

UNIVERSITY OF MANCHESTER

SKA PROJECT

REVIEW OF CANDIDATES' RESPONSES TO SECTION 10 OF THE REQUEST FOR INFORMATION



Pinsent Masons

**UNIVERSITY OF MANCHESTER - SKA PROJECT
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Pinsent Masons have been asked by the University of Manchester to review the reports produced by the Candidates in response to Section 10 of the Request for Information ("**RFI**") in order to help the University assess the advantages and disadvantages of the legal landscape for both Candidates for the 30 or 50 year life time of the SKA.

We have assessed the data provided within the Candidates' responses in accordance with the Notes set out in Appendix 1 and our quotation at Appendix 2.

This report comments on the responses to each question in the order set out in section 10 of the RFI and is structured as follows:

- (i) the question is stated;
- (ii) the question is followed by a summary of the key points arising from the responses provided to that question, in bullet point format; and
- (ii) below that, each key point is set out in a table. Underneath each key point is a more detailed commentary for each response in support of that key point. The commentary for each response is set out alongside the other in the table under the key point to ease comparison,

and illustrated below:

.....**QUESTION**

Summary

- Key Point 1
-Key Point 2

Points for Consideration and Further Clarification

..... Key Point 1	
South Africa (and its SKA African Partners) ("SA") <i>Commentary</i>	Australia and New Zealand ("A/NZ") <i>Commentary</i>

1. **An overview of legal and administrative procedures relating to access to the course of law, enforcement of regulations, dispute resolution and steps to avoid delays caused by legal procedures.**

Summary

- Both responses identify that parts of the overall facility will be subject to different legal systems and laws, dependent on the location of the relevant part. This adds to complexity during construction and operation and may complicate funding and property ownership structures. This is probably more marked under the South Africa option, although neither response is sufficiently clear to be certain.
- Clarification required in relation to ease of access to the relevant judicial systems and speed of the process from both Candidates.
- It appears Arbitration will be available under both options, regardless of the location of the relevant part of the facility, as an alternative to judicial proceedings. However, the responses suggest South Africa (where the bulk of the facility will be located under that option) has a more established practice and it is not clear whether New Zealand Courts recognise Arbitration.
- The responses suggest that Australia (where the bulk of the facility will be located under that option) places greater emphasis on encouraging other means of alternative dispute resolution. The role of certain administrative tribunals in Australia and the use of ADR, if any, in New Zealand require clarification.
- Neither response specifically references steps to avoid delays from legal procedures, although South Africa's response asserts that arbitration is usually quicker and cheaper than litigation in South Africa.

Points for Consideration and Further Clarification

Both responses identify that parts of the overall facility will be subject to different legal systems and laws, dependent on the location of the relevant part. This adds to complexity during construction and operation and may complicate funding and property ownership structures. This is probably more marked under the South Africa option, although neither response is sufficiently clear to be certain

South Africa (and its SKA African Partners¹) ("SA")

Under this option, parts of the SKA will be installed in at least six African Countries, although the response emphasises that the majority will be in South Africa. Each Country has its own different legal system and different law, which will apply to construction and operation of the parts of the facility in that Country. Enforcement of that law will be through the legal system of that Country, subject to comments below regarding enforcement of foreign judgements.

South Africa itself has a single body of law and a single established, independent legal system with a hierarchy of Courts, each with the jurisdiction to hear specific matters and a structured appeal system.

The position on enforcement of agreements, whether or not subject to the law of that Country, or of foreign judgements in each relevant Country, is not clear from the response. It notes that foreign judgments may be enforced in South Africa (where the majority of the facility will be located) provided the foreign decision was made by a Court which South African law recognises as having the jurisdiction to make that decision. It is not clear from the response when South Africa will recognise that jurisdiction. Judgments are enforced in South Africa by executing against movable or immovable property.

See also 3 below regarding co-operation between the SKA African Partners.

Australia and New Zealand ("A/NZ")

Under this option, parts of the SKA will be installed in 2 Countries, Australia and New Zealand, although the response emphasises that the majority will be in Australia. Each Country has its own different legal system and different law, which will apply to construction and operation of the parts of the facility in that Country. Enforcement of that law will be through the legal system of that Country, subject to comments below regarding enforcement of foreign judgements.

Both Countries have an established, independent legal system. Australia is divided into certain states and territories. The federal government of Australia has exclusive authority to make certain laws. Subject to the matters reserved for federal government and the federal court, each state or territory has its own law and court system which will apply to construction and operation of the parts of the facility in that state or territory. It is not clear from the response which states or territories parts of SKA will be installed in and the extent of the differences in law between those states and territories.

Enforcement of state/territory law will be through the legal system of that state or territory, subject to comments below regarding enforcement of foreign judgements and application of federal law. It is also not clear from the response the extent to which judgement obtained in one state/territory can be enforced in another.

New Zealand has a single established legal system with a single hierarchy of courts each with the jurisdiction to hear specific matters and a structured

¹ Botswana, Madagascar, Mozambique, Namibia and Zambia.

	<p>appeal system. National legislation and policy is established by Central Government and implemented through regional and local Councils. The extent to which regional and legal Councils are entitled to establish the law is not clear from the response.</p> <p>The position on enforcement of agreements, whether or not subject to the law of that Country or even state, or of foreign judgements in each relevant Country, is not clear from the response. It mentions a number of international treaties but does not explain their effect. The response also states that simplified processes and mutual recognition and enforcement of Australian and New Zealand judgments in either country have been created by statute however no detail has been provided as to what these may be.</p>
<p><i>Clarification required in relation to ease of access to the relevant judicial systems and speed of the process</i></p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>The response does not address this (including any conditions on access, such as legal status) and speed of the process.</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>The response does not address this (including any conditions on access, such as legal status) and speed of the process.</p>
<p><i>It appears Arbitration will be available under both options, regardless of the location of the relevant part of the facility, as an alternative to judicial proceedings. However, the responses suggest South Africa (where the bulk of the facility will be located under that option) has more established practice and it is not clear whether New Zealand Courts recognise Arbitration.</i></p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>The response states that arbitration is commonly used in South Africa and the South Africa Courts generally give effect to arbitration agreements, although no further clarity on this is provided. There is reference to specific legislation but local law advice would be required on the effect of that. South Africa has an established domestic arbitration organisation (AFSA). South Africa has also acceded to international dispute resolution mechanisms, so to the extent that AFSA is not selected as the relevant arbitration forum, international arbitration could also be utilised to resolve disputes between parties from multiple jurisdictions.</p> <p>Arbitral awards which comply with the requirements of the Arbitration Act are</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>Reference to relevant legislation suggests both countries have acceded to international dispute resolution mechanisms, making international arbitration an attractive alternative to resolve disputes between parties from multiple jurisdictions. Local law advice would be required on the effect of that however.</p> <p>Domestic arbitration is available in Australia. The Courts ordinarily have the power to direct the parties to a dispute to attempt alternative dispute resolution (which appears to include Arbitration) However, the response refers to agreement having been reached with the states and territories to implement uniform national commercial arbitration legislation recently. That</p>

<p>enforced in the same way as court judgments in South Africa making for a uniform procedure for the enforcement of most (if not all) judgements.</p>	<p>suggests no uniform approach currently and perhaps no common usage.</p>
<p>The responses suggest that Australia (where the bulk of the facility will be located under that option) places greater emphasis on encouraging other means of alternative dispute resolution. The role of certain administrative tribunals in Australia and the use of ADR, if any, in New Zealand require clarification.</p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>Each of the SKA African Partner countries utilise mediation and arbitration (international and/or local conventions) as means of settling disputes (over and above the court structure applicable in each country).</p> <p>There is a proposal to establish an African Dispute resolution body to give effect to commercial disputes however until such time as this is established (and widely utilised), the arbitration and mediation procedures applicable in each country (or international arbitration conventions) would be the appropriate forums for arbitration</p> <p>ASFA has recently been involved in the establishment of an African Dispute resolution body for African commercial disputes, although no reference is made to any use of this to date.</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>In Australia, Commonwealth, State and Territory law recognises alternative dispute resolution procedures (ADR). A national ADR council has been established and a set of principles has been prepared in order to encourage consistent ADR usage. Australia also has a range of administrative tribunals which operate relatively informally and which, at Commonwealth level are able to review administrative decisions by government and some non-government bodies. ADR procedures in Australia include facilitative procedures (negotiation, mediation), advisory procedures and determinative (such as arbitration).</p> <p>As well as the parties voluntarily committing to ADR, the Courts ordinarily have the power to direct the parties to attempt ADR before continuing in Court.</p> <p>In addition, a range of administrative tribunals exist which have jurisdiction to review administrative decisions taken by government and non-government bodies. The role and jurisdiction of these requires clarification so as to understand the risk of benefits that may flow from favourable Government decisions in support of the project - see later comments regarding permits for example. The response does not address the use of ADR in New Zealand.</p>

Neither response specifically references steps to avoid delays from legal procedures, although South Africa's response asserts that arbitration is usually quicker and cheaper than litigation in South Africa.

South Africa (and its SKA African Partners) ("SA")

South Africa does not specifically address this issue but makes the point generally that arbitration is generally quicker and is less costly than litigation in South Africa.

Australia and New Zealand ("A/NZ")

A/NZ does not address this and there is no indication given that arbitration is a viable alternative to using the courts (on the basis of cost or efficiency) in Australia and New Zealand.

2. What are the options to acquire legal capacity for the SKA Organisation in the domestic jurisdiction of the Candidate Sites?

Summary

- The Australian response fails to provide any options for New Zealand, whilst the South African response provides options and, additionally, some recommendations as to the most suitable, although the basis of the recommendation requires explanation.
- Similarly, neither response is sufficient to understand the requirements to be met by the company which are associated with each option

Points for Consideration and Further Clarification

The Australian response fails to provide any options for New Zealand, whilst the South African response provides options and, additionally, some recommendations as to the most suitable, although the basis of the recommendation requires explanation.

South Africa (and its SKA African Partners) ("SA")

The SA response sets out two approaches:

- 3 ways in which SKA can acquire legal capacity as a foreign company in South Africa (if the SKA organisation were incorporated in the UK as a company limited by guarantee);
- 1 way in which SKA can acquire legal capacity as a non-profit company formed within South Africa.

Australia and New Zealand ("A/NZ")

The A/NZ submission lists 5 options available to the SKA organisation for conducting its activities in Australia without indicating which would be the optimal solution.

The A/NZ response does not address how the SKA organisation would acquire legal capacity in New Zealand.

<p>A suggestion of the most appropriate of the first three options in the first approach is stated, although the reasons for the recommendation are not detailed. No suggestion is made as to selection between the first and second approach.</p> <p>Additionally it states the options to acquire legal capacity available to SKA in each of the relevant jurisdictions in the SKA African Partner countries, including a recommendation by local legal counsel as to which would be the optimal solution in each country. Again, the reasons for the recommendation are not detailed and need to be understood.</p>	
<p>Similarly, neither response is sufficient to understand the requirements to be met by the company which accompany each option.</p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>Some broad requirements are outlined, such as the need to comply with certain Company Act requirements, if a particular option is followed. However, these are not comprehensive (i.e. in the above example, simply cross referencing the legislation). Particular consideration should be given to tax and any operational or ownership or regulatory restrictions which flow from the legal capacity chosen.</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>No requirements are detailed</p>

3. **An outline of formal arrangements between the host country and other countries where remote sites are located to secure long term commitment to the SKA. Include statements from each additional country of its expressed commitment to join the primary host country in supporting the construction and operation of the SKA, and provide a summary from each country of its proposed specific contributions to the SKA project.**

Summary

- Both responses identify letters of intent and memoranda of understanding aimed at facilitating the implementation, construction and operation of the SKA project. Letters of intent are provided from all the SKA African Partner countries with the exception of Madagascar and Namibia and this should be queried. The Australian response also references formal Trade Agreements.

- The letters of intent are a statement of intention therefore typically will not be legally binding on the parties unlike the trade agreements, subject in each case to local law advice. Similarly, the memorandum of understanding concluded between the Commonwealth of Australia and the State of Western Australia is expressed as being non-binding on the parties.

Points for Consideration and Further Clarification

Both responses identify letters of intent and memoranda of understanding aimed at facilitating the implementation, construction and operation of the SKA project. Letters of intent are provided from all the SKA African Partner countries with the exception of Madagascar and Namibia and this should be queried. The Australian response also references formal Trade Agreements.

South Africa (and its SKA African Partners) ("SA")

South Africa and SKA African partners have engaged in relation to the SKA since 2004. Official endorsement of the SKA was encompassed in a declaration of the African Union Heads of State adopted in July 2010 at the Assembly of the Union in Uganda.

South Africa and the SKA African Partner countries issued a joint declaration, through the Ministers responsible for Science, Technology and Innovation of South Africa and the SKA African Partner countries, in March 2010, in Cairo agreeing to set up site readiness teams to facilitate various land acquisition processes. However, there is no indication of progress having been achieved by these teams.

South Africa has entered into memoranda of understanding and cooperation agreements relating to SKA with the SKA African Partner countries. The various SKA African Partner countries have also issued letters to South Africa confirming their commitments to:

- (i) assisting with the necessary land acquisition;
- (ii) facilitating the streamlining of movement of foreign nationals and equipment;
- (iii) waiving customs and excise duties;

Australia and New Zealand ("A/NZ")

Australia and New Zealand are committed to becoming full members of the SKA and to provide funding above the minimal level required for the pre-construction phase (provided the Australia/New Zealand site is chosen). The Australia and New Zealand governments offer to enter into an agreement regarding the support that will be given by their governments (jointly and severally) if the A/NZ site is selected however no indication is given as to terms and conditions of the support.

A memorandum of understanding concluded between Australia and the State of Western Australia has been provided setting out tasks and roles and responsibilities of the two governments in relation to Radio Quiet matters relating to SKA.

Australia has free movement of goods and people between States and therefore the A/NZ submission does not require letters of intent regarding waiving of customs and excise duties and streamlining the movement of people and goods between the borders of its States, between its borders and New Zealand and to a lesser extent, between its borders, New Zealand and members of ASEAN. This is evidenced by:

- (i) the Trans-Tasman Mutual Recognition Agreement concluded between

<p>(iv) exemption of international SKA staff from value added tax and income tax;</p> <p>(v) ensuring completion of environmental impact assessments; and</p> <p>(vi) co-ordinating the prohibition of radio frequency interference and facilitating access to dark fibre.</p> <p>However, Namibia and Madagascar have not issued the letters evidencing commitment to the abovementioned issues or signed the cooperation agreements and no reason has been given as why this is the case. Clarification should be sought on this point.</p> <p>The SKA proposal for the Southern African countries involves six countries however South Africa undertakes to facilitate on behalf of the SKA African Partner countries to ensure optimal logistical, administrative and legal processes are used. South Africa does not provide details as to how this will be achieved so as to enable a seamless interface for SKA with the southern African countries and clarification should be sought in relation to South Africa's role.</p>	<p>New Zealand and Australia, implementing principles of mutual recognition relating to sale of goods and registration of people;</p> <p>(ii) the conclusion of the Closer Economic Relationship Trade Agreement between Australia and New Zealand, which provides for the free flow of goods, services and people between the two countries, eliminates tariffs and quantitative restrictions in trade between the two countries and harmonises customs procedures; and</p> <p>(iii) the Agreement Establishing ASEAN (Association of South East Asian Nations) – Australia – New Zealand Free Trade Area, which provides a framework for trade and investment related cooperation.</p>
<p><i>The letters of intent are a statement of intention therefore typically will not be legally binding on the parties unlike the trade agreements, subject in each case to local law advice. Furthermore, the memorandum of understanding concluded between the Commonwealth of Australia and the State of Western Australia is expressed as being non-binding on the parties and contractually unenforceable.</i></p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>The letters of intent are merely indications of intent and will not amount to a firm commitment until set out in an agreement between the relevant parties. The cooperation agreements are agreements and, subject to local law advice, impose rights and obligations on the parties. However these can be terminated on six months notice without any sanction.</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>At this stage the statements regarding funding of the SKA are merely indications of intent and will not amount to a firm commitment until set out in an agreement between the relevant parties.</p> <p>The memorandum of understanding concluded between Australia and the State of Western Australia in relation to Radio Quiet matters relating to SKA specifically provides that it is not legally binding on the parties and creates no contractual relationship between the parties.</p>

	<p>By contrast it is likely that the formal trade agreements (Trans–Tasman Mutual Recognition Agreement, entered into pursuant to legislation, and the Closer Economic Relationship Trade Agreement) entered into between Australia and New Zealand are binding on the parties, subject to local law advice.</p>
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4. IPR regulation: What are the basic principles of ownership of Intellectual Property in the domestic jurisdiction of the Candidate Sites including any restrictions on Intellectual Property Rights that may apply to any of the activities of the SKA project?

Summary

- Both documents deal with the basic principles of IP ownership in the Candidate Site jurisdictions the various conventions and treaties which the countries have joined. The SA response provides a detailed summary for South Africa and more brief information for SKA Partner Countries. The A/NZ document provides less detail than we would expect, especially on the legal provisions that apply in New Zealand.
- The SA response touches on a statutory requirement for commercialisation of IPR in South Africa. It is not clear how this would apply to the SKA project and whether similar provisions exist in other Candidate Site jurisdictions
- Neither response indicates whether there are any applicable restrictions nor expressly identifies which IP rights are specific to the SKA project
- Neither response why the forms of IP specific to the SKA project are important. We have dealt with aspects of this below and would expect these aspects to have been dealt with in more detail. The documents do not deal with enforcement of IP rights in any great detail

Points for Consideration and Further Clarification

Both documents deal with the basic principles of IP ownership in the Candidate Site jurisdictions the various conventions and treaties which the countries have joined. The SA response provides a detailed summary for South Africa and more brief information for SKA Partner Countries. The A/NZ document provides less detail than we would expect, especially on the legal provisions that apply in New Zealand

South Africa (and its SKA African Partners) ("SA")

South Africa: the rights summarised include copyright, designs, patents, trade marks and counterfeiting, together with additional relevant information about IPR from publicly financed research (see below). The document does not deal with confidential information.

South Africa is a signatory to a number of international treaties and conventions on IPR including The World Intellectual Property Office (WIPO), the Paris Convention, the Berne Convention and the Patents Cooperation Treaty (PCT). The significance of these treaties and conventions is summarised in more detail below.

Other African SKA countries: the document sets out an overview of the IPR legislation applicable in each of the SKA African Partner countries (including copies of the relevant legislation). The response provides more brief information on the principles of ownership of IPR including copyright, designs, patents and trade marks in Botswana, Mozambique, Madagascar, Namibia and Zambia. The relevant laws are outlined very briefly. These countries are all members of WIPO so laws are intended to comply with WIPO principles. All of these countries are also signatories to the Berne Convention and the Paris Convention.

Where IPR rights are infringed, advice may have to be sought in relation to enforcement. Systems for enforcement of IPR in Africa will vary from the norms in Europe and may vary from country to country within the continent. The applicable procedures should be determined as necessary.

Australia and New Zealand ("A/NZ")

The A/NZ response identifies the key applicable IPR which exist in Australia and New Zealand. These countries have established regimes designed to protect IPR including patents, trade marks, designs, copyright and confidential information.

The law in relation to the protection of patents, copyright, trade secrets and confidential information is discussed generally without indicating how this would apply to A/NZ.

Although the principles for NZ are very similar to those of Australia and NZ is party to various international treaties and conventions on intellectual property, the A/NZ response does not deal with the NZ position in sufficient detail – this should be remedied. In terms of enforcement, both of these jurisdictions have established IP court systems and should therefore have in place enforcement mechanisms.

Key ownership principles for Australia identified in the document:

Patents – Australia is a signatory of the Paris Convention and the Patents Cooperation Treaty (PCT). (There is no mention of any international treaties or conventions to which New Zealand is a signatory).

Copyright – Law in Copyright Act 1968 is outlined.

Confidential Information – Common law outlined.

The document does not provide any further detail on other applicable rights which, for SKA, include designs and trade marks. Further information will have to be sought on these

The SA response touches on the statutory commercialisation of IPR in South Africa. It is not clear how this would apply to the SKA project and whether similar provisions exist in other Candidate Site jurisdictions

South Africa (and its SKA African Partners) ("SA")

The response refers to a statutory requirement that IPR, if publicly funded, must be protected, utilised and "commercialised for the benefit of South Africa"). This statutory provision should be noted.

Since the SKA is an international undertaking, funded by SA and a number of other countries (and may be a mix of private and public funding), it is not clear how the SKA IPR can be "commercialised for the benefit of South Africa" and this will require further investigation.

Australia and New Zealand ("A/NZ")

Neither response indicates whether there are any applicable restrictions nor expressly identifies which IP rights are specific to the SKA project

The responses do not identify which IP rights are specific to the SKA project and why such forms of IP are important.

Important restrictions to be aware of will be pre-existing trade marks, patents, designs and possibly other unregistered rights. We would recommend that searches of relevant registers are carried out to determine if prior rights or conflicts exist. This will be more difficult for unregistered rights and will depend on local law.

The information about publicly funded research and statutory restrictions in South Africa is dealt with briefly and not applied to the SKA project.

Neither response why the forms of IP specific to the SKA project are important. We have dealt with aspects of this below and would expect these aspects to have been dealt with in more detail. The documents do not deal with enforcement of IP rights in any great detail

The important rights relating to the SKA project will be patents, copyright, designs, trade marks and confidential information. Ensuring that any new inventions, designs and works associated with the build are identified and registered in accordance with the laws of the relevant jurisdictions is important. Ensuring that all relevant trade marks are registered in jurisdictions where the SKA will be constructed or where an SKA business will use that trade mark could also be important.

Once built, further IP may be generated by third parties as a result of use of the telescope. SKA should consider whether it wishes to have an interest in such IP with a view to commercial exploitation and, if so, should give advance consideration to a contract which will govern users of the telescope and ownership or licensing rights in the IP generated by such users.

The activities in all Candidate Sites will be subject to local intellectual property laws. Ownership of IP is important to the project and, where required, we suggest that local advice is sought in order to obtain a more comprehensive appreciation of risks and any restrictions in each jurisdiction. It is appropriate to seek good local advice in these jurisdictions to ensure that all IP is properly protected and, where appropriate, properly registered.

All Candidate Sites are members of WIPO. This is a specialised agency of the United Nations. It is dedicated to developing a balanced and accessible international IP system which rewards creativity, stimulates innovation and contributes to economic development while safeguarding the public interest.

All Candidate Sites are also signed up to the Paris Convention for the Protection of Intellectual Property and the Berne Convention for the Protection of Literary and Artistic Works.

These are established conventions which ensure that foreign applicants and owners of intellectual property law in member countries where they are not nationals are afforded the same treatment as nationals of that country. It is positive that Candidate Sites are members of these treaties and conventions. However, ownership, scope and enforcement of IP is likely to vary between jurisdictions.

5. **A description of the rights of the SKA organisation in respect of the ownership of land, perpetual rights of access etc. Include any information that describes any impediments to property rights and access such as indigenous land claims, heritage sites or sites of religious significance.**

Summary

- The Australian response does not confirm what rights of ownership can be acquired by SKA. This is covered in the South African response, although clarification is required regarding the risk of expropriation.
- The South African response describes certain rights to acquire relevant sites but neither response details fully how the sites will be acquired. The Australian response suggests a potential cost issue.
- Some impediments have been identified in both responses but the strategy for dealing with these is not clear. In the case of Australia, this includes indigenous land claims. It is also not clear in both cases whether all impediments have been identified

Points for Consideration and Further Clarification

The Australian response does not confirm what rights of ownership can be acquired by SKA. This is dealt with in the South African response, although clarification is required regarding the risk of expropriation	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>Ownership of property in South Africa vests in the state or private entities. As a corporate entity (even as a foreign company) the SKA organisation can own (with the property registered in its name in the Deeds Registry) or lease property in South Africa. If it is operating as a foreign company (see comments on structure above), it must first register as an external company in South Africa.</p> <p>That ownership will be a constitutional right. The response confirms that this cannot be arbitrarily confiscated except by expropriation (which process has a right of appeal) under relevant legislation. No further explanation is provided of when the legislation permits expropriation and clarification is required.</p> <p>The SKA African Partner countries individually confirm that there are no impediments to a foreign company owning or leasing land with only a general</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>The A/NZ response does not detail how the SKA organisation will obtain interests in the sites needed for SKA in Australia but merely states that there are a variety of options available.</p> <p>The A/NZ response does not provide any information regarding how the SKA organisation will obtain ownership or leasehold rights in New Zealand.</p>

<p>requirement that the foreign company be registered in the relevant country before taking transfer of property or entering into long term leases for property. The extent to which that right can be lost, if at all, requires clarification.</p>	
<p>The South African response describes certain rights to acquire relevant sites but neither response details fully how the sites will be acquired. The Australian response suggests a potential cost issue.</p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>Although not dealt with in the legal response, we noticed inadvertently that the response confirms elsewhere that all the sites are owned by the state or private individuals.</p> <p>Through the Astronomy Geographic Advantage Act (see section 6 below), the Minister of Science and Technology is empowered to acquire land or property which has been declared an Astronomy Advantage Area, including through expropriation if necessary. The site where the majority of the SKA will be located has already been designated an "Astronomy Advantage Area", therefore to the extent the SKA organisation needs to acquire land or property (or the rights thereto), the Minister could be approached to exercise its powers. The extent to which this is a discretion of the Minister and, if so, the basis upon which the discretion would be exercised is unclear</p> <p>See also comments at 3 above regarding the establishment of site readiness teams to facilitate various land acquisition processes by the African SKA Partner Countries.</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>The Governments of Australia and New Zealand have developed a strategy indicating how they could go about acquiring the necessary sites but have not disclosed the strategy. The effectiveness of the strategy cannot be considered as it has not been provided. The response also refers to a proposal to discuss with the SKA how to resolve the issue of the costs of acquiring land access.</p>

Some impediments have been identified in both responses but the strategy for dealing with these is not clear. In the case of Australia, this includes indigenous land claims. It is also not clear in both cases whether all impediments have been identified

South Africa (and its SKA African Partners) ("SA")

Again, although not dealt with in the legal response, we noticed inadvertently that the response confirms elsewhere, that none of the sites are subject to any indigenous land claims. Also, however, that some sites are of heritage importance. It is not clear how many or how significant these sites are.

It is suggested that this can be dealt with by mitigation measures, although detail of these measures have not been provided.

See also section 3 above and the reference to site readiness teams, which would be tasked with investigating the acquisition of the land required for SKA.

Similarly, it is confirmed that none of the sites in the SKA African Partner countries are subject to any indigenous land claims.

It is not clear whether there are any other impediments to property rights and access. In the event there are, the rights of the Minister of Science and Technology may be able assist in dealing with these under the Astronomy Geographic Advantage Act (see above).

Australia and New Zealand ("A/NZ")

The sites needed for the SKA in Australia are subject to native title claims. These can be compulsorily acquired however the preferred approach of the Australian government is negotiation and mediation which has been successful in the past. The same group of claimants for most of the proposed sites had native claims in relation to another area containing smaller astronomy projects and an agreement was negotiated in relation to this area. The circumstances, if any, in which the Government would be prepared to exercise compulsory purchase rights are not explained.

The sites needed for SKA are also currently leased for pastoral activities and these leases would need to be terminated in order to grant access to the sites.

The response does not confirm or deny the existence of any impediments to property rights and access in New Zealand.

6. **A description of any licences and permits required in order to deploy supporting infrastructure, construct and operate the telescope and an estimate of the timescales involved in obtaining the permits.**

Summary

- Neither response is sufficiently detailed to assist a technical team in considering the ease of delivery of the SKA project in either jurisdiction, given the Australian response fails to identify any specific licences/permits at all and neither deal with the grounds upon which permits can be refused
- The South African response is more extensive, although still broad and probably not comprehensive. Whilst dependent on local law, we consider the permit requirements listed are broadly the types of things typically encountered for major projects save perhaps for the airstrip licence and bulk materials mining licence requirements
- The South African response identifies a number of potential exemptions, although they are often discretionary and it is not clear if they can be achieved
- Neither response provides any information regarding the timescales involved in obtaining permits save for very few exceptions in the South African response

Points for Consideration and Further Clarification

<p><i>Neither response is sufficiently detailed to assist a technical team in considering the ease of delivery of the SKA project in either jurisdiction, given the Australian response fails to identify any specific licences/permits at all and neither deal with the grounds upon which permits can be refused</i></p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>The SA response sets out under eight categories certain permits and licences which will be required in South Africa order to deploy supporting infrastructure, construct and operate the SKA, often with reference to relevant legislation. A similar, although typically shorter list, is provided in relation to each SKA African Partner country.</p> <p>None of these address potential grounds for refusing to grant any of the permits and licences. Whilst the commentary offers a broad view of permits</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>The A/NZ response does not identify specific licences and approvals required in relation to infrastructure development construction and ongoing operations It recognises that a number of these exist, administered through the relevant government authority and that the SKA organisation will be required to obtain these and identifies three statutes under which approvals are required. The response does not address grounds for refusing to grant any permits and licences.</p> <p>The A/NZ response does not address, even in the most general terms, the</p>

<p>required, an understanding of those grounds is essential for considering the risk of that permit not being obtained in the context of the project. As the legislation has to be read in the context of local law, reliance on the statutory wording alone is potentially misleading and so of limited value. Thus the ability of those close to technical delivery of the project to consider the risk in practice of being able to secure consents is impaired.</p>	<p>permits or licences required in New Zealand.</p> <p>Also, it is clear that the South African structure results in similar approvals (e.g. telecommunications licences) having to be obtained in several Countries given their separate legal regimes (see section 1 above). A similar situation may result within different states/territories given their independent legal regimes and needs to be understood. The brief information provided in Australia's response (see below) does not deal with this.</p> <p>This lack of any substantive visibility of the permits that may be required is a cause for concern.</p>
<p><i>The South African response is more extensive, although still broad and probably not comprehensive. Whilst dependent on local law, we consider the permit requirements listed are broadly the types of things typically encountered for major projects save perhaps for the airstrip licence and bulk materials mining licence requirements</i></p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>The approvals listed in relation to South Africa and its African Partners relate to location of the structures, design of the structures, construction standards, water use and diversions, waste management, transport of materials, electricity supply and telecommunications and radio related licences, all of which would typically be expected.</p> <p>The lists are probably not comprehensive for each Country, given the brevity of some lists, or in the round (e.g. health and safety requirements are likely to apply generally and are not mentioned).</p> <p>More unusually, it is noted approval is likely to be required for the airstrip from the Civil Aviation Authority. Also, a mining licence may be required to extract bulk materials, although this may be exempted – see below.</p>	<p>The A/NZ response lists three specific statutes to be complied with but gives no description of the relevant approval regime under them. These are in relation to mining, cultural heritage and the preservation of important Aboriginal places and objects. It is noted that surveys will need to be undertaken in order to obtain at least some of these approvals but no indication is given as to the process for this..</p>

The South African response identifies a number of potential exemptions, although they are often discretionary and it is not clear if they can be achieved.

South Africa (and its SKA African Partners) ("SA")

The South African response identified some potential exemptions from permit requirements which would otherwise apply:

- The water use licence and waste management licence in existence and utilised by the MeerKAT (a SKA precursor) might be capable of being extended to SKA;
- the Minister of Minerals and Energy can exempt an "organ of state" from having to obtain a bulk materials mining licence and it is considered arguable this would include SKA. On the same basis, the SA SKA organisation is in the process of applying for this for MeerKAT;
- the effect of the Astronomy Geographic Advantage Act means that SKA would be exempted from applying for permits relating to the construction and operation of fibre optic data networks, subject to the minister declaring the SAK as an Astronomy device.

Australia and New Zealand ("A/NZ")

There is no indication of similar relaxation in the response provided by Australia

Neither response provides any information regarding the timescales involved in obtaining permits save for very few exceptions in the South African response.

South Africa (and its SKA African Partners) ("SA")

No estimate of the timescales involved in obtaining the permits has been provided. The exercise by the Minister of Science and Technology of his discretions under the Astronomy Geographic Advantage Act may help mitigate the risk of delays.

Australia and New Zealand ("A/NZ")

No estimate of the timescales involved in obtaining the permits has been provided. The response does confirm that the Federal and state governments will ensure these are treated as a priority indicating that there will be some effort to expedite these if possible. This is qualified so this will only be to the extent possible.

7. **A summary of any sensitive environmental issues that could potentially impede the progress of the SKA construction and operations. Include an overview of any Environmental Impact Assessments and procedures that need to be done and an assessment of the impact of the infrastructure on the surrounding environment. Provide an example of such an Assessment.**

Summary

- The Australian response does not deal with New Zealand and is confined to the position in Western Australia only and this is cause for concern. Otherwise, although a matter of local law, both responses indicate wide ranging environmental legislation will apply in each Country in which part of the SKA project is located.
- An Environmental Impact Assessment (EIA) is required for each Country in which part of the SKA project is located, subject to clarification in relation to New Zealand. Each response includes a relevant sample EIA for technical review. Both responses indentify additional referrals that are required.
- The Australian response considers that the SKA would have a moderate overall environmental impact but spread over a number of sites. The South African response recognises there are heritage sites but consider that no issues would cause significant delay to the construction programme.

Points for Consideration and Further Clarification

<p><i>The Australian response does not deal with New Zealand and is confined to the position in Western Australia only and this is cause for concern. Otherwise, although a matter of local law, both responses indicate wide ranging environmental legislation will apply in each Country in which part of the SKA project is located.</i></p>	
<p>South Africa (and its SKA African Partners) ("SA")</p> <p>The SA response lists key legislation applicable to the environment and environmentally sensitive issues and provides an overview in respect of the relevant environmental legislation applicable to the SKA African Partner countries. In South Africa, protection of the environment is a constitutional right.</p> <p>The environmental impact assessment which addresses all these issues is conducted during the detailed design stage and will identify issues (including any specific heritage issues to be addressed). The opinion offered in the SA response is that there are no heritage issues which would cause significant delay to the construction program.</p>	<p>Australia and New Zealand ("A/NZ")</p> <p>In Australia, compliance with federal and state environmental legislation is required. The state legislation identified relates to Western Australia, where much of the facility will be located.</p> <p>No detail of state legislation is provided for any other relevant states nor any information for New Zealand. This is a concern.</p>

An Environmental Impact Assessment (EIA) is required for each Country in which part of the SKA project is located, subject to clarification in relation to New Zealand. Each response includes a relevant sample EIA for technical review. Both responses identify additional referrals that are required.

South Africa (and its SKA African Partners) ("SA")

As well as an environmental impact assessment being required for South Africa and each of the SKA African Partners, it appears to be the case that notification to the heritage resources authority regarding potential activity on heritage sites will also be required. They will decide if the project can proceed and may impose conditions to fulfil the obligations of the heritage Resources Act.

The response includes an example environmental assessment in Annexure J7.1.2 for the MeerKAT (a SKA precursor), which covers the same geographic area as the SKA core region.

The SA response does not indicate how long it would take to complete the environmental impact assessment.

Australia and New Zealand ("A/NZ")

It is not clear whether an environmental impact assessment is required for New Zealand and/or for all states in which part of the facility is located rather than Western Australia alone. This needs clarification

In addition to an environmental impact assessment (a state requirement), a referral assessing the impact of the SKA in relation to threatened species, ecological communities, natural and cultural heritage is to be submitted to the Department of Sustainability, Environment, Water, Population and Communities (a federal requirement).

The A/NZ response includes an example environmental assessment in Attachment 18 for the ASKAP telescope.

It is estimated that the environmental impact assessment would take approximately 18 months to complete – and this estimate is dependent on the collection and dissemination of information from the SKA organisation to the relevant authorities.

The Australian response considers that the SKA would have a moderate overall environmental impact but spread over a number of sites. The South African response recognises there are heritage sites but consider that no issues would cause significant delay to construction

The response does not give any indication of the overall impact of the SKA on the environment. It highlights the issue of heritage sites in South Africa but does not expect there to be any heritage issues which would cause significant delay to the construction programme.

The opinion offered in the A/NZ response is that the SKA would have a moderate overall environmental impact but spread across a number of sites. It is anticipated that the overall impact will be significantly less than a large scale mining operation common in Western Australia.

Pinsent Masons LLP

08.11.2011

APPENDIX 1

NOTES

1. Pinsent Masons have assessed the data provided within the Candidates' responses and have advised:
 - 1.1 in its capacity as a UK law firm with no knowledge of local law within the relevant jurisdictions;
 - 1.2 on the content of the report as set out in the Candidate's responses to Section 10 of the RFI and have not reviewed wider material to verify what is written in the report or to determine whether there are any apparent omissions from the report.
2. In relation to the South African and SKA African Partner countries response, we have reviewed:
 - 2.1 only the content of the report and the general overviews provided in relation to the individual SKA African Partner countries; and
 - 2.2 only the overviews provided in relation to Namibia, Botswana, Zambia, Mozambique and Madagascar (and not those provided in respect of the additional sites situated in Ghana, Kenya and Mauritius as we understand this are not part of the standard bid evaluation).

We have not reviewed the legislation provided to substantiate the overviews nor have we attempted to interpret the overviews in the context of the legislation provided and suggest that this is an exercise which should be undertaken by local lawyers in the relevant jurisdictions.

3. We note that the Candidates were asked to provide information on:
 - 3.1 the regulatory environment governing the data transport network (Section 5 of the RFI);
 - 3.2 how the radio quiet zone is addressed in local and national laws, how such legislation would be enforced and whether any decisions could be made to amend or overturn the relevant legislation (Section 7 of the RFI);
 - 3.3 legislation concerning the employment and retention of a domestic and international workforce (Section 12 of the RFI).

The scope of our review did not include these sections however we suggest that these sections be reviewed for any relevant legal implications arising from the information provided.

APPENDIX 2