of business days of the planned start date (say 20 business days), the LAAN is deemed to have been withdrawn.

D. Requirement to provide engineering certification (Issue 14)

Seqwater would support a change to the Code of Practice. However, Seqwater submits that a carrier should be required to provide (as in the case of other industries) pre and post engineering

¹⁴ There have been instances where this is done by some carriers so that a landowner can miss the timeframe for response despite having delivered its objection to previous LAAN/s for the same activity.



certifications. See response made above (located at B. Standard notification across industry - Issue 11).

Regulatory burden to carriers should not be seen as a means to dismiss the engineering assessment and certification requirements of public utility landowners operating critical infrastructure. To do so, places the critical infrastructure at risk impacting on public health and worker safety. This also impacts on a public utility landowner's statutory function.

Engineering certification of the designs prior to construction, and of the construction, is required by Seqwater to demonstrate compliance with Professional Engineers Act (which operates in Queensland). The Code of Practice should require them to provide the design certification with the LAAN (otherwise it is not a properly made LAAN) and within 20 business days of the activity being installed/completed. Allowing carrier to provide it 30 days after they receive from the supervising engineer will not be an effective mechanism as it gives a carrier an out to say they haven't received it, and therefore they will have no interest in chasing the supervising engineer to get the certification for forwarding to the landowner and in many cases, the public utility is unlikely to receive the as-built construction certification.

E. Extending notification timeframes (Issue 15)

Seqwater strongly supports (and has previously made such submissions including at the PIRG¹⁵) for legislative amendment to be made to Schedule 3 of the Act to extend the minimum notification timeframe for public utility landowners from 10 business days to 20 business days. There should also be an option to "stop the clock" if additional information has been requested but not forthcoming.

Seqwater also strongly supports the above be coupled with a further requirement that a public utility can assess and provide a permit for approved deployment of telecommunication facilities. In the case of complex or unusual applications, a water service provider can request further time to assess the proposed deployment including whether the public utility requires the carrier to enter into an agreement. Seqwater also seeks that a further requirement that a carrier is to pay an application fee for a public utility to assess any notification as is common with other industry groups.

In relation to the prompt questions, Seqwater responds as follows:

1. Seqwater views that there be limited utility with a non-regulatory approach – it is difficult for a public utility landowner to have certainty with a non-regulatory approach. This causes business disruption, delay and expense.
2. the benefits with extending the minimum notification timeframes enables more time for the public utility landowner to assess the proposed notification and seek clarification from the carrier and to inspect assets/land.
3. longer timeframes should apply to all landowners. Non-public utility landowners may be disadvantaged and may not be resourced to deal with carrier installation – they may also need to seek legal advice etc. Having consistent timeframes may reduce confusion.
4. longer timeframes will allow public utility landowners more time to assess and make more informed decisions.

¹⁵ It is noted that the statement made in the Consultation Paper that the PIRG "*did not make any recommendations regarding this proposal*" is not correct in this regard. It was noted that a number of public utilities at the PIRG (including WSAA, Seqwater and the Qld Water Directorate) sought this timeframe be increased from 10 business days to 20 business days. Also refer to Seqwater's submission at point 8, page 4 at Annexure A.



5. other factors to be considered when considering whether to extend notification or objections timeframes as per outlined above – provision for a permit and depending on complexity of the notification and impact to the public utility infrastructure.

2. Objections and protections

A. Clarifying the objections process for landowners (Issue 17)¹⁶

Seqwater is of the opinion that the prompt questions provided would be addressed by the development and inclusion into the same prescribed form as per response to 1 Safety and notification, B. Standard notification across industry (Issue 11).

B Allowing carriers to refer objections to the TIO (Issue 17)

Seqwater supports the Code of Practice being amended to allow carriers to refer objections directly to the TIO without waiting for a request from the landowner to refer the objection. Seqwater submits that a new requirement to be introduced into the Code of Practice which requires a carrier to lodge all disputed objections to the TIO at first instance. This is to prevent carriers from commencing legal proceedings (for example, by lodging applications directly to the Federal Court of Australia or other court of competent jurisdiction for injunctive relief) which can incur significant costs for the public utility landowner prior to a determination being made by the TIO. The commencement of legal proceedings can be problematic for public utilities who are not resourced for or have budget to deal with these types of disputes¹⁷. All landowners would benefit from this new provision.

Seqwater further supports for a deadline on carriers to lodge an objection with the TIO within 20 business days. This would give landowners certainty as to whether the carrier intends to proceed with its activity.

Consideration should be given to allow landowners to directly access the TIO to lodge disputes (if so required and expanded powers requested above are adopted) in circumstances that they cannot be dealt with by ACMA. Landowners need a suitable platform to deal with disputes and in a cost effective and timely manner.

C. Removal of redundant equipment (Issue 18)

Seqwater views the requirement under the *Mobile Base Station Deployment Code C564:2018* (the Deployment Code) for carriers to make sure that equipment no longer in service, does not transmit, or is removed, is deficient and unsafe for the reasons set out below¹⁸.

Communications Alliance has identified and reported to the PIRG that 10% of RFNSA sites house unknown equipment. In relation to the comment that *“there is some evidence that redundant equipment has been turned off, yet left in situ on the infrastructure and assets of landowners and occupiers”*, equipment where owners cannot be identified (unknown equipment) has become very problematic for the water

¹⁶ In relation to the analysis of notices, there were many before the PIRG that showed that the Code of Practice requirements were not met. It was also noted by the PIRG that the factsheet/guide made available to landowners was not correct and needed to be amended.

¹⁷ The area of 5G deployment and telecommunication law is complex and can have long term implications for landowners.

¹⁸ Leaving equipment in situ impacts on site and worker safety and potential for EME impacts if equipment is turned on without the landowner knowing etc. It is also difficult for a water service provider to perform electrical isolations.



industry and impacts on a water service providers ability to carry out its statutory functions and puts public health at risk¹⁹. For this reason, it is very important that:

- all deployed equipment be sufficiently labelled with carrier's name and emergency contract details: [see Seqwater's previous submissions at page 5, point 9 of Annexure A - (for example, something similar to that used by the Australian Defence, Defence Labelling Standard Equipment and Equipment Systems could be used as a guide – please see Annexure F). This will assist with ease of identification of owners during an emergency event in a timely and safe manner];
- the Code of Practice be amended to provide a suitable working process for landowners to remove redundant and unknown equipment (including within sufficient timeframes – say within 25 business days) so that water service providers are not in breach of section 474.6 of the *Federal Criminal Code (Cth) 1995* (which makes it an offence to interfere with a facility without the consent of the owner: [refer to Seqwater's previous submission at pages 5 and 6, point 12 of Annexure A]).

Seqwater agrees with the statement that *“presence of redundant equipment has a range of effects on different landowners and may make the management of critical infrastructure more difficult for operators of public utilities”*.

In relation to the two options, Seqwater's preference is for Option 2 namely, “a new section be included in the Code of Practice so that the removal of redundant equipment by a carrier becomes a legal requirement and part of the same powers and immunities framework”. This option would provide public utility landowners with better protections and for timely responses and ensure responsibility lies with the relevant carrier who has exercised the powers and immunity framework to deploy the original installation.

If this option is adopted, Seqwater is likely to have a decrease in expenditure and a decrease in business interruption and minimise drinking water contamination and public health risk.

In Seqwater's experience, non-regulatory methods have had limited effect and request for new requirements to be included into the Code of Practice, namely:

1. suitable and workable process for water services providers to be able to have removal of redundant and unknown equipment (including within sufficient timeframes) so that water service providers are not in breach of section 474.6 of the *Federal Criminal Code (Cth) 1995* (which makes it an offence to interfere with facility without the consent of the owner), where the water service provider has made genuine efforts to ascertain or locate the owner of the equipment including notification to ACMA²⁰. If a carrier cannot be identified (i.e. consent cannot be obtained), a water service provider has two options, namely:

¹⁹ Ibid.

²⁰ It is noted that unknown equipment is outside the terms of reference of the Working Committee 90. Landowners need to be able to deal with unknown equipment. Seqwater has previously made submissions for the creation of new online database for hosting all carrier deployment - the current register for the location of carrier equipment held by ACMA is incomplete and not sufficient for water service provider purposes to rely upon. In addition, the current information held by RFNSA can be limited, incomplete, inaccurate and out of date. For the purposes of worker safety, this information provided by the RFNSA cannot be relied upon by a water service provider. The lack of information can impact and interfere with the operations of a water service provider. It is critical that adequate records are maintained by ACMA as the telecommunication regulator. These records should also include sufficient details of the installation and evidence of landowner consent. We also recommend that ACMA undertake regular audits of installation and maintenance of deployment equipment in the field to ensure carrier compliance and to maintain public confidence.



- a. applies to the Federal Court of Australia to seek orders to obtain the approval of the court to remove the equipment as ACMA and TIO does not have jurisdiction. It is noted that this provision has not been judicially tested including where a landowner interferes in order to respond to an emergency (this also implies a consideration of what constitutes an emergency – which can take on a different meaning for landowner v. carrier). This prevents the water service provider from taking direct and urgent action to rectify issues created by illegally installed carrier equipment or to respond in an event of emergency (for example, loss of continuity of water supply, natural disaster event or contamination of water supply as damaged vermin proofing can allow vermin into a drinking water reservoir, or illegal access by someone breaking into the hatch). This can also cause worker safety and site security concerns. This scenario can also lead a water service provider to allow its asset to run to failure – due to its loss of control of infrastructure; and
- b. allow the asset to run to failure i.e. permit an emergency scenario. This approach places a significant cost on the replacement of water utilities assets. These costs are ultimately absorbed by the water service provider and passed onto its consumers – this is not a cost saving for the public or end-users. It also places unacceptable risk on the community in relation to the water service provider's ability to supply safe drinking water.

Ultimately, this would require Home Affairs to amend the outdated Federal Criminal Code or ensure suitable protections are contained in the *Telecommunication Act 1997*.

3. Facilitating services in line with community expectations and to support economic growth

A. Improve coverage outcomes through better infrastructure, where safe (Issue 21)

Seqwater does not support for antenna protrusions to be extended to a height of 5 metres where equipment has been deployed onto public utility infrastructure for a number of reasons. It would be concerning if this was adopted because of the following concerns:

- many existing carrier installations on or within public utility infrastructure (for example, drinking water reservoirs) are unlikely to meet formal engineering assessment and certification (for example, under the RPEQ system which operates in Queensland);
- drinking water reservoirs constructed prior to the Telco Act are not designed²¹ to support additional load (live and wind) from carrier installation and the weight of people working on them²² – this becomes more problematic where there are a number of carriers and overcrowding exists on roof tops. If each carrier was allowed to extend their height of each piece of equipment - this would place further loads on a structure which may already be overloaded or does not provide sufficient operational requirements for a water service provider²³ – this can compromise the structural integrity of the structure;

²¹ Not anticipated at the time of design of the public utility infrastructure (drinking water reservoirs).

²² The factors of safety (AS1170) may not accommodate the extra loads from carrier installation.

²³ For operational, maintenance, public health and safety reasons, a water service provider requires sufficient footprint on its reservoir roofs to inspect and maintaining drinking water supply, assess the structure and provide sufficient platform for workers to operate from a WHS perspective.

- places drinking water supply at increasing risk of contamination and has the potential to impact on public health (for example, birds roosting on antennas and defecating on reservoir roofs can place the drinking water at risk to the community);
- equipment that needs to be maintained and regulated and increases the risk for potential storm damage and lightning strikes (if appropriate lightening protection measures are not included in the design and installation of carrier equipment) and site overhead hazards;
- asset and site maintenance cost would be further increased and added to the burden of the asset owners due to the need to implement higher and more complicated access to sites where ongoing operational and urgent maintenance is required;
- visual impact. Seqwater sites are predominately located in high growth regions with dense population;
- access to critical infrastructure being blocked in particular by antenna protrusions on a single structure, for example to water supply reservoirs. This undermines Seqwater's ability to access and manage our water supply structures (including carrying out required operations and maintenance). It is also a safety risk for Seqwater personnel and other users of Seqwater sites including carrier personnel and other personnel;
- many of Seqwater's assets were constructed before 1960s and are approaching their end of infrastructure life;
- workmanship issues from the installation by carriers and lack of maintenance/upkeep;
- proposed future upgrades/repairs of Seqwater's water infrastructure may be impacted by the antenna protrusions.

B. Improve coverage outcomes through tower extensions (Issue 23)

Seqwater does not support this proposal to the extent that a drinking water reservoir is considered a "facility" for the purposes of the Telco Act for the reasons outlined in these and in previous submissions. The use of land/infrastructure belonging public utility should be excluded from item 12 in the Schedule to the LIFD. A landowner should also have the right of first refusal. For reasons identified above, the safety conditions qualification referred to are unlikely to provide sufficient safeguards for a public utility landowner operating critical infrastructure.

Unless agreement has been given by a public utility, a carrier should deploy their own towers (including their own electrical supply) independent of public utility infrastructure or co-locate onto existing telecommunication towers.

Prompt 2 - In the event that this proposal was to proceed, a public utility landowner would be disadvantaged (financial/non-financial) by:

- Costs attributed to further engineering and EME assessments;
- Costs attributed to business interruption;
- Delays in attempting to perform electrical isolations or inspections/repairs to water reservoirs;
- Increased compliance costs, for example, ensuring safety requirements are met due to potential of exposure to radiation hazards.
- Increased operational maintenance requirements due to increased quantity of infrastructure and bird roosting and asset impact areas.

It is also noted that the public utility landowner would have long terms impacts associated with tower extensions.

Prompt 3 – Seqwater is concerned that there is likely to be impact to its statutory functions and its ability to operate critical infrastructure. This is most likely to increased costs for a public utility – these costs are



not budgeted for and likely to be passed onto consumers. Scheduling of maintenance of structures would be complicated by needing to arrange access with telecommunications carriers, which may delay critical repairs or reduce the ability of Seqwater to carry out its functions as a public utility.

C. Allowing deployment on poles rather than on utilities (Issue 24)

For the purposes of this proposal, if it is the intention to continue to have drinking water reservoirs classified as facilities²⁴, then Seqwater does not support this proposal to the extent that a public utility infrastructure (for example, a drinking water reservoir) is to be used to deploy on or within infrastructure for the reasons outlined above in these submissions including EME considerations.

Costs should not be the only consideration for making decisions for the roll out of 5G. Seqwater is of the view that this type of deployment should remain within current planning scheme processes and public consultation and key stakeholder engagement has occurred.

D. Encourage the co-location of facilities (Issue 26)

Seqwater previously made submissions for co-location sites, deployment is made directly onto telecommunication monopoles/towers instead of public utility infrastructure – this would provide a water service provider with a level of comfort (for example, ensure water quality and workers safety risks are maintained and minimised).

Seqwater does not support for co-location limits be updated in residential areas from 25% to 50% for installation on public utility infrastructure²⁵. This will cause overcrowding and noise issues, Seqwater has to comply with noise requirements in residential areas. However, Seqwater would support the increase if that is applied to existing carrier telecommunication towers subject to safety, EME and engineering assessments and landowner requirements/considerations etc.

It would be useful, when constructing new telecommunication towers/poles, for a carrier to specify the additional capacity allocated to cater for potential co-locations²⁶.

If an existing Telecommunication Tower is within close proximity to proposed low impact on a utility asset the Carrier must demonstrate that colocation onto the Telecommunication Tower is not physically or technically possible. This report should be produced by an independent third party.

Summary

In summary, Seqwater supports the installation on telecommunications infrastructure in the community, but has concerns if such infrastructure compromises our ability to fulfil our legislative obligations regarding: health and safety of employees, asset management, water supply operations, site security, critical infrastructure resilience and business continuity, public health and water quality.

Seqwater seeks that the Department (and decision makers including the Minister, Hon. Paul Fletcher) ensure:

- drinking water supplies are protected from any risk of contamination and from loss of continuation of drinking water supply;
- Seqwater workers are safe from harm caused by carrier installations;


²⁴ Clarity is needed noting that the Consultation Paper did not specially exclude water reservoir infrastructure.

²⁵ Seqwater understands that the colocation limits operate in conjunction with noise limits. This does not appear to be mentioned in the Consultation Paper.


²⁶ It would also be useful for this information to be set out in the EME Safety Guide.

- amendments are made to section 474.6 of the *Criminal Code (Cth) Act 1995* to facilitate the removal of telecommunication equipment where the identity of ownership cannot be identified;
- water utilities can meet their legislative obligations and statutory functions under relevant State legislation.

This view is supported by the water industry, in particular WSAA and Queensland Water Directorate.

Please contact 

Yours sincerely,






Annexure A – Seqwater’s Submissions to the inquiry into and report on the deployment, adoption and application of 5G in Australia



Annexure B - Form 15 – Compliance certificate for building design or specification (produced by Queensland Government, Department of Housing and Public Works)

5. Building certifier reference number	Building certifier reference number
6. Competent person details A competent person for building work means a person who is assessed by the building certifier for the work as the building certifier is satisfied is of the building work because of the individual's skill, experience and qualifications in the aspect. The competent person must be assessed by a registered/licensed under a law applying in the State to practice the aspect. If no relevant law requires the individual to be licensed or registered to be able to give the help, the certifier must assess the individual as having appropriate experience, qualifications or skills to be able to give the help. If the chief executive issues any guidelines for assessing a competent person, the certifier must follow the guidelines when assessing the person.	Name (in full) Company name (if applicable) Contact person Phone no. (business hours) Mobile no. Fax no. Email address Postal address Licence or registration number (if applicable) Postcode Signature Date

The Building Act 1975 is administered by the Department of Housing and Public Works



Department of Housing and Public Works
Form 15—Compliance certificate for building design or specification
Version 4 – July 2017

NOTE: This is to be used for the purposes of section 10 of the *Building Act 1975* and/or section 46 of the *Building Regulation 2006*.


RESTRICTION: A building certifier (Class B) can only give a compliance certificate about whether building work complies with the BCA or a provision of the Queensland Development Code (QDC). A building certifier (Class B) can not give a certificate regarding QDC boundary clearance and site cover provisions.

1. Property description This section need only be completed if details of street property description are applicable. E.g. in the case of (standard/generic) pool design/shell manufacture and/or patio and transport systems this section may not be applicable. The description must identify all the subject of the application. This and plan details (e.g. Site plan, Section, etc.) documents or a case notice. If the plan is not registered by title, provide previous lot and plan details.	Street address (include no., street, suburb/locality and postcode) Postcode Lot and plan details (attach list if necessary) In which local government area is the land situated?				
2. Description of component/s certified Clearly describe the extent of work covered by this certificate, e.g. all structural aspects of the steel roof <u>beams</u> .	<div style="border: 1px solid black; height: 100px;"></div>				
3. Basis of certification Detail the basis for giving the certificate, e.g. the standards to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon.	<div style="border: 1px solid black; height: 100px;"></div>				
4. Reference documentation Clearly identify any relevant documentation, e.g. numbered structural engineering plans.	<div style="border: 1px solid black; height: 100px;"></div>				
<table border="1" style="width: 100%;"> <tr> <td style="width: 70%;">LOCAL GOVERNMENT USE ONLY</td> <td style="width: 30%;">Reference Number/s</td> </tr> <tr> <td>Date received</td> <td></td> </tr> </table>		LOCAL GOVERNMENT USE ONLY	Reference Number/s	Date received	
LOCAL GOVERNMENT USE ONLY	Reference Number/s				
Date received					

Annexure C - Form 16 – Inspection Certificate produced by Queensland Government, Department of Housing and Public Works

<p>4. Description of component/s certified Clearly state the extent of work covered by this certificate, e.g. all structural aspects of the steel roof beams.</p>	
<p>5. Basis of certification Detail the basis for giving the certificate and the extent to which the design complies with standards, codes of practice and other publications, were relied upon.</p>	
<p>6. Reference documentation Clearly identify any relevant documentation, e.g. numbered drawings, specifications, structural engineering plans</p>	
<p>7. Building certifier reference number of development approval number</p>	<p>Building certifier reference number</p> <p>Development approval number</p>
<p>8. Building certifier, competent person or QBCC licensee details A competent person must be assessed as competent before carrying out the inspection. The builder for the work cannot give a certificate unless it is assessed by a competent person as assessed by the building certifier for the work as competent to practice in an aspect of the building and specification design, because of the individual's skill, experience and qualifications. The person must be assessed and licensed under a law applying in the State to practice the aspect. If no relevant law requires the individual to be licensed or registered, the certifier must assess the individual as having appropriate experience, knowledge and skills to be able to give the help.</p>	<p>Name (in full)</p> <p>Company name if applicable</p> <p>Phone no. (business hours)</p> <p>Mobile no.</p> <p>Fax no.</p> <p>Email address</p> <p>Postal address</p> <p>Licence class</p> <p>Licence number</p> <p>Postcode</p> <p>Date approval to inspect received from building certifier</p>
<p>9. Signature of building certifier, competent person or QBCC licensee Note: A building certifier must sign this form for temporary swimming pool opening under section 4 of Schedule 1 of the QBCC Act 2004.</p>	<p>Signature</p> <p>Date</p>

The *Building Act 1975* is administered by the Department of Housing and Public Works.



**Queensland
Government**

Department of Housing and Public Works

**Form 16—Inspection
Certificate/Aspect Certificate/QBCC
Licensee Aspect Certificate**

(Version 6 – July 2019)

NOTE: This form is to be used for the purposes of section 10(c) and 239 of the *Building Act 1975* and/or sections 32, 35B, 43, 44 and 47 of the *Building Regulation 2006*.

<p>1. Indicate the type of certificate</p> <p>The stages of assessable building work are listed in section 24 of the Building Regulation 2006 or as conditioned by the building certifier. An aspect of building work is part of a stage (e.g. waterproofing).</p>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><input type="checkbox"/> Inspection Certificate for</p> <p><input type="checkbox"/> Stages of building work (for single detached class 1a or class 10 building or structure) <small>(indicate the stage)</small></p> <p><input type="checkbox"/> Aspect of building work <small>(indicate the aspect)</small></p> </div> <div style="width: 45%;"> <p><input type="checkbox"/> QBCC Licensee Aspect Certificate</p> </div> </div> <p>Scope of the work</p> <p>Scope of the work covered by the license class under the <i>Queensland Building and Construction Commission Regulation 2003</i> for the aspect being certified, e.g. scope of work for a waterproofing license is 'installing waterproofing materials or systems for preventing moisture penetration'. An aspect being certified may include 'wet area sealing to showers'.</p> <div style="border: 1px solid black; height: 100px; margin-top: 10px;"></div>
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| **2. Property description** The description must identify all the land and the subject of the application. The lot and plan details (e.g. SPOR7) are shown on title documents or a **radius** notice. If the lot and plan details do not provide previous lot and plan details | **Street address** (include no., street, suburb/locality and postcode) **Postcode** **Lot and plan details** (attach list if necessary) **In which local government area is the land situated?** |
| **3. Building/structure description** | **Building/structure description** **Class of building/structure** |

Annexure D - Seqwater Engineering Statement for Design (ES1)

 Asset Management – Template
 X-TMP-STD-005 Engineering Statement - ES1 – Design


PURPOSE	This form is for the purpose of documenting that built asset creation or modification requiring, or based on, the application of engineering principles have been performed by a competent person in accordance with the Professional Engineers Act 2002 (QLD). Refer Seqwater Procedure PRO-01617 Engineering Review and Approval for further guidance on when this form should be used.		
ES1.1 – Asset Description The description must identify all aspects of the asset that are covered under this statement.	Asset Name (include facility and specific area of work) <input type="text"/> Project Name (if applicable) <input type="text"/>		
ES1.2 – Statement Type Identify if this statement relates to approval of a design or the performance of a design review.	Completed as: Designer <input type="checkbox"/> Design Reviewer <input type="checkbox"/>	Design Status: Preliminary Design <input type="checkbox"/> Detailed Design <input type="checkbox"/>	
ES1.3 – Scope of Engineering Statement Clearly describe the extent of engineering work covered by this certificate, e.g. all mechanical aspects of the new water pump station.	<input type="text"/>		
ES1.4 – Reference Documentation Clearly identify any relevant documentation, e.g. drawings, specifications, standards engineering plans. NOTE: Any risk registers that are to be carried from design to construction should be listed here.	<input type="text"/>		
ES1.5 – Basis of Approval Detail the basis for giving the statement and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon. Also include references to any other RPEQ and their RPEQ# that may have been relied upon.	<input type="text"/>		
ES1.6 – Hazard and Value Analysis Risk assessment process & studies to ensure the Health & Safety, Environment, Production and Commercial Risk associated with the modification or the impacts on existing plant are fully identified & managed. External - Refer AS ISO 31002:2003 (R2013) - Hazard and operability studies (HAZOP studies) - Application guide Internal - Refer to Seqwater Engineering Technical Hazard Study Guideline TRM D14/20830.	Hazard Study 1 – Preliminary Design Yes <input type="checkbox"/> N/A <input type="checkbox"/> (if N/A state reason) (eg HAZID) Hazard Study 2/3 – Detailed Design Yes <input type="checkbox"/> N/A <input type="checkbox"/> (if N/A state reason) (eg HAZOP, CHAIR, CHAZOP, etc.) WHS Risk assessment? Yes <input type="checkbox"/> N/A <input type="checkbox"/> (if N/A state reason) (Refer TEM-00006) Details (include reference to any Hazard and Value Engineering undertaken and consultation with Seqwater WHS) <input type="text"/>		
ES1.7 – Competent Engineer Details A competent engineer for this statement, means an RPEQ. The Professional Engineers Act 2002 defines a 'professional engineering service' as 'an engineering service that requires, or is based on, the application of engineering principles and data to a design, or to a construction or production activity relating to engineering, and does not include an engineering service that is provided only in accordance with a prescriptive standard.' Include references to any other RPEQ and their RPEQ# that may have been relied upon in Section ES1.5 Basis of Approval.	Name (in full) <input type="text"/> Company name (if applicable) <input type="text"/> RPEQ# Phone no. (business hours) Mobile no. <input type="text"/> <input type="text"/> <input type="text"/> Email address <input type="text"/>		
ES1.8 – Competent Engineer Declaration This form does not replace any other necessary certificates, statements or approvals necessary to meet regulatory or contractual obligations of the designer.	I believe on reasonable grounds that the design for this asset modification to date, in accordance with the drawings, specifications, and other documents provided or listed in this statement, a) complies with the requirements of the Professional Engineers Act 2002 (QLD) and the associated Code of Practice for Registered Professional Engineers (2008); and that b), the persons who have undertaken the design have the necessary competency to do so.		
ES1.9 – Signature of Competent Engineer	Signature Date <input type="text"/> <input type="text"/>		
ES1.10 – Seqwater Receiver Details of the Seqwater representative (eg Planner or Project Manager) receiving this statement. Listing of an Seqwater representative does not confirm Seqwater's acceptance of the project or replace any contractual arrangements in place for handover or end of practical completion.	Name Position Title <input type="text"/> <input type="text"/>		


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Doc owner:	Principal Engineer, Analysis & Advice	Doc approver:	Manager, Engineering & Technical Support	Rev no:	2
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Annexure E - Seqwater Engineering Statement Construction (ES2)

Asset Management – Template

X-TMP-STD-006 Engineering Statement – ES2 – Construction Review



PURPOSE	This form is for the purpose of documenting that built asset creation or modification requiring, or based on, the application of engineering principles have been performed by a competent person in accordance with the Professional Engineers Act 2002 (QLD). It should be used to confirm that at the end of construction the necessary engineering approvals have been received for any design modifications undertaken in the construction process. Refer Seqwater Procedure ES2-01617 Engineering Review and Approval for further guidance on when this form should be applied.
ES2.1 – Asset Description The description must identify all aspects of the asset that are covered under this statement.	Asset Name (include facility and specific area of work) <input style="width: 100%;" type="text"/> Project Name (if applicable) <input style="width: 100%;" type="text"/>
ES2.2 – Statement Type Identify if this statement relates to completion of construction or progress assessment of construction.	Construction Status: In Progress <input type="checkbox"/> Complete <input type="checkbox"/>
ES2.3 – Scope of Engineering Work Clearly describe the extent of engineering work covered by this certificate, e.g. all mechanical aspects of the new water pump station.	Details (include details on any design modifications that may have been made during the design) <input style="width: 100%;" type="text"/>
ES2.4 – Reference Documentation Clearly identify any relevant documentation, e.g. drawings, specifications, standards engineering plans. NOTE: Any risk registers that have been carried from design to construction should be listed here.	<input style="width: 100%;" type="text"/>
ES2.5 – Basis of Approval Detail the basis for giving the statement and the extent to which tests, specifications, rules, standards, codes of practice and other publications, were relied upon. Explain the level of monitoring and observation carried out. Also include references to any other RPEQ and their RPEQs that may have been relied upon.	<input style="width: 100%;" type="text"/>
ES2.6 – Hazard Analysis Risk assessment process & studies to ensure the Health & Safety, Environment, Production and Commercial Risk associated with the modification or the impacts on existing plant are fully identified & managed. External – Refer AS ISO 31030:2003 (R2013); Hazard and operability studies (HAZOP studies) – Application guide Internal – Refer to Seqwater Engineering Technical Hazard Study Guideline TRM D14/03830.	Hazard Study 4/5 – Construction/Commissioning Yes <input type="checkbox"/> N/A <input type="checkbox"/> (if N/A state reason) (e.g. construction and design verification, pre-commissioning check) Hazard Study 6 – Operation Yes <input type="checkbox"/> N/A <input type="checkbox"/> (if N/A state reason) (e.g. post start-up review, maintenance assessment etc.) WHS Risk assessment? Yes <input type="checkbox"/> N/A <input type="checkbox"/> (if N/A state reason) (Refer TEM-00008) Details (include reference to any Hazard Studies undertaken and consultation with Seqwater WHS) <input style="width: 100%;" type="text"/>
ES2.7 – Competent Engineer Details A competent engineer for this statement, means an RPEQ. The Professional Engineers Act 2002 defines a 'professional engineering service' as an engineering service that requires, or is based on, the application of engineering principles and data to a design, or to a construction or production activity relating to engineering, and does not include an engineering service that is provided only in accordance with a prescriptive standard. Include references to any other RPEQ and their RPEQs that may have been relied upon in Section ES2.5 Basis of Approval.	Name (in full) <input style="width: 100%;" type="text"/> Company name (if applicable) <input style="width: 100%;" type="text"/> RPEQ# <input style="width: 200px;" type="text"/> Phone no. (business hours) <input style="width: 150px;" type="text"/> Mobile no. <input style="width: 100px;" type="text"/> Email address <input style="width: 100%;" type="text"/>
ES2.8 – Competent Engineer Declaration This form does not replace any other necessary certificates, statements or approvals necessary to meet regulatory or contractual obligations of the work.	On the basis of this statement I believe on reasonable grounds that a) asset modifications have been completed in accordance with the Professional Engineers Act 2002 (QLD) and the associated Code of Practice for Registered Professional Engineers (2008); and that b), the persons who have undertaken the work have the necessary competency to do so.
ES2.9 – Signature of Competent Engineer	Signature <input style="width: 150px;" type="text"/> Date <input style="width: 100px;" type="text"/>
ES2.10 – Seqwater Receiver Details of the Seqwater representative (e.g. Planner or Project Manager) receiving this statement. Listing of a Seqwater representative does not confirm Seqwater's acceptance of the project or replace any contractual arrangements in place for handover or award of practical completion.	Name <input style="width: 150px;" type="text"/> Position Title <input style="width: 150px;" type="text"/>

Doc no. TEM-00217
 Doc owner: Principal Engineer, Standards & Assurance

Version date: 16/07/2015
 Doc approver: Manager, Asset Management

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Annexure F – Australian Defence, Defence Labelling Standards

DEFENCE LABELLING STANDARDS EQUIPMENT AND EQUIPMENT SYSTEMS

Equipment Labelling

1. All Equipment items shall be physically labelled with the GEMS Identifier (Id) from the Defence Estate Information System. The labels shall be made of a durable adhesive nature and conform with Australian Standards.
2. Each label shall display:
 - a. The relevant GEMS Id (Attribute 1035) at the top of the label. In the attached example the Unique Identifier indicates Equipment Item 100015163.
 - b. A barcode in the centre of the label. The Barcode shall represent the GEMS Id (Attribute 1035).
 - c. The related Estate Class Id (Attribute 990) in text at the bottom of the label. The example below is - E.A.05.04. (Equipment, Airfield, Navigation Aid, Windsock). See Fig 1.



Figure 1 - Equipment Label

Equipment System Labelling

3. **Equipment System with No Child Equipment.** Equipment Systems with no children shall be physically labelled where the system requires planned maintenance or inspection eg Earthing and Bonding - ES E1EB.
4. **Equipment Systems with Children.** Equipment Systems with children shall be physically labelled where applicable as per the Defence Equipment Rules (Attachment 1). For example, it would be appropriate to apply a label to a Fire Sprinkler System because there is child equipment related to a Fire Sprinkler System. It is beneficial to uniquely identify the system and it is possible to physically apply a label in the Fire Sprinkler System control room and on the child equipment.

Defence Equipment Labelling Standards

5. The format of the label shall be the same as described for Equipment Labelling. Each label shall display the:

- a. relevant GEMS Id (Attribute 1035) at the top of the label eg the GEMS Id indicates Equipment System Item EQ 20/0129/0154 as shown in Fig 2; and
- b. related Estate Classes Identifier (Attribute 990) in text at the bottom of the label eg ES.EL.LP (Equipment System, Electrical, Lightning Protection as shown in Fig 2.



Figure 2 - Equipment System Label

Equipment Item and Equipment System Label Requirements

6. The labels shall conform with Australian Standards and specifically:
 - a. The printing process shall be permanent, fade resistant and onto durable adhesive labels.
 - b. Lettering shall be no less than 5 mm in height.
 - c. Each label shall display 'Department of Defence' at the top of the label. The relevant GEMS Id (Attribute 1035) shall be displayed immediately underneath the 'Department of Defence'. See Figs 1 & 2.
 - d. Each label shall display a barcode at the centre of the label. The barcode shall be of either the 3 of 9 type (compatible with PDA hardware) or Code 128 type (compatible with pocket PC). The Barcode shall represent the GEMS Id (Attribute 1035).
 - e. Each label shall display the related Estate Class Id (Attribute 990) in text at the bottom of the label.
7. The label shall be adhered to a surface on the equipment or adjacent to, using discretion regarding the temperature and texture of the surface.

Defence Equipment Labeling Standard

8. The label shall be placed in a location that is accessible for a bar code scanner and as recommended in Attachment 1 - Defence Labelling Standards.

Existing Equipment Item and Equipment System Labels – Transition to New Requirements

9. It is not envisaged that the contractor changes the existing labels to comply with the above equipment and equipment system label standard as a separate exercise. It may be practical, however, to make changes while maintenance is being undertaken on the item. The existing equipment number (legacy), eg SQ-131286, can be found in GEMS using the "Sort Field".
10. New equipment and equipment systems being brought into service are to comply with the above Defence labelling standards. Existing equipment and equipment systems that do not have a label are to be labelled as per the above Defence labelling standards.