Annex 17
International Centre for Settlement of Investment Disputes

ICSID Case No. ARB/05/22

BIWATER GAUFF (TANZANIA) LTD.,
CLAIMANT

v.

UNITED REPUBLIC OF TANZANIA,
RESPONDENT

PROCEDURAL ORDER N° 1

Rendered by an Arbitral Tribunal composed of

Gary BORN, Arbitrator
Toby LANDAU, Arbitrator,
Bernard HANOTIAU, President
I. CLAIMANT’S REQUEST FOR PROVISIONAL MEASURES

1. On 2 August 2005, the Claimant, Biwater Gauff (Tanzania) Ltd. (“BGT”) filed a request for arbitration with respect to a dispute with the Respondent, the United Republic of Tanzania (“the UROT”) arising out of a series of alleged breaches by the UROT of its obligations under both international and domestic law concerning foreign investment which, according to BGT, are said to have caused loss to BGT in the region of US$ 20 to 25 million.

2. In its request for arbitration (as subsequently amended, the latest version bearing the date of 21 February 2006), BGT formulated a request for provisional measures. This is further detailed below, following a summary of the underlying facts, as alleged by BGT.

3. For the avoidance of any doubt, the Arbitral Tribunal emphasises that the outline of facts set out below is nothing more than a summary drawn from BGT’s Request for Arbitration (the UROT having yet to state its case), and entails no prejudgment whatsoever by the Arbitral Tribunal on any issues of fact or law.

(a) Outline of Facts as Alleged by BGT

4. In 2003, the UROT was awarded World Bank funding in the amount of US$ 140,000,000 (the “Overall Project Funding”) for the purpose of a comprehensive program of repairs and upgrades to, and the expansion of, the Dar es Salaam water and sewerage infrastructure: the Dar es Salaam Water Supply and Sanitation Project (the “Overall Project”). As a condition of the Overall Project funding, the UROT was obliged to appoint a private operator to manage and operate the water and sewerage system, and to carry out some of the works associated with the Overall Project (the “Project”).

5. Biwater International Limited (“Biwater”), a company incorporated under the laws of England and Wales, and HP Gauff Ingenieure GmbH & Co. KG-JBG (“Gauff”), a German corporation, submitted a joint tender for the Project and were awarded preferred bidder status by the UROT in December 2002. BGT was the investment
vehicle incorporated by Biwater and Gauff for the purpose of their investment. Biwater holds 80% of BGT’s shares and Gauff holds the remaining 20%.

6. Under the terms of the request for tender, the parties submitting a successful tender were obliged to incorporate a local Tanzanian operating company to enter into the contract associated with the Project (the “Operating Company”). The request for tender also required that a minimum number of shares in the Operating Company were to be held by a local Tanzanian company or a Tanzanian national. BGT agreed to cooperate in respect of the Project with Super Doll Trailer Manufacture Co. (T) Limited (“STM”), a company incorporated in Tanzania. Biwater and Gauff incorporated City Water Services Limited (“City Water”) under the laws of Tanzania on 17 December 2002 as the Operating Company, and STM subsequently agreed to acquire a minority shareholding in City Water. BGT currently holds 51% of the shares in City Water and STM holds the remaining 49%.

7. On 19 February 2003, City Water, as the Operating Company, entered into three key contracts for the implementation of the Project with the Dar es Salaam Water and Sewerage Authority (“DAWASA”), as follows:

(i) the Water and Sewerage Lease Contract (the “Lease Contract”);
(ii) the Supply and Installation of Plant and Equipment Contract (“SIPE”); and
(iii) the Contract for the Procurement of Goods (“POG”) (together the “Project Contracts”).

8. With regard to the Lease Contract, the parties were described as City Water, and the UROT as “represented by DAWASA”. With regard to SIPE and POG, the parties were described as City Water and DAWASA, with no express reference to the UROT.

9. DAWASA is a Tanzanian public corporation. Prior to the handover of operations to City Water on 1 August 2003, DAWASA was responsible for the provision of water and sewerage services to the residents of Dar es Salaam and the surrounding area. Following the handover from DAWASA, City Water’s role was to operate the water production, transmission and distribution systems, operate and maintain the
sewerage system, and to build and then collect revenue from the customer receiving these services.

10. Under the Lease Contract, City Water agreed to provide water and sewerage services on behalf of DAWASA pursuant to the terms of the Lease Contract for a period of ten years. City Water also agreed to implement and manage the implementation of certain capital works associated with the Overall Project. Moreover, it assumed certain tariff and rental fee payment obligations to DAWASA, and DAWASA in turn agreed to facilitate City Water’s operations, including allowing City Water exclusive access to and use of the Assets (as defined in the Lease Contract) which City Water leased from DAWASA; not retaining any other operator to operate the designated water services; and not operating in any way so as to hinder or conflict with City Water’s operations.

11. CRDB Bank Limited (“CRDB”), a bank operating under the laws of the UROT, provided Performance Bonds to DAWASA on behalf of City Water in respect of City Water’s performance under the Project Contracts, and Advanced Payment Bonds in respect of SIPE and POG.

12. According to BGT, a series of events took place in 2005, culminating in the seizure of City Water on 1 June 2005, which constituted breaches by the UROT of its obligations under international and domestic law. In particular, it is said that:

- on 13 May 2005, the Minister of Water and Livestock Development announced at a televised press conference that the UROT, on advice from DAWASA, had terminated the Lease Contract;

- under cover of a letter from CRDB dated 16 May 2005, City Water was notified that the entire amount of the Lease Contract Performance Bonds had been called;

- on 25 May 2005, DAWASA issued a Notice to Terminate under Article 51.3 of the Lease Contract, on the grounds of failure to remedy an alleged breach notified in a Cure Notice of 17 May 2005, the latter being a notice under
Article 50.1 of the Lease Contract, stating that City Water was in breach of its obligations under Article 47.1 of the Lease Contract to procure the maintenance of the performance guarantee for the duration of the Lease Contract;

- on 1 June 2005, representatives of the UROT effectuated the deportation of City Water’s senior management. At the same time, representatives of the UROT and DAWASA entered City Water’s offices with the express purpose of seizing control of the company’s assets and installing new management (representatives of “DAWASCO”, an allegedly newly formed government entity).

13. According to BGT, from 1 June 2005, DAWASCO, for all practical purposes, replaced City Water in the supply of water and sewerage services in Dar es Salaam and has announced this to the general public in Tanzania.

14. BGT concludes that the actions of the UROT and DAWASA on 1 June 2005 constituted a repudiatory breach of the Lease Contract. It alleges that the unlawful deportation of City Water’s senior management, the seizure of City Water’s assets, the occupation of City Water’s offices and the takeover of City Water’s business constitute the expropriation of BGT’s investment and amount to a breach of the UROT’s international and domestic obligations.

(b) BGT’s Original Request for Provisional Measures

15. In its Request for Arbitration (paragraph 138 in the initial Request, paragraph 137 in the Amended Request), BGT formulated a request for provisional measures pursuant to ICSID Arbitration Rule 39 (1). It requested the Arbitral Tribunal to recommend binding provisional measures with respect to its rights to the following:

(i) monies standing to City Water’s “Contracting Works Account”;
(ii) cheques issued to City Water; and
(iii) the payment of certain monies due to City Water, in respect of works subcontracted to BGT under the SIPE and POG. BGT further alleged that “items (i) and (ii) are held by City Water on trust for BGT. However, following the expropriation of its operations, City Water has been unable to access, or pay cheques into, its bank accounts at CRDB. Once received, item (iii) will also be held on trust for BGT (initial paragraph 139, as amended - paragraph 138).

16. In particular, BGT requested the recommendation of provisional measures to preserve its rights in respect of (i), (ii) and (iii) until the determination of the Arbitral Tribunal in this arbitration (initial paragraph 140, as amended - paragraph 139). In addition, it requested the recommendation of provisional measures to preserve its rights in respect of City Water’s records, papers, documents and mail pending the determination of the Arbitral Tribunal (initial paragraph 141, as amended – paragraph 140).

(c) BGT’s Re-Formulated Request for Provisional Measures

17. On 10 February 2006, the parties were notified by the ICSID Secretariat that the Arbitral Tribunal invited BGT to submit a development of, or any further observations concerning, its request for provisional measures by 17 February 2006, and that the UROT was invited to submit its reply observations regarding BGT’s request for provisional measures by 27 February 2006. This latter date was subsequently extended to 1 March 2006.

18. Each party duly made written submissions pursuant to these directions.

19. On 7 March 2006, the parties were notified by the ICSID Secretariat that the Arbitral Tribunal invited BGT to submit a reply to the UROT’s answer of 1 March 2006 by 13 March 2006 and that the UROT was invited to submit a rejoinder by 20 March 2006. The Secretariat pointed out that the reply and rejoinder should address issues that had not been addressed previously, in particular the legal basis for BGT’s request and the legal defences to such requests. It also asked the parties to make concise and focused submissions. The Arbitral Tribunal also proposed that there be
oral submissions limited to 30 minutes per party on BGT’s request for provisional measures at the Arbitral Tribunal’s first session.

20. In its submission dated 17 February 2006, BGT re-formulated its request for provisional measures as follows:

“1. **Preservation and provision of documentation in respect of:**

(i) **City Water’s Bank Accounts**

The Respondent to procure that all of the bank statements which have been sent (and which will be sent) from CRDB to City Water’s former Dar es Salaam address in respect of all of City Water’s accounts with CRDB (including its Contracting Works Accounts, Operational Accounts, Collection Account and Deposit Account) be delivered by courier without delay by DAWASA / DAWASCO to City Water’s new postal address (to be notified).

(ii) **City Water’s Assets**

(i) The Respondent to procure a Statement of Account from DAWASA / DAWASCO in respect of all dealings with City Water’s assets (including without limitation dealings with monies owed in respect of the SIPE & POG contracts). The Statement of Account to include:

(a) a statement of all monies collected from City Water’s debtors by the Respondent, including by the Respondent’s entities DAWASA/DAWASCO or their agents and representatives, since 1 June 2005 (accompanied by copies of all invoices, receipts and related correspondence) including details of the accounts into which the monies have been paid (and a statement of which debtors, if any, remaining outstanding); and

(b) a statement of all monies paid to City Water’s creditors by the Respondent, including by the Respondent’s entities DAWASA / DAWASCO or their agents and representatives, since 1 June 2005 (accompanied by copies of all invoices, receipts and related correspondence), including details of the source of the monies paid (and a statement of which creditors, if any, remain outstanding).
2. **Preservation and provision of City Water's Papers, Records and Correspondence**

The Respondent to procure that DAWASA / DAWASCO collect, take and provide an inventory of, and provide copies of all of City Water’s ledgers, papers, records, documents and correspondence (electronic and hard copy) seized at the time of the occupation of City Water’s offices on 1 June 2005, and to include all correspondence received subsequently.

3. **Additional Provisional Measures**

*Such other provisional measures as the Tribunal in its discretion sees fit to recommend in order to preserve the rights of the Parties and safeguard the efficient conduct of these proceedings."

21. The first session of the Arbitral Tribunal took place in Paris on 23 March 2006 at the offices of the World Bank at 66 avenue d’Iéna. The parties agreed on procedural rules and on the agenda of the arbitration (as recorded in separate Minutes) and made submissions on the request for provisional measures.

II. **BGT’s Justification for its Request for Provisional Measures.**

22. In its submission dated 17 February 2006, Claimant based its request for provisional measures on Article 47 of the ICSID Convention and Rule 39 (1) of the ICSID Arbitration Rules.

23. Article 47 of the ICSID Convention states that: “Except as the parties otherwise agree, the Tribunal may, if it considers that the circumstances so require, recommend any provisional measures which should be taken to preserve the respective rights of either party”.

24. Rule 39 (1) of the Arbitration Rules provides that: “At any time during the proceeding a party may request that provisional measures for the preservation of its
rights be recommended by the Tribunal. The request shall specify the rights to be preserved, the measures the recommendation of which is requested, and the circumstances that require such measures”.

25. The justification for the request was further clarified as follows.

26. City Water Bank Statements and Assets: In respect of items 1(i) and (ii) of its re-formulated request of 17 February 2006 (the “Re-formulated Request”), BGT alleged that the purpose of the provisional measures was to preserve, and to provide BGT with access to, documentation relating to the bank accounts and assets of its investment vehicle, City Water. In particular, BGT stated that it sought (i) the preservation and provision of bank statements in respect of bank accounts held by City Water with its Tanzanian bank; and (ii) a written statement of account in respect of dealings with City Water’s assets by the UROT or by the UROT’s entities, as well as the preservation and provision of copies of all supporting documentation. The preservation and provision of such documentation was said to be necessary in order for BGT to be able to assess, or better assess, the extent of its loss since 1 June 2005.

27. With respect to the documentation relating to City Water’s bank accounts, BGT alleges that since 1 June 2005, it has been denied access to the monthly bank statements due to City Water from CRDB in respect of the company’s accounts (including its Contracting Works Accounts, Operational Accounts, Collection Account and Deposit Account). BGT alleges that following the seizure of its premises and business operations on 1 June 2005, it wrote several times to CRDB to obtain the requested copies of its bank accounts but never received them. It therefore requests the Arbitral Tribunal to order their production in order to identify any withdrawals or other unauthorised dealings with these accounts, to better assess its loss in this respect. To this end, BGT requests the Arbitral Tribunal to recommend that the UROT procure the collection, inventory and forwarding of all such statements delivered to City Water’s former Dar es Salaam premises. BGT considers these documents to be at risk of loss or destruction if left in the UROT’s possession, or that of the UROT’s entities.
28. With respect to the documentation relating to dealings with City Water’s assets, BGT alleges that following the seizure of City Water’s premises and business operations on 1 June 2005, DAWASCO was appointed to replace City Water as Operator and immediately assumed the control and use of all of City Water’s assets, including corporeal assets such as vehicles and equipment. In addition, in early August 2005, BGT received reports that DAWASCO was collecting monies invoiced by and owing to City Water, and using such monies to pay various suppliers’ bills. Consequently, BGT seeks the preservation and provision of all documentation relating to dealings with City Water’s assets, including copies of all invoices, receipts and related correspondence in order to better assess its loss. BGT considers these documents to be at risk of loss or destruction if left in the UROT’s possession or that of the UROT’s entities. In addition, BGT seeks a written statement of account from the UROT detailing all dealings (including those of DAWASCO) with City Water’s assets whether corporeal (e.g. vehicles) or incorporeal (e.g. debts owed to City Water) since 1 June 2005. BGT considers such written statement of account to be essential to understanding the UROT’s (or the UROT’s entities’) dealings with City Water’s assets.

29. **Preservation and Provision of City Water’s Papers:** In respect of item 2 of the Re-formulated Request, BGT requests the Arbitral Tribunal to recommend the collection, inventory and provision of copies of the papers, records and correspondence of City Water held by DAWASCO since 1 June 2005 (and all correspondence of City Water held by DAWASCO subsequently) in order to preserve potential evidence relevant to its claim against the UROT, and in particular relevant to the better assessment of its loss. BGT considers these documents to be at risk of loss or destruction if left in the UROT’s possession or that of the UROT’s entities.

30. **Necessity and Urgency:** BGT further pointed out that it requests the above provisional measures as a matter of urgency. It considers, in accordance with ICSID jurisprudence, that necessity and urgency are present where a Respondent fails to take steps to preserve or to provide documentation relevant to a Claimant’s case, or in circumstances where there is a risk of loss or destruction of such documentation.
III. **THE UROT’S ANSWER**

31. The UROT replied to BGT’s Re-Formulated Request on 1 March 2006.

32. *Jurisdiction Objections:* The UROT has foreshadowed a number of objections to jurisdiction and other preliminary issues that may be presented to the Arbitral Tribunal in the early stages of the arbitration, taking the position that these are relevant factors which ought to caution the Arbitral Tribunal’s exercise of its discretion under Article 47 of the ICSID Convention, particularly given, on its case, the absence of necessity or urgency in BGT’s request.

33. *Necessity and Urgency:* The UROT recorded BGT’s statement in its request that “necessity and urgency are recognized in ICSID jurisprudence as being present where Respondent fails to take steps to preserve or to provide documentation relating to the Claimant’s case, or in circumstances where there is a risk of the loss or destruction of such documentation”. On the UROT’s case, even if this is a correct statement of the law, BGT has presented no evidence that the UROT has failed to take steps to preserve or to provide documentation or that there is a risk of the loss or destruction of such documentation, much less risk requiring the urgent imposition of interim measures. According to the UROT, BGT offers only the repeated, unsupported speculation that BGT considers these documents to be at risk of loss or destruction if left in the UROT’s possession, which is not a substitute for evidence. Nor, according to the UROT, has BGT shown that the entities of whose actions it complains can rightly be called or equated with the UROT: With respect to the first requested measure, for example, the culprit, on BGT’s own account of the facts, appears to be BGT’s own bank (CRDB), an entity wholly unrelated to the Republic. For the avoidance of any possible doubt, the UROT stated that it has not lost or destroyed any relevant documentation, nor does it have any intention of doing so.

34. *Pre-Judging Merits:* On the other hand, the UROT alleged that BGT’s request was an invitation to the Arbitral Tribunal to prejudge the merits of the case. The UROT takes issue with BGT’s theory of the facts and it is therefore not appropriate for the
Arbitral Tribunal to resolve matters going to the merits on a provisional measures application. According to the UROT, the best example related to the request for an accounting in respect of all dealings with City Water’s assets and copies of all of City Water’s ledgers, papers, records, documents and correspondence. Identifying “City Water’s assets” or “City Water’s documents” is impossible without first resolving basic issues underlying the case. It is BGT’s view that virtually everything City Water used is City Water’s property. On the UROT’s case, this is not so. UROT claims that City Water leased assets from DAWASA and that the physical and other assets that were necessary to operating the Dar Es Salaam water and sewerage system are mostly, if not entirely, the property of entities other than City Water. Indeed, according to the UROT, the Lease Agreement in its Article 56 required City Water to turn those assets over to DAWASA upon the termination of the Lease Contract for any reason, including breach by either party. Therefore, UROT concludes, before the extremely broad and generally defined measures sought in the request could be granted, the Arbitral Tribunal would have to explore the facts of the case and the operation of Article 56 in the context of the entire contractual agreement between City Water and DAWASA.

35. The Nature of the Requests: With respect to what the UROT refers to as the “Document Requests” (items 1 (i) and 2 of the Re-formulated Request), the UROT alleged that these are in fact document disclosure requests which are not an appropriate subject for a provisional measures application. Moreover, as was already explained by the UROT in previous correspondence with BGT, Article 56.3 of the Lease Contract provides that “The Operator shall, on the termination of this Contract for whatever cause, deliver up to the Lessor all appropriate and necessary materials, documents, records ... data, intellectual property and other information of whatever nature (with the exception of those dealings solely with the Operator’s Foreign Personal) in the possession, custody or power of the Operator relating to the operations of the Operator or to the Assets and necessary for the performance of the Services ... “. According to the UROT, it had proposed to BGT back in June 2005 that if City Water identified particular documents not covered by Article 56.3, those documents would be delivered to City Water. And if City Water might not be able to identify all such documents, DAWASA would create an inventory of the papers in its possession following termination of the Lease Contract and supply the
inventory to City Water, such inventory to be paid for by City Water given the apparent fact that the vast majority of the papers did not even arguably belong to City Water under Article 56.3. City Water did not accept this offer.

36. Furthermore, the UROT contends that the only category of documents that the request attempts to identify with any specificity is that described in item, 1(i) of the Re-formulated Request, relating to bank statements. The UROT reasons that it would appear here that if BGT’s bank (an entity unrelated to the UROT) has continued sending statements to the same address as it did before the Lease Contract was terminated, these should be obtainable by City Water itself.

37. As far as the second document request is concerned (item 2 of the Re-formulated Request), the UROT observed that this is extremely large and tendentious and would require the Arbitral Tribunal to adopt BGT’s views on some of the ultimate questions in dispute. The UROT denied that there was an occupation “of City Water’s offices” on 1 June 2005 or at any other time. It denied that City Water’s documents or other assets were seized at that or any other time and therefore denied that the class of ledgers, papers, etc. as described in item 2 of the Re-formulated Request exists at all.

38. Consequently, in the UROT’s submission, BGT’s request for document discovery in items 1(i) and 2 of the Re-Formulated Request should be rejected.

39. As far as what the UROT referred to as the “Accounting Request” is concerned (item 1(ii) of the Re-formulated Request), the UROT described BGT’s insistence that the UROT create evidence as “audacious”. The request assumes the correctness of BGT’s theory of the case, and on the UROT’s analysis invited the Arbitral Tribunal not only to prejudge the merits, but also to compel BGT to create a document bolstering BGT’s theory. This request, it was said, is conceptually misguided and lacks evidentiary support.
IV.  **BGT’S REPLY TO THE UROT’S ANSWER**

40. In its reply dated 16 March 2006, BGT asserted that in accordance with Article 47 of the ICSID Convention and Rule 39 (1) of the Arbitration Rules, the Arbitral Tribunal must consider the following issues in considering the recommendation of provisional measures:

(i) Has BGT identified the right(s) that it seeks to preserve by means of the requested provisional measures?

(ii) Has BGT identified the measures the recommendation of which is requested?

(iii) Has BGT identified the circumstances that require such measures?

(iv) In addition, it was said, the Arbitral Tribunal must consider whether the requested provisional measures will impinge on the determination of the merits of the dispute.

41. **Identification of Rights:** With respect to (i), BGT seeks to preserve its procedural right to the preservation and production of evidence. According to BGT, this right is one of a number of procedural rights the protection of which goes to the integrity of the arbitration process. This right which is referred to in Article 1134 of NAFTA and in the UNCITRAL working group’s draft amendment to Article 17 of the Model Law, has also been the subject of recommendations under Article 47 of the Convention by ICSID Tribunals. In addition, it falls directly with the definition of the type of rights capable of protection by means of provisional measures given in *Plama Consortium Limited v. Republic of Bulgaria* (2005). The Tribunal in *Plama* considered the scope of the rights to which Rule 39 (1) relates. It held that it is not limited to the preservation of the rights in dispute between the parties but extends to rights relating to the dispute. The Tribunal specifically stated that “the rights to be preserved must relate to the requesting party’s ability to have its claims and requests for relief in the arbitration fairly considered and decided by the Arbitral Tribunal and for any arbitral decision which grants to the Claimant the relief it
seeks to be effective and able to be carried out” (para. 40). The Plama Tribunal went on expressly to include procedural rights within the category of protected rights: “thus the rights to be preserved by provisional measures ... may be general rights, such as the rights to due process ...” (para. 40). Applying the test in Plama to the present case, it is BGT’s case that the right to the preservation and production of evidence relates directly to BGT’s ability to have its claim and request for relief in the arbitration “fairly considered and decided by the Arbitral Tribunal”.

42. BGT also referred to other ICSID decisions, and in particular Agip v. Congo (Award, 30 November 1979, (1993) 1 ICSID Reports 311) and Vacuum Salt v. Ghana (Award, 16 February 1994, (1997) 4 ICSID Reports 331-332). BGT noted that the facts of the present case are directly analogous with those of Agip v. Congo where the Tribunal made the requested recommendation for provisional measures. In that case, the Claimant’s locally incorporated subsidiary (an oil distribution company) had been nationalized, and its assets had been transferred to the state owned oil corporation. The subsidiary’s local offices had been occupied by the government and its company records has been seized. At the request of the Claimant, the Tribunal recommended that the Government of the Congo collect, create a complete list of, and keep available for presentation to the Tribunal at the Claimant’s request, the documents which had been in the subsidiary’s local office at the date of the occupation.

43. Identification of Measures: With respect to (ii), BGT pointed out that it had already specified the provisional measures the recommendation of which it requested and that these measures relate directly to the preservation and production of evidence.

44. Identification of Circumstances: Finally, in relation to (iii), BGT alleged that circumstances of necessity and urgency are clear in the present case.

45. With respect to necessity, BGT noted that since 1 June 2005, it has been denied access to key evidence relevant to its claims for damages: the administrative, financial, legal, commercial and engineering records contained in the offices of its investment’s vehicle, City Water. If BGT’s right to the preservation and production
of evidence is not protected, so it is argued, this will have a direct impact on BGT’s ability to pursue its claims for damages in this arbitration and the Arbitral Tribunal’s ability to decide such claims fairly. This is not harm of a type which can be compensated by damages, for the very reason that it goes to BGT’s ability to effectively present its claim for damages.

46. With respect to urgency, BGT alleged that the urgency is obvious given that the evidence at issue will have a direct bearing on the award made by the Arbitral Tribunal and that BGT requires the measures sought in order to present a comprehensive memorial to the Arbitral Tribunal. It is imperative that BGT’s right to the preservation and production of evidence is protected at as early a stage as possible, in order to facilitate the efficient conduct of the proceedings.

47. With respect to the UROT’s specific objections, BGT disputes the UROT’s jurisdictional objections, and further points to SCHREUER who specifically recognises that a request for provisional measures may have to be decided by a Tribunal before it has ruled on its own jurisdiction and that as a consequence, a party may be exposed to provisional measures even though it contends that ICSID has no jurisdiction.

48. BGT further disputes the UROT’s objections as to the lack of necessity and urgency, and with respect to the risk of prejudging the merits. BGT points out that an application for provisional measures will, of its nature, require the Arbitral Tribunal to balance the need for the protection of the applicant’s legitimate rights with the requirement not to prejudge the merits of the case. In this case, the request does not impinge upon the merits of the dispute in any way. The preservation and production of documentation does not involve an acceptance by the Arbitral Tribunal of BGT’s theory of the case. It simply involves the acceptance by the Arbitral Tribunal that BGT has a right to the preservation and production of evidence relevant to that case.

49. Moreover, with respect to the determination of the City Water’s assets and Article 56 of the Lease Contract, BGT points out that it was not a party to the Lease Contract and does not seek to found its claim for provisional measures on the basis
of Article 56 or any other provision in that contract; that on the other hand, it does
not assert a right to the preservation and production of evidence on the basis that all
or any of the documents referred to belonged to City Water. On its case, BGT does
not need to prove that it, or its subsidiary, has any rights of property in the requested
documentation. Rather, BGT asserts a right to the preservation and production of
the requested documentation on the basis that such documentation constitutes
evidence directly relevant to its case. But even if the UROT’s construction of
Article 56 is accepted at its highest, and all of the materials, documents, records,
data, intellectual property and other information of whatever nature as passed into
the ownership of the UROT, Article 56 neither expressly nor impliedly excludes
City Water from access to such material.

50. With respect to the “Accounting Request” (item 1(ii) of the Re-formulated
Request), BGT notes that the UROT’s argument in respect of Article 56 and the
inability to identify “City Water’s assets” cannot apply to this request and is not
raised by the UROT, for the simple reason that there can be no doubt that the debts
owed to City Water constitute “assets” of City Water and no other entity.

51. According to BGT, the request is both urgent and justified. BGT has been informed
of reports that DAWASCO has been collecting monies owed to City Water. These
reports appear to align with the statement in DAWASCO’s “Notice to the Public”
dated 8 June 2005 that “all cheques should be addressed and paid to DAWASCO”.
BGT has no information as to DAWASCO’s dealings with such monies. In
addition, BGT has been informed of reports that DAWASCO has paid out monies
to certain alleged creditors of City Water.

52. Information pertaining to monies owing to City Water and monies owed by City
Water is clearly evidence relevant to BGT’s case. The UROT’s objection that the
request is audacious and inappropriate is unjustified. The creation of a Statement of
Account is directly analogous to the creation of a list of documents, a provisional
measure recommended in *Agip v. Congo*. The invoices, receipts and related
correspondence are necessary in order to verify the information contained in the
statement of documents.
53. With respect to the “document request” (items 1 (i) and 2 of the Re-formulated Request), BGT’s reply was that:

- The UROT’s allegation that the bank statements are probably in City Water’s post office box does not solve the issue since the key to such box is now also in DAWASCO’s possession or control;

- The UROT’s allegation that the request for production of documents held at City Water’s offices on 1 June 2005 would require the Arbitral Tribunal to adopt BGT’s views on some of the ultimate questions in dispute, is also unfounded. The substance of BGT’s request relates to the ledgers, papers, records, documents and correspondence held at, or contained in, the City Water offices on 1 June 2005, and to correspondence addressed to City Water and delivered to those offices subsequently. It is clear that such a category of documents does exist.

54. BGT therefore concluded that its request is fully justified.

V. The UROT’s REJOINDER

55. In its rejoinder, the UROT reaffirmed its jurisdictional objections as well as the non compliance by BGT with the requirements for the recommendation of provisional measures contained in Article 47 of the ICSID Convention and Rule 39 (1) of the Arbitration Rules.

56. On the one hand, the UROT alleged that BGT has not attempted to demonstrate that its right to the preservation and production of evidence is threatened. What remains therefore is BGT’s asserted right to the production of evidence. But, it is said, parties to an ICSID arbitration have no such right: they have at most a right to ask the tribunal to call for production pursuant to Article 43 of the Convention. This right should not be circumvented by demanding immediate document production in the guise of an application for provisional measures under Article 47.
Moreover, the Agip and Vacuum Salt cases relied upon by BGT do not support its position. In Agip, the State did not oppose the claimant’s provisional measures request. In Vacuum Salt, the claimant’s provisional measure was rendered moot by the State’s undertaking to preserve evidence. In both cases, the subject of the requested measures was property that the Respondent States admitted belonged to the claimants and also admitted having expropriated de iure. Such is not the case here.

The UROT also considered that BGT’s reference to NAFTA and the UNCITRAL Working Group’s draft revision to Article 17 of the Model Law are irrelevant since both texts contemplate the provisional measures to preserve evidence, not to require it to be produced.

In the second place, the UROT alleged that BGT has requested inappropriate (much too broad) measures, which could only be rejected on the basis of Articles 3 and 9.2 (c) of the IBA Rules of Evidence.

In the third place, the UROT reaffirmed its previous case that BGT has failed to prove the requirements of necessity and urgency. With respect to urgency, the UROT observed that City Water commenced a contractual arbitration against DAWASA more than ten months previously. At that time, it could easily have sought provisional measures from the UNCITRAL Tribunal or judicial intervention. In fact, according to the UROT, BGT broached the subject in connection with proceedings in both fora, but then abandoned each proceeding. Therefore, on the UROT’s case, BGT should not now be permitted to come to this Arbitral Tribunal for the same purpose, especially since it has not shown any more urgency or diligence than City Water in seeking the documents at issue. If BGT needs the documents at issue to prepare its memorial, it should request them in the context of the discovery procedure which the Arbitral Tribunal has proposed to take place before the first round of pleadings.

Finally, the UROT reaffirmed its view that the requested measures would require the Arbitral Tribunal to prejudge the merits of the parties’ dispute.
62. The UROT therefore concluded that BGT’s request should be denied with costs.

VII. ORAL SUBMISSIONS

63. Each party further developed its case in the course of oral submissions at the first session.

64. An additional issue was also raised by the UROT at the hearing, namely whether BGT’s Request for Arbitration was valid and properly registered pursuant to the ICSID Convention and Rules, given its subsequent amendment by BGT. Although this was raised primarily as a procedural issue, it was also advanced on behalf of the UROT as a relevant factor to be taken into account in assessing BGT’s application for provisional measures.

VII. THE ARBITRAL TRIBUNAL’S DECISION

(a) General Observations and Powers

65. The starting point for the Arbitral Tribunal must be consideration of the nature and ambit of its powers with regard to provisional measures.

66. Relevant Powers: Article 47 of the ICSID Convention provides that:

“[e]xcept as the parties otherwise agree, the Tribunal may, if it considers that the circumstances so require, recommend any provisional measures which should be taken to preserve the respective rights of either party”.

67. According to SCHREUER (The ICSID Convention: A Commentary, p. 744 and following, at 746):
“[t]he purpose of provisional measures is to induce behavior by the parties that is conducive to a successful outcome of the proceedings such as securing discovery of evidence, preserving the parties’ rights, preventing self-help, safeguarding the awards’ eventual implementation and generally keeping the peace. They have to be taken at a time when the outcome of a dispute is still uncertain. Therefore, the Tribunal has to strike a careful balance between the urgency of a request for provisional measures and the need not to prejudge merits of the case”.

68. The author further points out that “it is clear that provisional measures will only be appropriate where a question cannot await the outcome of the award on the merits” (p. 751). According to the author, one type of situation in which this is true is where “it may be necessary to require the parties to cooperate in the proceedings and to furnish all relevant evidence” (idem).

69. Under Arbitration Rule 39 (1), a party may request provisional measures at any time during the proceeding.

70. It is also clear, and apparently not in issue between the parties here, that a party may be exposed to provisional measures even though it contends that ICSID has no jurisdiction (SCHREUER, p. 764). As noted on behalf of the UROT, there may be cases, however, where the likely objections to jurisdiction might be a relevant factor in a tribunal’s exercise of its discretion to recommend provisional measures (for example in a case where there is no urgency or questionable necessity).

71. Ambit of the Power: The ambit of this power is very broad. The type of rights capable of protection by means of provisional measures are not only substantive rights but also procedural rights. SCHREUER points out in this respect that “the rights most frequently invoked in the requests for provisional measures concerned procedural questions”, such as “the right of access to evidence (disclosure)” (p. 779). In the same vein, the ICSID Tribunal in the Plama case held that Rule 39 was not limited to the preservation of the rights in dispute between the parties but extended to rights relating to the dispute. As the Tribunal there put it: “the rights to be preserved must relate to the requesting party’s ability to have its claims and requests for relief in the arbitration fairly considered and decided by the Arbitral Tribunal and for any arbitral decision which grants to the Claimant the relief it
seeks to be effective and able to be carried out” (para. 40). It concluded that “the rights to be preserved by provisional measures ... may be general rights, such as the rights to due process ...” (idem).

72. Two examples of cases in which requests were filed with ICSID tribunals to preserve evidence are Agip v. Congo (Award, 30 November 1979, 1 ICSID Reports, 311) and Vacuum Salt v. Ghana (Award, 16 February 1994, 4 ICSID Reports, 331/2), both referred to by the parties.

73. In Agip, the claimant’s subsidiary in the Congo had been nationalized in 1975. In the course of the nationalization, the Government had occupied the local offices and seized the company’s records. ICSID proceedings were instituted in October 1977. On 21 November 1978, Agip lodged a request for measures of preservation in accordance with Article 47 to the effect that the Government should be directed to collect all the documents that had been kept at the local office, furnish the Tribunal with a complete list of these documents and keep these documents available for presentation to the Tribunal at Agip’s request. The Government did not avail itself of its right to make observations. The Tribunal made a decision as requested on 18 January 1979.

74. In Vacuum Salt v. Ghana, the claimant filed a request for arbitration on 28 May 1992 alleging breach of its lease agreement and the progressive expropriation of its business and property by Ghana. Vacuum Salt submitted a request for provisional measures on October 22, 1992, expressing concern, inter alia, over the preservation of its corporate records. The Government made a voluntary undertaking that it would not deny the claimant access to its records.

75. Relevant Factors: The requirements that must be satisfied for the recommendation of provisional measures under Article 47 of the ICSID Convention are now well-settled, and were not materially in dispute as between the parties (e.g. urgency, necessity, a right that requires protection; circumstances threatening the right; etc). They appear from the summary of each side’s case above, and need not be repeated.
76. As far as urgency is concerned, however, whilst it was common ground that this is a requirement, for its own part the Arbitral Tribunal considers that the requirement needs more elaboration. In the Arbitral Tribunal’s view, the degree of “urgency” which is required depends on the circumstances, including the requested provisional measures, and may be satisfied where a party can prove that there is a need to obtain the requested measure at a certain point in the procedure before the issuance of an award. In most situations, this will equate to “urgency” in the traditional sense (i.e. a need for a measure in a short space of time). In some cases, however, the only time constraint is that the measure be granted before an award – even if the grant is to be some time hence. The Arbitral Tribunal also considers that the level of urgency required depends on the type of measure which is requested.

77. Other Relevant Powers: As recorded above, the UROT has made the point that some of BGT’s requests are, in truth, applications for disclosure of documents, as opposed to proper requests for provisional measures. As set out below, to a certain degree the Arbitral Tribunal agrees with this. In this regard, it is relevant to note that quite apart from its powers under Article 47 of the ICSID Convention to recommend provisional measures, the Arbitral Tribunal also has a broad power under Article 43 of the ICSID Convention, as follows (in relevant part):

“Except as the parties otherwise agree, the Tribunal may, if it deems it necessary at any stage of the proceedings,
(a) call upon the parties to produce documents or other evidence, ....”

78. Rule 34 of the ICSID Arbitration Rules is also in similar terms.

79. The Arbitral Tribunal notes that, absent contrary agreement, this is a power which it is entitled to exercise of its own motion, at any stage of the proceedings, and in relation to the production of documents or other evidence.

80. The precise dividing line between what is (i) properly a provisional measure under Article 47 and (ii) an order under Article 43 may not always be immediately obvious. This is all the more so given that (as set out above) Article 47 extends to the protection of procedural rights with respect to evidence, and given that tribunals
have in the past made recommendations for the marshalling and preservation of evidence under Article 47 that (arguably) might also have been made under Article 43.

81. In the Arbitral Tribunal’s view, it is appropriate to analyse the precise nature of the relief that BGT seeks, in order to assess whether each element falls within the ambit of Article 47 – or, alternatively Article 43. In so far as it falls outwith Article 47, but within Article 43, the issue is then whether there are case management or other reasons to justify the issuance of an order under Article 43, ahead of the planned document disclosure exercise in this case.

(b) The Nature of BGT’s Applications

82. BGT’s (re-formulated) request for provisional measures comprises a range of different types of applications. Properly analysed, four different types of recommendation / order are sought:

(i) for the preservation of evidence (documents listed in items 1(i), 1(ii) and 2 of BGT’s Re-formulated Request);

(ii) for the compilation of an inventory of documents (item 2 of BGT’s Re-formulated Request);

(iii) for the production of documents (items 1(i), 1(ii) and 2 of BGT’s Re-formulated Request); and

(iv) for the compilation of a statement of account (item 1(ii) of BGT’s Re-formulated Request).

83. Each category is addressed in turn below.
(c) Preservation of Evidence

84. It is uncontroversial that the Arbitral Tribunal’s powers under Article 47 include the power to recommend the preservation of evidence, including documents. This is one of the most common forms of interim relief.

85. As matters stand in this case, it is common ground that BGT’s activity in Tanzania (by way of City Water) ceased as of 1 June 2005. It is also common ground that the operation previously run by City Water was (at least in some form) taken over by other entities thereafter. The precise nature of these events and their legal significance are obviously matters for later determination, but it is likely that the investigation of the merits will require consideration of evidence that is currently in Tanzania, and beyond BGT’s possession, custody or control.

86. In the Arbitral Tribunal’s view, BGT’s request that this evidence be preserved is reasonable. Until a view can be taken as to the relevance and materiality of such evidence, the safest course at this early stage of the proceedings is to ensure that no adverse step is taken in relation to the same. To this extent, BGT has clearly identified the right which it seeks to preserve by means of the requested provisional measure. It has also identified the measures the recommendation of which is requested. The Arbitral Tribunal also considers that the requirements of necessity and urgency are met, the former because of the potential need for the evidence in question, and the latter because there is a need for such evidence to be preserved before the proceedings progress any further (e.g. to enable each party properly to plead their respective cases).

87. As to the requirement to demonstrate “circumstances that require such measures”, the Arbitral Tribunal is motivated by the fact that the UROT has already volunteered an undertaking to preserve all such evidence (e.g. as set out in correspondence, in the UROT’s Answer on provisional measures, and repeated since). The Arbitral Tribunal’s recommendation is not based on any finding that the UROT has or may act adversely in respect of such documents, but rather a recognition of the need to preserve such evidence and the UROT’s offer that already exists to do so.
88. The Arbitral Tribunal therefore recommends as follows, pursuant to Article 47 of the ICSID Convention:

That, for purposes of their possible presentation during these proceedings, the UROT preserve, and take no adverse step in relation to, all documents (electronic and hard copy) within each of items 1(i), 1(ii), and 2 of BGT’s Re-formulated Request dated 17 February 2006.

(d) Inventory

89. In the Arbitral Tribunal’s view, the request for an inventory of documents in item 2 of BGT’s Re-formulated Request is best analysed as ancillary to the preservation of the same documents. In order for all sides and the Arbitral Tribunal to better understand the range and nature of documents that might have existed or still exist at City Water’s offices, and that might be relevant and material to the resolution of this dispute, it would obviously be extremely helpful for some form of inventory to be compiled. This is particularly so in a situation such as this when one party claims that it has been excluded from the relevant premises, and no longer has any means of reviewing the documentation itself.

90. For the same reasons as justify a recommendation to preserve documents, the Arbitral Tribunal considers it appropriate to recommend the provision of some form of inventory of documents within the category defined in item 2 of BGT’s Re-formulated Request.

91. The Arbitral Tribunal notes that such an inventory was previously offered by DAWASA in June 2005 (albeit on certain terms, and at a time when such an inventory may have been easier to compile).

92. As a matter of powers, Article 47 of the ICSID Convention and Rule 39 of the ICSID Arbitration Rules clearly empower the Arbitral Tribunal to recommend all
necessary steps in order to preserve evidence, as demonstrated by the previous decisions noted earlier in which similar orders have been made.

93. In any event, as a matter of case management, the provision of an inventory is likely to facilitate and shorten the forthcoming document disclosure exercise, and as such the Arbitral Tribunal considers it within its general procedural powers to implement mechanisms such as this.

94. Having said this, the Arbitral Tribunal considers that the current formulation of item 2 of BGT’s Re-formulated Request is overly broad and potentially burdensome. By “inventory”, the Arbitral Tribunal does not have in mind the identification of individual items (such as papers, records, ledgers, correspondence etc), akin to an English litigation-style list of documents. Rather, the Arbitral Tribunal is of the view that the inventory should identify the categories of documents that exist, so as to enable further specific requests to be made in the course of the planned document disclosure exercise, without imposing an undue burden on the UROT or (if different) the entities which have possession, custody or control of the documents in question.

95. Further, given the difficulties that the UROT has articulated in relation to the ownership of the documents in question, and (for example) the possible operation of Art 56 of the Lease Contract, the Arbitral Tribunal considers that the inventory ought not to be tied to “City Water’s” documents, thereby avoiding practical problems and any risk of prejudging issues. Rather, the documents in question should be defined by reference to those located at City Water’s offices at the time of the alleged occupation on 1 June 2005.

96. The precise formulation of this inventory is a matter which the Arbitral Tribunal considers is best worked out between the parties in the first instance, since they are better placed to take account of the practical issues involved in compiling the same. In so far as agreement cannot be reached, the Arbitral Tribunal will make its own recommendation following submissions from the parties. The Arbitral Tribunal considers that this should be a matter in which the parties, and their counsel, should
be able to reach a satisfactory resolution without need for further submissions or expense.

97. For the avoidance of doubt, the Arbitral Tribunal’s recommendation is not based on a final determination that any particular documents are subject to disclosure, are relevant to the dispute, are within the UROT’s possession, custody or control, or that the UROT has or may act adversely in respect of the same, but rather a recognition of the need to preserve such evidence, and for reasons of case management.

98. The Arbitral Tribunal therefore recommends as follows:

That, by 18 April 2006, the UROT take all necessary steps to procure that DAWASA / DAWASCO provide an inventory with respect to (a) documents (electronic and hard copy) seized or taken over or otherwise existing at City Water’s offices at the time of the latter’s occupation on 1 June 2005 and (b) documents (as defined) relating to what was City Water’s operation that have been received subsequently.

That, the parties cooperate in establishing a workable and non-burdensome inventory within the parameters set out in paras 90-97 above.

(e) Production of Documents

99. Over and above the preservation of documents, BGT also seeks the actual production of various categories of documents (items 1(i), 1(ii) and 2 of BGT’s Reformulated Request).

100. This is a more controversial issue when framed as an application for provisional measures under Article 47 of the ICSID Convention. Actual production is not usually considered within the ambit of such interim relief, partly because
preservation is usually sufficient to protect the rights in question, and partly because actual production is catered for by other rules (in particular Article 43 of the ICSID Convention and Rule 34 of the ICSID Arbitration Rules). Indeed, the two procedures are aimed at different issues: Article 47 is designed to ensure that the Arbitral Tribunal can properly discharge its mandate, whilst Article 43 is one element in a range of provisions that structures how the mandate is to be discharged.

101. Further, as the UROT has observed, the danger of allowing Article 47 as a method of obtaining disclosure of documents is that this might be deployed to circumvent other procedures – in this case the detailed mechanism for two exchanges of document requests. Although there may be instances in which document production could be ordered pursuant to Article 47, this would in the Arbitral Tribunal’s view be exceptional.

102. Even assuming that the power is available to it, on balance the Arbitral Tribunal does not consider it appropriate in this case to address BGT’s applications for actual production of documents by way of Article 47. This is primarily because, the documents having already been secured by the recommendations above, the Arbitral Tribunal is not satisfied that the requirements of Article 47 are established (eg a right that is threatened).

103. However, the Arbitral Tribunal does consider it appropriate to consider the requests for production by way of Article 43, and in the light of case management issues.

(i) Application Concerning City Water’s Bank Accounts

104. Item 1(i) in BGT’s Re-formulated Request comprises a specifically identified, narrow category of documents that are of obvious potential relevance and materiality to the issues in dispute. As such, it is inevitable that they will be sought by BGT in the course of these proceedings in any event. Given its narrow ambit, this is a request that the Arbitral Tribunal considers appropriate to allow at this stage, since this may well have case management advantages.
105. In particular, insofar as there is any issue as to whether or not such documents exist and whether or not they are within the UROT’s possession, custody or control, allowing the request at this stage of the proceedings could allow more time for these issues to be resolved.

106. The Arbitral Tribunal therefore orders as follows:

   That, by 18 April 2006, the UROT take all necessary steps to procure that all of the bank statements (if any) which have been sent from CRDB to City Water’s former Dar es Salaam address (or otherwise received by the UROT) in respect of all of City Water’s accounts with CRDB (including its Contracting Works Accounts, Operational Accounts, Collection Account and Deposit Account) be delivered by courier by DAWASA / DAWASCO to City Water’s new postal address (to be notified), and that all such statements which are received thereafter are similarly delivered.

(ii) Application Concerning City Water’s Assets

107. In so far as items 1(ii) and 2 in BGT’s Re-formulated Request concern requests for production, however, the position is different. Unlike item 1(i) above, each of these requests comprise broad categories. The relevance and materiality of each category will be a matter for debate, as will the practicality and potential burden of each request. As one example, item 1(ii)(i)(a) could encompass all documents generated in respect of all customers in Dar es Salaam, which might total hundreds of thousands of individual accounts or subscriptions. In the event that the categories are found to be relevant and material, and the UROT is able to establish a disproportionate burden, other mechanisms may have to be considered for the handling of these documents (eg a summary statement with sample documents).
108. These are all issues which will require a more thorough consideration, which is more appropriately done with the benefit of the “Redfern Schedule” procedure that has now been put in place.

109. It follows that there are no case management advantages in accelerating these requests, and that BGT’s application for production under items 1(ii) and 2 of its Re-formulated Request are denied for the time being. BGT is, of course, free to make requests for production for such materials in the course of the arbitration.

(f) Statement of Account

110. In the Arbitral Tribunal’s view, BGT’s request for a “Statement of Account” in item 1(ii) of its Re-formulated Request is properly viewed as an aspect of the production of documents or other evidence. This is particularly so since the request is advanced as a collation or summary of the documents for which BGT also seeks production.

111. However, for the same reasons as set out above with respect to production of documents, the request concerns a broad category of underlying documents, and is therefore far from straightforward. As such, the Arbitral Tribunal considers that it ought to be addressed with the benefit of the agreed “Redfern Schedule” procedure, and the full elaboration of competing factors that this will entail. To this end, there are no case management advantages in accelerating the issue.

112. As far as Article 47 is concerned, the underlying documents have already been preserved (by the recommendation above), and therefore the Arbitral Tribunal considers that there are no grounds for the imposition of further provisional measures in this regard.

113. It follows that BGT’s request for a “Statement of Account” in item 1(ii) of its Re-formulated Request is denied for the time being.
(g) **Concluding Note**

114. The recommendations and orders above are made strictly without prejudice to all substantive issues in dispute and without prejudice to further requests (by either party) for production of documents or other disclosure. The Arbitral Tribunal is obviously not yet in a position to form any views whatsoever on the merits of either party’s case, and it has been careful not to prejudge any issues of fact or law in the formulation of this procedural order.

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**The Arbitral Tribunal**

[Signature]

Gary BORN

[Signature]

Toby LANDAU

[Signature]

Bernard HANOTIAU

**Dated:** 31 March 2006
Annex 18
ICANN

New gTLD Application Submitted to ICANN by: Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti.

Application Downloaded On: 15 Feb 2014

String: park

Application ID: 1-2127-79611

Applicant Information

1. Full legal name
   Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti.

2. Address of the principal place of business
   Contact Information Redacted

3. Phone number
   Contact Information Redacted

4. Fax number
   Contact Information Redacted

5. If applicable, website or URL
   http://www.agitsys.com

Primary Contact

6(a). Name
   Mehdi Abbanaia

6(b). Title
   Managing Director

6(c). Address

6(d). Phone Number
   Contact Information Redacted

6(e). Fax Number
   Contact Information Redacted

6(f). Email Address
   Contact Information Redacted

Secondary Contact

7(a). Name
   Helen Ateley

7(b). Title
   The Head of Engineering Dept.

7(c). Address

7(d). Phone Number
   Contact Information Redacted

7(e). Fax Number
   Contact Information Redacted

7(f). Email Address

ANNEX 18
Contact Information Redacted

Proof of Legal Establishment

8(a). Legal form of the Applicant
Limited Company

8(b). State the specific national or other jurisdiction that defines the type of entity identified in 8(a).
Trade Registration Office (Ticaret Sigilli Numaralbgündan)

8(c). Attach evidence of the applicant's establishment.
Attachments are not displayed on this form.

9(a). If applying company is publicly traded, provide the exchange and symbol.

9(b). If the applying entity is a subsidiary, provide the parent company.

9(c). If the applying entity is a joint venture, list all joint venture partners.

Applicant Background

11(a). Name(s) and position(s) of all directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ali Zainabkhah</td>
<td>Member of the Board</td>
</tr>
<tr>
<td>Mohdi Alhamae</td>
<td>Chairman and Managing Director</td>
</tr>
</tbody>
</table>

11(b). Name(s) and position(s) of all officers and partners

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fatih Artanoy</td>
<td>CFO</td>
</tr>
<tr>
<td>Mohdi Alhamae</td>
<td>Chairman and Managing Director</td>
</tr>
</tbody>
</table>

11(c). Name(s) and position(s) of all shareholders holding at least 15% of shares

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ali Zainabkhah</td>
<td>Member of the Board</td>
</tr>
<tr>
<td>Mohdi Alhamae</td>
<td>Chairman and Managing Director</td>
</tr>
</tbody>
</table>

11(d). For an applying entity that does not have directors, officers, partners, or shareholders: Name(s) and position(s) of all individuals having legal or executive responsibility.

Applied for gTLD string

13. Provide the applied-for TLD string. If an IDN, provide the U-label.

14A. If applying for an IDN, provide the A-label (beginning with "xn-").

14B. If an IDN, provide the meaning or restatement of the string in English, that is, a description of the literal meaning of the string in the opinion of the applicant.

14C1. If an IDN, provide the language of the label (in English).

14C2. If an IDN, provide the language of the label (as referenced by ISO-639-1).

14D1. If an IDN, provide the script of the label (in English).
14D. If an IDN, provide the script of the label (as referenced by ISO 15924).

14E. If an IDN, list all code points contained in the U-label according to Unicode form.

15A. If an IDN, upload IDN tables for the proposed registry. An IDN table must include:
1. the applied-for gTLD string relevant to the tables,
2. the script or language designation (as defined in BCP 47),
3. table version number,
4. effective date (DD Month YYYY), and
5. contact name, email address, and phone number.
Submission of IDN tables in a standards-based format is encouraged.

15B. Describe the process used for development of the IDN tables submitted, including consultations and sources used.

15C. List any variations to the applied-for gTLD string according to the relevant IDN tables.

16. Describe the applicant's efforts to ensure that there are no known operational or rendering problems concerning the applied-for gTLD string. If such issues are known, describe steps that will be taken to mitigate these issues in software and other applications.

The team behind Asia Green IT System Blegisayar Sar. ve Tic. Ltd. Sti. has been involved in the development of various IDN scripts for over ten years. Through this work, we have become aware of some issues that may cause rendering problems for certain new gTLDs. We have reviewed the string that will be used with this application and based upon our expertise, we see no issues with operational or rendering problems concerning the applied for gTLD string.

17. OPTIONAL.
Provide a representation of the label according to the International Phonetic Alphabet (http://www.langsci.ucl.ac.uk/ipa/).

18A. Describe the mission/purpose of your proposed gTLD.

There are in excess of a hundred millions of Persians worldwide. They are a disparate group, yet they are united through their core beliefs. They are a group whose origins are found several millennia in the past, their ethnicity often inextricably linked with their heritage. However, there has been no way to easily unity them and their common cultural, linguistic and historical heritages. The ISO gTLD, and the community it creates, will change this.

The origins of the ethnic Persian community can be traced to the Ancient Iranian peoples, who were part of the ancient Indo-Iranians and themselves part of the greater Indo-European linguistic family. The Ancient Iranian peoples appeared in parts of Iranian plateau around 2000-1500 BCE. Important Iranian tribes such as OldPersians, Medes, Persians, Bactrians, Scythians, and the Avesta people used the same Aryan (Iranian), which was a collective definition, denoting peoples who were aware of belonging to the same ethnic stock, speaking a common language, and mainly sharing a religious tradition that centered on the worship of Ahura Mazda.

The Old Persians (one of these ethnic Iranian groups) were originally nomadic, pastoral people occupying the western Iranian plateau. By 550 BCE they were calling themselves the Parsa, and their constantly shifting territory Persia. For the most part, this was localized around Peru (Peris), bounded on the west by the Tigris River and on the north by the Persian Gulf. The best known written record of the term Persian is from Assyrian inscriptions of the 9th century BCE, which mention both Parth and Parasa. These cognate words were taken from old Iranian Parsa and presumably meant border, borderland and were geographical designations for Iranian populations. Nonetheless, Parsa and Parasa were two different geographical locations - the latter referring to northwestern Iran, known in Old Persian as Parsa (Nodara Parsa). The Greeks (who learned earlier to use names related to "Median") began in the 5th century to use adjectives such as Parsa, Persica or Persus for Cyrus the Great's empire, which is where the word Persian in English comes from. In the later parts of the Bible, where this kingdom is frequently mentioned (Books of Esther, Daniel, Ezra and Nehemiah), it is called "Parsa" (Hebrew פארס), or sometimes "Parsa va Meda" (ג'נדא פארס), i.e. "Persia and Media". As the Old Persians gained power, they developed the infrastructure to support their growing influence including creation of a capital named Persepolis, and an opulent city named Persepolis.

Starting around 550 BCE, from the region of Persia in southern Iran, encompassing the present Fars province, the ancient Persians spread their language and culture to other parts of the Iranian plateau and assimilated and intermarried with local Iranian and indigenous non-Iranian groups including the Elamites over time. Persians also interacted with other ancient civilizations in Europe and Africa. The first Persian Empire extended as far as the limits of the Greek city states, where Persians and Athenians influenced each other in what is essentially a reciprocal cultural exchange.

The proposed gTLD is, in fact, the name of the accursed homeland of the Persian people, including different areas of the world including Iran, Afghanistan, Tajikistan, Uzbekistan, and many more Persian people around the world. The total number of native Persian language speakers exceeds 81 million people, while the population of the
combined global community is around 110 million.

While the .Parsi gTLD ties back historically, linguistically and culturally to the Persian people, it also has the potential to tie together the tens of millions of people across the globe who read Persian-script languages. A Persian gTLD has the power to bring together people from across national borders in a forum for open exchange of information and commerce. There is not a .COM or .ORG equivalent of .Parsi—a domain that has universal appeal across a common origin. ICANN is dedicated to creating more competition in the TLD space, and the introduction of a Persian community through a .Parsi gTLD does so in one simple stroke.

Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. (AGITsys) was founded by individuals of Persian origin who derive a great sense of honor and pride from their community, history and ancestry. AGITsys' founders have gathered together a team to create a Persian domain language on the Internet, a daunting but critical task. The team behind AGITsys, including technical advisor member Dr. Shahram Soboutipour, has taken a leading role in working toward Persian domain names (something it considers inevitable) for more than 8 years. No entity is better suited to manage Persian .Parsi gTLD, nor more dedicated to providing new online resources to facilitate the unification of the .Parsi community online. The .Parsi gTLD will increasingly open up vast resources of the Internet and the associated global interconnectivity to this Persian community, while also being a potential catalyst for the unification of the .Parsi community online. The .Parsi gTLD will increasingly open up vast resources of the Internet and the associated global interconnectivity to this Persian community, while also being a potential catalyst for the unification of the .Parsi community online.

The company is not only perfectly situated ideologically, but also physically, as it is headquartered in Turkey, which is a gateway between Europe and Asia. This geographical position allows it to reach out to its potential clients in Turkey, the Middle East, and Europe. In addition, Turkey's key position on the Bosphorus Strait connects it to Europe and Asia, making it an ideal location for a Persian domain.

Turkey's geographical and political location aids it economically in the endeavor needed for the .Parsi community to become a top domain. Turkey is a key economic and political player in the world, and its close relationship with other countries in the Middle East and Europe makes it an excellent candidate for a Persian domain.

Consequently, the new .Parsi gTLD will also increase access to online resources as the tens of millions of people that read Persian and Persian-related materials are able, for the first time, to find the content they seek within the same operating under the .Parsi gTLD. Existing Persian-language websites and registries will be able to expand their presence to that audience with new .Parsi sites, while new registants will emerge from those Persian populations brought together by the .Parsi gTLD, adding to the visibility of the Internet in ways not currently possible. As the global population begins to use .Parsi gTLD, more people will seek out new online resources.

The .Parsi gTLD is flexible, and is thus capable of being used for sites focused on e-commerce, information dissemination, charitable endeavors and many more functions among Perseans. A transformation in competition is anticipated for web sites within .Parsi, as from new access to the vast resources of the Internet and the associated global interconnectivity to this Persian community, while also being a potential catalyst for the unification of the .Parsi community online.

AGITsys has been at the forefront of the ICANN community effort in working to bring the Global Persian community together through a dedicated gTLD, as well as bringing Perseans into the larger online community. AGITsys has a great understanding of the opportunities a Persian gTLD offers, and its adoption of the .Parsi gTLD will serve to increase awareness of the Persian community and provide a new online presence for the .Parsi. AGITsys recognizes that it is a shining example of ICANN's wisdom in granting the gTLD.

In terms of goals in the areas of specialty, service levels, and reputation for the proposed .Parsi gTLD, AGITsys is committed to offering choice in top level domain extensions among the Persian community. AGITsys recognizes that many new gTLDs will naturally have a relatively narrow appeal and audience. The .Parsi gTLD is different, as it not only targets a distinct online community, but one that spans the globe. AGITsys is prepared to utilize its role as a leading source of registants and sites, while incorporating the power of the web to connect with the millions of other registants and Internet users beyond Turkey. Further, we intend to adapt and follow the highest standards in registry operations exceeding service levels and expectations thus producing a consistent reputation.

AGITsys has been at the forefront of the ICANN community effort in working to bring the Global Persian community together through a dedicated gTLD, as well as bringing Perseans into the larger online community. AGITsys has a great understanding of the opportunities a Persian gTLD offers, and its adoption of the .Parsi gTLD will serve to increase awareness of the Persian community and provide a new online presence for the .Parsi. AGITsys recognizes that it is a shining example of ICANN's wisdom in granting the gTLD.

The company is committed to bringing top-level domain registration services to registants. To this end, AGITsys has contracted CoCCA Registry Services (NZ) Limited ("CoCCA") to provide hosted Registry Services for the .Parsi gTLD. CoCCA has over nine years experience authoring open source registry software systems and providing TLD registry support services. CoCCA was originally incorporated in Australia in 2003 as CoCCA Registry Services Limited, and in January 2009 CoCCA re-located its operations to New Zealand and trades as CoCCA Registry Services (NZ) Limited. CoCCA is a privately held NZ company.

CoCCA's clients are managers of ccTLDs, have conducted CoCCA's SRS technology or services to manage their critical infrastructure, and have committed to working with CoCCA's SRS technology or services to manage their critical infrastructure. Several other ccTLDs have committed to migration to CoCCA's "pamoa" s EPS Shared Registry System ("SRS") in 2012 pending the outcome of de-registrants.

CoCCA's SRS is the most widely deployed, field-tested SRS in use today. CoCCA's SRS is a mature product that has grown organically over the past decade as new standards have been developed and published. It is the first SRS provider to have accumulated CoCCA's level of experience operating multiple small to medium sized TLDs efficiently and securely.

AGITsys' team is working to integrate CoCCA's .Parsi gTLD with the wider ICANN community, which includes the Persian community, to provide a new level of service for the Persian community on the Internet.

AGITsys' team is working to integrate CoCCA's .Parsi gTLD with the wider ICANN community, which includes the Persian community, to provide a new level of service for the Persian community on the Internet.
As it is rolled out, the .PARS gTLD will rapidly develop as the gTLD of choice among Persians in all countries. The demand for Persian content from this group isn’t and won’t be satisfied by .COM or .ORG offerings within the current gTLDs and in fact has hampered collaboration and innovation. The Persian people demand content that is tailored to their own unique needs and wants, under the umbrella of a dedicated gTLD. As stated in Annex 18 above, as Persian-content sites increasingly seek to differentiate themselves to consumers, and registrants seek to differentiate themselves to acquireers of second-level domains, the power to differentiate will come from innovative new approaches to market service and the commoditization of a trusted online environment.

It is AGITSy’s mission that competition and differentiation of the .PARS gTLD will be coupled with a user experience online that is reliable and predictable. To make this as likely as possible, AGITSy’s will work both with existing registrars seeking to reach new audiences, as well as with new registrars that may emerge from within the global Persian community, thereby supporting ICANN’s mission to create more capacity in developing countries. AGITSy feels it can foster more competition at the registrar level by offering assistance and encouragement to new registrars in this way. We also believe that this should and will be coupled with a positive experience for Internet users. Indeed, this is critical to the success of the .PARS gTLD. By working with the right registrars (who maintain the right, stringent) standards for adoption and use by their own customers, AGITSy can reach its goal of having the .PARS gTLD become synonymous with a safe and trusted online experience.

As a part of this, since the .PARS gTLD is community-based and designed to serve those of Persian heritage — as well as to protect its good name, AGITSy intends to limit second-level domain registrations to those of Persian heritage, or those with a clear interest in serving the Persian community and culture beneficially. Such a designation is almost impossible to police, because to restrict registrations to those geographically located in Persian nations would alienate the Diaspora mentioned above. Thus, these limitations will mostly be self-imposed, with registrants agreeing themselves that they are either of Persian heritage or have a clear interest in maintaining their community. Equally, AGITSy will not tolerate radical content, nor will it tolerate content that criticizes Persia and the Persian culture. Random and severe action will be taken against participants promulgating either, and a black list will be created in an attempt to preempt any such attempts. Once content is registered, the community will be to an extent self-policing, with facilities to report abusive or non-Persian registrations available on the Registry websites.

Because of its dedication to the Persian community and the .PARS gTLD which is intended to serve it, AGITSy will implement protection measures for registrations to ensure an abuse-free environment while maintaining community standards. This will be accomplished with registration policies, guidelines,野生堂, name selection policies, and more. All are governed by an Acceptable Use Policy and post-registration protections via Uniform Dispute Resolution Policy and Uniform Rapid Suspension. More details on these policies can be found in answers to Questions 28 and 29.

The privacy offered will be, within the rules and procedures provided by ICANN. These policies will be transparent and rigorous, implemented after successful policies implemented by currently delegated gTLDs and accompanied by vigilant processes and technologies to prevent unauthorized access to information. This is a manifestation of the larger goal of the .PARS gTLD, that of a trusted source of safe online transactions, as stipulated in 18(a).

Privacy and security will be key elements of our Acceptable Use Policy (AUP). The AUP will govern how a registrant may use its registered name, with a specific focus on protecting Internet users. The AUP will specifically address privacy by prohibiting a registrant from using a domain for any activity that violates the privacy or publicity rights of another person or entity, or breaches any duty of confidentiality owed to any other person or entity. The AUP will prohibit spam or other unsolicited bulk email, or computer or network hacking or cracking, as well as the installation of any viruses, worms, bugs, Trojan horses or other code, files or programs designed to, or capable of, disrupting, damaging or limiting the functionality of any software or hardware. We will maintain complete enforcement rights over the use of the domain name. Should a registrant find itself in breach of the AUP, we would reserve the right to revoke, suspend, terminate, cancel or otherwise modify their rights to the domain name.

In terms of community outreach by the .PARS gTLD, it is expected that the momentum around .PARS will build quickly, given the pent-up demand that has been building for years within the ranks of the Persian people and associated community. AGITSy, as its champion in gTLD discussions, knows full well how popular this service will be.

There is already widespread support within the Persian Community for AGITSy’s application for .PARS. More than 40,000 people have signed a petition to ICANN supporting our effort. As members of the Persian community, these people recognize the historical and cultural importance of the .PARS gTLD to Persians and endorse this effort. The petition can be found at http://www.ipetitions.com/petition-dot-par-s.

The growth of the .PARS gTLD will be driven by what economists refer to as the network effect. A network effect occurs when a service becomes more popular as more people adopt it. A significant portion of a service’s value stems directly from the increased adoption and usage of the service. Historically, the network effect is most powerful in tools of interconnection. The telegraph and telephone were technologies that grew exponentially due to the network effect. The Internet itself is an example of that phenomenon, as seen by the rapid upward growth curve of Internet penetration, broadband speeds, and web site creation. ICANN’s data on the growth of .COM is an example of the network effect, and now it is seen in social-media platforms atop the Internet, such as Facebook and Twitter. In a short period of time, with very little effort invested in PI or promotion, we were able to recruit more than 40,000 supporters of our application for .PARS. Once delegated and properly promoted, we expect to see even greater results.

As more sites offer information, services, and opportunities for interconnection to the .PARS community as a whole, more members of the community will navigate to those sites. Many of those members will provide their own content, and their activity there will spark further growth of second-level .PARS domains. At some point, Persian information and service providers currently not offering sites, will see the demand for .PARS-related content and will migrate their content to .PARS sites as well. Furthering these offerings to the community and further driving community members to .PARS sites. The future benefits of interlinking this diverse and global community are incalculable but immense.

Augmenting this, AGITSy is also active in the business community within Turkey and Middle Eastern countries, and interconnected across the spectrum of the Persian community due to its promotional efforts with ICANN and elsewhere. It will leverage that network to spread the word of the .PARS gTLD in order to promote adoption. The best steps AGITSy can take to ensure the gTLD’s adoption and growth, however, are to ensure a system encouraging robust, safe and dynamic second-level domain sites. At that point, the word will spread through the network effect.

18C. What operating rules will you adopt to eliminate or minimize social costs (e.g., time or financial resource costs, as well as various types of consumer vulnerabilities)? What other steps will you take to minimize negative consequences/costs imposed upon consumers?
AGITSyS will endeavor to the utmost in order to minimize the social costs to registrants of a .PARS second-level domain, not least because AGITSyS has every incentive to encourage the adoption and growth of the .PARS domain. AGITSyS has chosen to adopt CoCDA's tested acceptable use based policy matrix, recommendations for minimizing harm in TLDs, and adopt the TLD to the COCCA Complaint Resolution Service ("CRS"). The COCCA Rest practice policy matrix has been developed over a decade and has currently been adopted by 16 TLDs. It was developed for (and by) ccTLDs managers that desired to operate an efficient standards-based SRS system complimented by a policy environment that addressed a registrants use of a string as well as the more traditional TLD emphasis rights to string.

A key element of CoCDA’s policy matrix is that it provides for registry-level suspensions where there is evidence of AUP violations. The TLD will join other TLDs that utilize the COCCA’s single desk CRS. The CRS provides a framework for the public, law enforcement, regulatory bodies and intellectual property owners to swiftly address concerns regarding the use of domains, and the COCCA network. The AUP can be used to address concerns regarding a domain or any other resource record that appears in the zone. The CRS procedure provides an effective alternative to the court system while allowing for Complaints against domains to be handled in a way treats each complaint in a fair and equal manner and allows for all affected parties to present evidence and arguments in a constructive forum.

AGITSyS is also currently developing procedures for competition resolution regarding multiple registrations for the same second-level domain in addition to offering the required Sunrise offerings through general availability. AGITSyS will model these procedures after the techniques and approaches that have succeeded best to date. The history of .COM will be of interest here, because .PARS should grow quickly and face demand as high among the Persian community as .COM has in the English-language online community. In terms of cost, benefits, and incentives to registrants within the Persian community, AGITSyS will offer fair and competitive pricing campaigns for tens of millions of people, introducing them to the wonders of the Internet and the Persian culture therein. Competitive pricing and/or discounts will be used and adjusted accordingly to ensure the right incentive matches the phase of operation and business goals. AGITSyS’ business plan increases our confidence in offerings that will encourage growing adoption of the .PARS TLD. Each year, AGITSyS will review its financial goals versus actual performance of operations. Output from the analysis will include the consideration of pricing versus demand for registrations. As with any for-profit entity, adequate cash flow and predictable revenue streams are essential to successful operations. As such, AGITSyS may adjust pricing of domains registrations to align with evolving business goals. Adjustments can include not only price increases, but perhaps price decreases, but only current market analysis will dictate change. Therefore, AGITSyS will document in the Registrant Agreement domain price change procedures and how they can be expect to learn about changes through our communications platform. In the end, serving the Persian community through Internet technologies remains our first priority.

19. Is the application for a community-based TLD?

Yes

20A. Provide the name and full description of the community that the applicant is committing to serve. In the event that this application is included in a community priority evaluation, it will be scored based on the community identified in response to this question. The name of the community does not have to be formally adopted for the application to be designated as community-based.

The .PARS gTLD community is global; peoples of various nations united through their historical, ethnic and linguistic connections which date back more than two millennia. The term "Persian" (Pārs: پارس) refers to the original homeland of the Persian people. The native name of the Persian language is Pārsi or Pārsī. Pārsi and Persian both derive from the Hellenized form Ῥεός Πεζίς of the root word Πέζος. The Old Persian word was Pāρs.

The Persian Community:

The Persian people are part of the Iranian peoples who speak the modern Persian language and closely akin Iranian dialects and languages. The origin of the ethnic Iranian-Persian peoples are traced to the Ancient Iranian peoples, who were part of the ancient Indo-Iranians and themselves part of the greater Indo-European linguistic family.

The term Persian translates to "from or of Persia" which is a region north of the Persian Gulf located in Pars, Iran.

It was from this region that Cyrus the Great the founder of the Achaemenid empire, united all other Iranian empires (such as the Medes and the Elamites), and expanded the Persian cultural and social influences by incorporating the Babylonian empire, and the Lydian empire. Although not the first Iranian empire, the Achaemenid Empire is the first Persian Empire well recognized by Greek and Persian historians for its massive cultural, military and social influences going as far as Egypt, Syria, and Libya and ruling on an estimated population of 40 million, about 500 B.C.

Ancient history and origin:

The Persians are believed to be descendents of the Indo-Iranian (Indo-Europeans) tribes that began migrating from Central Asia into what is now Iran in the second millennium BCE. The ancient Persians from the province of Pars became the rulers of a large empire under the Achaemenid dynasty (Khosrowanshiyam) in the 6th century BCE, resulting with the tribes and other provinces of the ancient Iranian plateau and forming the Persian Empire. The founding dynasty of the empire, the Achaemenids, and later the Sassanids, were from the southern region of Iran, Pars. The latter Persian dynasty arose from the north. However, according to archaeological evidence found in modern day Iran in the form of cuneiforms that go back to the Achaemenid era, it is evident that the native name of Pars (Persia) had been applied to Iran from its birth.

The origin of the ethnic Iranian peoples-Persian peoples are traced to the Ancient Iranian peoples, who were part of the ancient Indo-Iranians and themselves part of the greater Indo-European linguistic family. The
Ancient Iranian peoples arrived in parts of Iran and the plateau around 2000-1500 BCE. Important Iranian tribes such as Old Persians, Medes, Parthians, Bactrians, Scythians, and the Avesta people used the name Arya (Iranian), which was a collective definition, denoting peoples who were aware of belonging to the same ethno-political, speaking a common language, and mainly sharing a religious tradition that centered on the worship of Ahura Mazda.

The Old Persians, who were one of these ethnic Iranian groups, were originally nomadic, pastoral people in the western Iranian plateau and by 650 BCE were calling themselves the Parsa and their constantly shifting territory Parsa, for the most part localized around Persis (Paras), bounded on the west by Tigris River and on the south by Persian Gulf. The first written record of the term Persian is from Assyrian inscriptions of the 9th century BCE, which mention both Parsuash and Parsuwa. These cognate words were taken from Old Armenian Parsava and presumably meant borderland, borderland and were geographical designations for Iranian populations. Nonetheless, Parsa and Parsuwa, were different geographical locations, the latter referring to southwestern Iran, known in Old Persian as Pārāsa (Modern Parsa, the Arabized version of Parsa), since Arabs use "p" instead of "b". The Greeks, who tended earlier to use names related to "Median" began in the 5th century BC to use adjectives such as Persian, Maræ, or Cyrus, for the Persians, the Great's empire, which is where the word Persian in English comes from. In later parts of the Bible, where this kingdom is frequently mentioned (Books of Esther, Daniel, Ezra and Nehemiah), it is called "Parsas" (יווה) or sometimes "Parasa or Medai" (יווה ידיא), i.e. "Persia and Medea". As the Old Persians gained power, they developed the infrastructure to support their growing influence including creation of a capital named Pasargadae, and an opulent city named Persepolis. Starting around 550 BCE, from the region of Persia in southern Iran, encompassing the present Fars province, the ancient Persians spread their language and culture to other parts of the Iranian plateau and assimilated and intermarried with local Iranian and indigenous non-Iranic groups including the Elamites over time. Persians also interacted with other ancient civilizations in Europe and Africa. The first Persian Empire extended as far as the limits of the Greek city states, where Persians and Athenians influenced each other in what is essentially a reciprocal cultural exchange.

Ethnicity:

While a categorization of a "Persian" ethnic group persists in the West, Persians have generally been a pan-national group often comprising regional people who often refer to themselves as 'Persians' and have also often used the term "Iranian" (in the ethnic-cultural sense). As a pan-national group, defining Persians as an ethnic group, at least in terms used in the West, is not inclusive since the ethnonym "Persian" includes several Iranian peoples including the speakers of Modern Persian. Some scholars, classify the speakers of Persian language as a single ethnic unit (the 'Persians') and exclude those Iranians who speak dialects of Persian, or other Iranian dialects closely related to Persian; however this approach to ethnicity in Iran is erroneous, since the designation of "Iranian" as an ethnic term has been used by all these ethnic groups in Iran, including the "Persians" irrespective of their origin, language and religion.

Although the Persian community is connected through ethnicity, origin and language, they are now separated by borders. The major community of Persians can now be found in Iran, Georgia, Turkey, Armenia, the Caucasus, Azerbaijan, Afghanistan, Tajikistan, Uzbekistan and Northern Pakistan. Like the Persians of Iran (Western Persians), the Tajiks (Eastern Persians) are descendants of various Iranian peoples, including Persians from Iran, as well as numerous invaders. Tajiks and Persians have a particular affinity with Persians in neighboring Khurasan due to historical interaction some stemming from the Islamic period. Scholars also include Indian Persian language speakers such as Tajiks, Gilak, Lurs, Mazandaranis and speakers of Central Iranian languages in Iran under the term Persian. Specifically, the Lurs speak an Alisheri Persian language.

The introduction of .PERS will re-connect the Persian Community, living in countries where the old Persian Empire existed: PERS

The total population of Persian community living in Iran, Georgia, Turkey, Armenia, the Caucasus, Azerbaijan, Afghanistan, Tajikistan, Uzbekistan and Northern Pakistan, talking Persian as their mother tongue is more than 120 million, who know themselves as one group with the same origin, culture and heritage.

It is impossible to estimate how many of these people will actively participate in the online .PERS community, because internet penetration varies hugely in the various Persian and Persian-hosting nations. However, it is anticipated that millions of people will participate as the network effect (as described in section c below) begins to have an impact.

208. Explain the applicant's relationship to the community identified in 207(a).

- Relations to any community organizations.

Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. (AGITsys) was founded by individuals of Persian origin who desire a great sense of honor from their community, history and ancestry. AGITsys' founders have gathered together a team with extensive experience in Persian language on the Internet, a daunting but critical task. The company is headquartered in Turkey, which ties together the global Persian population through close relations with the citizens of Persian-speaking countries in the East, as well as the diaspora of Persian language speakers in Western nations. Turkey's geographical and political location aids it enormously in this endeavor, as it literally and figuratively sits in-between the East and West. The .PERS gTLD is designed to accommodate a global community, and AGITsys' team's work with ICANN has always looked toward not just to serving the Afghan, Tajik and Iranian people but all users of Persian-script languages.

The team behind AGITsys has pioneered the introduction of Persian text on the Internet, a daunting but critical task. They have taken a leadership role in working toward Persian domain names for more than 8 years. No entity is better suited to manage the .PERS gTLD, nor more dedicated to providing new online tools and services to facilitate the unification of the .PERS community online. The .PERS gTLD will open up the vast resources of the Internet to this community, while stimulating the introduction of more online resources in the Persian language.

ICANN is well-positioned to facilitate Persian-based domain names due to the efforts of AGITsys' leadership. Mr. Shahram Roboutipour, an expert in Persian linguistics has labored for years in anticipation of ICANN's introduction of Persian TLDs including:
GNSEO Internationalized Domain Names Working Group

Soboutipour engaged directly with this IDN-related ICANN Working Group. Over a four-month period ending in 2007, Shahram participated in policy discussions regarding new TLDs as the only representative of Persian concerns. The report can be found here: http://gnseo.icann.org/drafts/idn-wg-fr-2mar07.htm

GNSEO Policy Process Steering Committee (PPSC)

Since 2008, AGITSys has been working with the GNSEO PPSC. Soboutipour indirectly promoted policies and steering processes for future development of Persian TLDs within the Working Group Work Team (WG WT). The WG-WT is responsible for making recommendations concerning processes and methods involved for a new WG model, including suggestions for transition to a new model. As has been the case in other Working Groups, we were the only representatives looking out for Persian concerns.

Public Interest Registry (.org Registry) Advisory Council

Shahram has been a member of the Advisory Council of PIR, Public Interest Registry (.org Registry) from April 2008 to 2012. He was especially engaged in the Advisory Council's Working Group, where PIR was interested in programming its future activities in this world.

Arabic Script IDN Working Group (ASTMG)

is a self-organizing group that consists of interested parties in the implementation of Arabic script in Internationalized Domain Names. Persian script is known as part of the Arabic script (Perso-Arabic Script). Soboutipour was also active in this group.

- Relations to the community and its constituent parts-groups.

As stated above, AGITSys operates at the heart of the community as defined both by geography and population. But as this application demonstrates, it has a clear understanding of the larger community that would be served by PARs, the spread over more than two millennia of the Persian people and alphabet.

- Accountability mechanisms of applicants to the community.

AGITSys will oversee the formation of a PARs Policy Advisory Committee (PAC) populated by members of the PARs gTLD community. AGITSys intends that the PAC be representative of the entire broad spectrum of the Muslim community. It therefore intends to engage religious figures, academics, public figures and a broad range of community members and simply interested parties as part of this board. Anyone with a desire to do so will be able to apply to become a member of the PAC. And AGITSys will not discriminate against any applicant; if their application is strong then the simplest farmer has as much chance of joining the board as a distinguished academic.

The PAC would serve as a conduit for the community to weigh in on any policy matters that impact the operation of the gTLD. These can range from abuse prevention and mitigation to registration policies and the maintenance and structure of the PARs community. This advisory board will also be critical for our continued outreach across the community as we spread the word about the PARs gTLD. It will serve as a key channel of communication with, and anchor to, the community which this effort hopes to serve.

AGITSys has received endorsement letters from the following organizations and individuals:
1. The Economic Cooperation Organization (ECO) Cultural Institute
2. Ferdowsi Foundation
3. Iran-Tajikistan Friendship Association
4. Institute for Trade Studies and Research
5. Iranian Scientific Society of Command And Control
6. Iranian Censors & Spiesologists Association
7. Dr. Majid Tahmasi, Historian and Researcher

In addition to the support of these leading organizations, there is already widespread grassroots support within the Persian Community for AGITSys’ application for PARs. More than 40,000 people have signed a petition to ICANN supporting our effort. As members of the Persian community, these people recognize the historical and cultural importance of the PARs gTLD to Persians and endorse this effort.

In a short period of time, with very little effort invested in PR or promotion, we were able to recruit more than 40,000 supporters of our application for PARs. Once delegated and properly promoted, we expect to see even greater results. As it is not possible to upload all 40,000 signatures, we encourage you to view the petition at http://www.ipetitions.com/petition-dot-pars.

20C: Provide a description of the community-based purpose of the applied-for gTLD.

- Intended registrants in the TLD.

The PARs gTLD is intended for Members of the Persian Community who live in one of the countries: Iran, Georgia, Turkey, Armenia, the Caucasus, Azerbaijan, Afghanistan, Tajikistan, Uzbekistan and Northern Pakistan. Sizable Persian communities can also be found across North America in large cities such as New York City, Los Angeles, Chicago, Boston, Seattle, San Francisco, Denver, Ottawa and Toronto. It is estimated that as many as 1,500,000 Persian-speaking individuals live in the United States alone. Other major concentrations of Persian immigrants include Turkey (800,000), U.A.E. & Bahrain (500,000), Iraq (250,000), Germany (100,000), UK (80,000), Canada (75,000), France (62,000), India (60,000), Australia (60,000), CIS (50,000), Israel (50,000), Lebanon (50,000), Philippines, Korea & Japan (50,000), Russia & Other

- Intended end-users of the TLD.

Persians can be found in Iran, Georgia, Turkey, Armenia, the Caucasus, Azerbaijan, Afghanistan, Tajikistan, Uzbekistan and Northern Pakistan. Sizable Persian communities can also be found across North America in large cities such as New York City, Los Angeles, Chicago, Boston, Seattle, San Francisco, Denver, Ottawa and Toronto. It is estimated that as many as 1,500,000 Persian-speaking individuals live in the United States alone. Other major concentrations of Persian immigrants include Turkey (800,000), U.A.E. & Bahrain (500,000), Iraq (250,000), Germany (100,000), UK (80,000), Canada (75,000), France (62,000), India (60,000), Australia (60,000), CIS (50,000), Israel (50,000), Lebanon (50,000), Philippines, Korea & Japan (50,000), Russia & Other
Former Soviet Union countries (50,000), Syria (50,000), Pakistan (40,000), Egypt & North Africa (20,000), Greece (20,000), Kuwait (20,000), Austria (15,000), Spain & Portugal (15,000) and Sweden (15,000).

Many of these Persian communities are served by Persian-script newspapers and periodicals, but the readers of these publications would welcome to their fellow citizens online through .PARS sites. The .PARS gTLD will also serve as a reminder of their glorious ancient homeland.

Within all of these populations, the intended end users of the .PARS gTLD are manifold:

- Persian-language speakers with ties to the Persian heritage: This would include a significant percentage of the population of Persian Community along with other nations.
- Persian-language native speakers: As demonstrated above, this includes millions of individuals in Afghanistan, Iran and Tajikistan as well as other continents.
- Persian-language students: Those learning Persian as a foreign language would benefit from increased resources online that would help them learn and grow in their new language.
- Persian businessmen: Tens of thousands of entities hold the word "PARS" as part of their legal trading name, where it is needed to indicate their origin. Businessmen have chosen the word "PARS" as a symbol of honor and glory, and as an indication that they belong to the Persian community, leaving aside the simple popular use of the word. The word "PARS" limited to just "Persian language websites" and "in the page title" results more than 50,000,000 web pages, clearly indicating this popularity: http://goo.gl-tG3VF

A list of the regional and social varieties of modern Persian includes:

- Western variant (Farsi)
- Eastern variant (Dari)
- Central Asian variant (Tajik)
- Hazara dialects (Hazari)
- Judeo-Persian (Dzhidi)
- Judeo-Tajik (Bukhori)

It is hoped that not only will these intended users derive individual benefit from the existence of a .PARS community, but that they will also contribute in turn. This should create a group benefit, which will in turn feed back to individual benefits - establishing a beneficial cycle.

* Related activities the applicant has carried out or intends to carry out in service of this purpose.

Anticipating the diversification of TLDs now being realized, and the consequent introduction of a Persian culture-specific online space, AGITSys has been working with a wide variety of related parties for several years in preparation, and will continue to do so going forward. A key element to the success of the .PARS gTLD is a strong and interactive community, which Persians around the world are proud to associate with and keen to contribute to. In order to ensure this, AGITSys will engage in and sponsor community outreach and marketing, in order to raise awareness of the forthcoming possibilities and to gather input for how the .PARS gTLD will take shape, and what they intend to subsequently give back to it. Launching the .PARS gTLD in concert with the desires of the community will be key to its success.

Quality content will also be fundamental to a thriving .PARS community, especially because AGITSys is committed to ensuring that .PARS is populated by quality second-level domain offerings. With this in mind, AGITSys will be talking with those most likely to contribute quality content, from news and media agencies to academies and libraries (who will be able to digitize Persian-script materials and then distribute them online comprehensively for the first time) about how they can and will contribute, and what AGITSys can do to facilitate this process. Ultimately, however, culture and history will always be the most important element for a successful .PARS community online. The entire gTLD concept is designed as a place of online respect and reverence for those of Persian heritage to appreciate it - and appreciate their association with this heritage. As such, the involvement, blessing and feedback of the Persian cultural, political and religious community is fundamentally important. Aware of this, AGITSys has been in prolonged and continued contact with important Persian figures around the globe asking them what they want to see and how they would like to see it done, whilst also encouraging them to spread the word and prepare themselves. This should mean that when the .PARS gTLD comes online, there will be a large avalanche of information posted almost immediately - therefore instantly creating a rewarding user experience.

* Explanation of how the purpose is of a lasting nature.

The community that will be served by .PARS—growing as it has out of the Persian people and the Persian alphabet—has thrived and grown for more than a millennium. Remarkably, it has done so largely without the level of connection online found with English-speaking cultures. This existing community interconnection speaks to the cultural staying power of the community and the many ways it enriches world culture.

With the adoption of a .PARS community, this robust group will be further empowered to interconnect and grow, allowing it to take its equal place on the Internet stage. The community thrives now, but will reach new heights with a .PARS gTLD.

The growth of the .PARS gTLD will be driven by what economists refer to as the network effect. A network effect occurs when a service becomes more popular as more individuals adopt it. A significant portion of the service's value stems directly from the increased adoption and usage of the service.

As more sites offer information, services, and opportunities for interconnection to the .PARS community as a whole, more members of the community will navigate to those sites. Many of those will provide their own content, and their activity there will spark further growth of second-level .PARS domains. At some point, information and service providers currently not offering sites in Persian will see the demand for .PARS-related content and will migrate their offerings to .PARS sites as well, furthering the offerings to the community and further driving community members to .PARS sites. The future benefits of interlinking this diverse and global community are incalculable but immense.

20Q. Explain the relationship between the applied for gTLD string and the community identified in 20Q(a).
• relationship to the established name, if any, of the community.

The .PARS gTLD is the name of the geographic location where the Persian community belongs to. Every member of the community can trace its heritage ethnically and linguistically to the Persian people, and millions of residents of Iran, Afghanistan and Tajikistan—among others worldwide—are descendants of the Persians who lived in the PARS land. There will be an instant connection to anyone in the community as to the meaning of .PARS, and the fact that any second-level domain with the .PARS gTLD will be a site providing them with information and access critical to them as a community member.

• relationship to the identification of community members.

As stated above, community members will feel an affinity and self-identification with the .PARS gTLD, as well as formal identification by their place of residency. As adoption of .PARS grows, use of domains using this community gTLD will grow exponentially, helping to cement the obvious connection between the string and the community.

• any connotations the string may have beyond the community.

AGITSys knows of no other connotations the .PARS string might have outside of this community.

20E. Provide a complete description of the applicant’s intended registration policies in support of the community-based purpose of the applied-for gTLD. Policies and enforcement mechanisms are expected to constitute a coherent set.

• Eligibility: who is eligible to register a second-level name in the gTLD, and how will eligibility be determined.

As mentioned above, the primary goal of the .PARS gTLD is the protection and promotion of Persian culture, language and heritage. To this end, in order to register a .PARS Domain Name, you declare during time of registration that you are part of the Persian Ethnic, Linguistic and Cultural Community. Our policies may permit registrations in .PARS gTLD by the following: universities, schools, research institutions and other academic entities that use Persian in their academic activities or teach-promote aspects of Persian culture. Public or private entities whose aim is promoting the Persian culture. Writers, translators, correctors and journalists publishing (or contributing to) works in Persian Publishing companies that publish works in the Persian language or relating to the Persian culture Media using the Persian language for their communications Individuals, groups, businesses, organizations, entities or initiatives, however constituted, carrying online communications in Persian Individuals, groups, businesses, organizations, entities or initiatives, however constituted, carrying the word "Pars" as part of their name.

In order to register a names in the .PARS TLD, all registrants must attest that they are members of the Persian Community who live in one of the following countries: Afghanistan, Armenia, Azerbaijan, The Caucasus, Georgia, Iran, Tajikistan, Turkey, or Uzbekistan and provide a valid address demonstrating their residence. The .PARS gTLD is intended for people who wish to promote, participate or learn about the Persian heritage, Persian language, Persian culture and Persian history and who use it in any way within their daily lives. The .PARS gTLD will be open to anyone complying with AGITSys Acceptable Use Policy (AUP), .PARS registration policies and with ICANN guidelines.

• Name selection: what types of second-level names may be registered in the gTLD.

Generally, eligible registrants may register names of their choice in the .PARS gTLD as long as they are in compliance with key registry policies such as the Acceptable Use Policies and not on the PAC Reserved list described below. AGITSys will also follow ICANN guidelines regarding potential restrictions of second-level domains. To help preserve the cultural importance of the gTLD, we will also develop and implement a reserve list of names that will represent key cultural, traditional and historical values of the Persian community. The development of this list will be spearheaded by this restriction can be controlled by creating the list of prohibited names managed by the .PARS Policy Advisory Board. This list will contain a broad listing of names that have particular significance to the .PARS community. It will include key holidays, religious institutions cultural icons and described above.

• Content-Use: what restrictions, if any, the registry operator will impose on how a registrant may use its registered name.

AGITSys will have an Acceptable Use Policy (AUP) and registration policies that will govern how a registrant may use its registered name. We will ask all members to honor the Persian Culture, Heritage and language. We will also require registrants to ensure that websites hosted under these domain names contain Persian scripts to promote the Persian language as a valuable resource of the Persian Community. AGITSys will monitor the use of automated measures to search for and evaluate the use of Persian scripts on websites registered in the .PARS gTLD. Those registrants who do not comply with the usage requirements above will have punitive action taken against them, potentially leading to their website being de-listed. These requirements will be enforced through the AUP and contacts registrants must sign with their registrars prior to the registration of a domain name.

• Enforcement: what investigation practices and mechanisms exist to enforce the policies above, what resources are allocated for enforcement, and what appeal mechanisms are available to registrants.

As part of the AUP and registration policies, AGITSys will have complete enforcement rights over registrants' use of .PARS domains names. AGITSys will randomly audit domain names registered in the .PARS gTLD to ensure compliance with all eligibility and use criteria. If a violation is discovered, an investigation will begin immediately to rectify said violation.
20F. Attach any written endorsements for the application from established institutions representative of the community identified in 20(a). An applicant may submit written endorsements by multiple institutions, if relevant to the community.

21A. Is the application for a geographic name?

No

22. Describe proposed measures for protection of geographic names at the second and other levels in the applied-for gTLD. This should include any applicable rules and procedures for reservation and/or release of such names.

**Protection of Geographic Names**

Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. has chosen COCCA Registry Services (HK) Limited (COCCA) as their registry services provider. COCCA has over 12 years of experience in authorizing registry software and providing registry support services. With 35 national TLDs relying on COCCA’s technology to manage critical infrastructure, the COCCA EPP Shared Registry System (SRS) is the most widely deployed, field-tested SRS in use today. In many respects new niche market gTLDs are predicted to more closely resemble existing ccTLD name spaces than the current gTLD one. COCCA’s commercial model and technology enables TLD Sponsoring Organizations to focus on operating the first and portion of the registry including sales, marketing and community relations while leaving the operational aspects to the proven team at COCCA.

In addition to technology COCCA has a considered and tested set of leading - practice policies designed to address community, stability, rights protection, abuse mitigation, privacy and other issues. COCCA is a trusted partner for Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. to operate the .com in a manner that is fully compliant with all ICANN rules and regulations.

COCCA, on behalf of the Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti., intends to implement the following measures to protect geographical names at the second and at all other levels within the TLD:

**Reservation Measures for Geographical Names**

Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. will adhere to Specification 5 of the proposed Registry Agreement, “Schedule of Reserved Names at the Second Level in gTLD Registrations” — section 5 titled “Country and Territory Names.” The geographic names listed in the following internationally approved documents will be reserved at the second level within the TLD and at all other levels where registrations occur: (22.1.1.1) the short form (in English) of all country and territory names contained on the ISO 3166-1 list, as updated from time to time, including the European Union, which is exceptionally reserved on the ISO 3166-1 list, and its scope extended in August 1999 to any application needing to represent the new European Union (22.1.1.2) the United Nations Group of Experts on Geographical Names, Technical Reference Manual for the Standardization of Geographical Names, Part I: Names of Countries of the World; and (22.1.1.3) the list of United Nations member states in 6 official United Nations languages prepared by the Working Group on Country Names of the United Nations Conference on the Standardization of Geographical Names.

**Potential Release of Geographical Names**

Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. is committed to working with governments and other stakeholders that may have a concern regarding the registration of names with national or geographic significance at the second level. If Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. decides to release reserved geographical names, Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. will abide by the process outlined in Specification 5 of the Registry Agreement by seeking agreement from the applicable government(s).

**Review, Audit, and Updates to Policies**

Policy management is dynamic in nature requiring continual management. The Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. in conjunction with COCCA’s assistance will be engaged in policy development efforts to ensure greater, and with respect to protections of geographical domain names. Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. will review and consider suggestions or concerns from government, public authorities or IGO’s regarding this policy. And as with all required policies, Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. will perform openly and transparently update to existing policy or the creation of new policy be required. Further, Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. internal process continually reviews and manages its reserve list as one part of the abuse prevention mechanisms described in greater detail within question 28, “Abuse Prevention and Mitigation.”

23. Provide name and full description of all the Registry Services to be provided. Descriptions should include both technical and business components of each proposed service, and address any potential security or stability concerns.

The following registry services are customary services offered by a registry operator:

A. Receipt of data from registries cooperating registration of domain names and name servers.
B. Dissemination of TLD zone files.
C. Dissemination of contact or other information concerning domain name registrations (e.g., port-43 WHOIS, Web-based Whois, REDITs Whois Service).
D. Internationalized Domain Names, where offered.
E. DNS Security Extensions (DNSSEC). The applicant must describe whether any of these registry services are intended to be offered in a manner unique to the TLD.

Additional proposed registry services that are unique to the registry must also be described.

Asia Green IT System Bilisayar San. ve Tic. Ltd. Sti. has contracted COCCA Registry Services (HK) Limited ("COCCA") to provide hosted Registry Services for the .com TLD. The .com TLD will be added to COCCA’s existing production EPP Shared Registry System ("SRS"). COCCA will ensure redundant geographically diverse WHOIS resolution through propagation of the .com zones on the Internet Software Consortium ("ISC"), Packet Clearing House.
"PCH") anycast networks - and on CoCCA unicast servers.

CoCCA authors the internet's most widely used SRS registry system which has been branded "pamoja" for gTLD nameservers. CoCCA authors BIND and pioneered anycast network technology. PCH has one of the Internet's largest and longest running anycast networks. DNSSEC key storage and and signature will take place on the PCH DNSSEC platform, a platform developed for ccTLD's that mirrors the security and processes used by ICANN to secure the root.

The .parTLD SRS data will be escrowed with both NCC Group and CoCCA subsidiary CoCCA Data Escrow Services (NZ) Limited.

23.1 About CoCCA

CoCCA has over nine years experience authoring open source registry software systems and providing TLD registry support services. CoCCA was originally incorporated in Australia in 2003 as CoCCA Registry Services Limited, in January 2009 CoCCA re-located to New Zealand and trades as CoCCA Registry Services (NZ) Limited. CoCCA is a privately held NZ company.

CoCCA’s existing clients are governments and other managers of country code top level domains (ccTLDs). As of March 2012, 33 national ccTLDs have selected CoCCA’s SRS technology and/or services to help them manage their critical infrastructure. Several additional ccTLDs have committed to migrate to CoCCA’s “pamoja” SRS in 2012 (pending the outcome of re-delegations). As many as 40 ccTLDs are thought to be using the pamoja SRS application, while CoCCA has formal relationships and support contracts with 33 TLDs, the exact number of users is hard to determine as the pamoja software is freely available for download from the Internet. CoCCA’s offers ccTLDs a perpetual royalty-free license to use and deploy the SRS software.

CoCCA’s commercial model is based on delivering significant economies of scale to TLD managers, CoCCA’s dominant market position in the ccTLD ecosystem - where the TLD string is generally considered critical infrastructure, ensures CoCCA’s commercial viability and ongoing funding of R&D regardless of the success of a particular gTLD string (or group of gTLD strings) that select CoCCA as the Registry Services provider. CoCCA’s technology is mature, field tested and their commercial model is solid and not dependent on new gTLD’s.

The pamoja SRS can be used several ways, the application can be downloaded and installed locally by a TLD Sponsoring Organization (“SO”), or the SO can contract CoCCA to host either the primary or failover SRS at the CoCCA Network Operations Centre (“NOC”).

CoCCA’s pamoja SRS is a freely available gTLD-compliant TLD database application based on the “CoCCA Tools” open source ccTLD EPP registry system. The SRS licensing simplifies failover and transitioning planning as the source, data, and daily virtual machine images are to be placed into escrow enabling them to be migrated or re-deployed by a different entity without any SRS licensing issues. CoCCA’s SRS is a ‘shrink-wrapped’ application that can be installed on a single server in minutes or deployed in a High Availability (HA) configuration.

CoCCA’s pamoja SRS is the most widely deployed, field-tested SRS in use today. CoCCA’s SRS is a mature product that has grown organically over the past decade as new standards have been developed and published. It is doubtful any other Registry Services provider has accumulated CoCCA’s level of experience operating multiple small to medium sized TLDs efficiently and securely.

CoCCA’s pamoja SRS is currently used to run three (3) Arabic (IDN) TLDs and was selected by the Telecommunications Regulatory Authority in Egypt to launch the Internet’s first IDN TLD (.masr) in 2010. The flexible package supports ASCII and IDN - including variants and folding where required.

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<th>Key</th>
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<th>CoCCA Failover SRS</th>
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ANNEX 18
23.3 CoCCA's Hosted SRS

Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. has confirmed with CoCCA their production experience and the availability of the Registry Services described briefly in sections 23.4-23.18 below - and in greater detail in the responses to questions 24-43. Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. and CoCCA understand elements of ICANN's TLD requirements will most likely be modified in the future. CoCCA's Registry Services will comply with future ICANN requirements or mandates.

23.4 Receipt of Data via the SRS EPP Interface

Data from Registrars concerning the insertion and maintenance of records in the SRS may be processed either via the CoCCA EPP interface (SNL over SSL on port 700) or manually via CoCCA's post 443 SSL web interface. CoCCA was an early adopter of the EPP standard and has operated an EPP based SRS for almost seven years.

The .par TLD will be added to CoCCA's existing production SRS, which currently has 203 registrars connected.

CoCCA's SRS has a single EPP interface for all hosted TLDs allowing registrars to share the same contact and host objects across multiple TLDs. The .par TLD will only be made accessible to ICANN accredited registrars, as zone views are currently connected to CoCCA for ccTLDs and using the EPP and GUI interface that the .par TLD will be accessed via when launched.

CoCCA's pamoja EPP Interface currently complies the IETF RFC's required by ICANN (5730-5734 and 3735) and is explained in more detail in the response to Question 25.

23.5 Receipt of Data via the SRS Graphical User Interface ("GUI")

Registrars may insert and manage domain, contact and host records as well as the SRS accounting functions via a post 443 GUI. Registrars do not have to use the EPP interface on port 700. Records managed via the GUI connect to the SRS EPP engine on port 700 via background processes; this ensures rigorous conformity with the RFC's and consistency in auditing and maintenance of historical records.

23.6 Registrar Data Restrictions (Reserved Names)

Restrictions on what domains may be inserted and maintained by registrars is to be controlled by configuration of Java regular expressions. In order to comply with the requirements set out in Specification 5 and any Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. policy, the .par TLD will use three of pamoja's features as described below.

23.6.1 Prohibited Patterns. Domains that match patterns will be rejected with an EPP 2306 - Parameter Value Policy error, letting the registrar know that these domain names do not fit in with the registry policy for this zone.

23.6.2 Syntax Patterns. Certain strings, such as all-numeric names or single character names may be restricted. An EPP 2305 error - "Parameter Value Syntax error" will be returned to the EPP client, indicating that the name is invalid.

23.6.3 Approval Patterns. Names that match these patterns will not be rejected, but will be registered pending approval. Until they are approved, the name will not appear in the .par zone files, and will not be able to be transferred, renewed or modified in any way by the registrar.

23.6.4 Both ASCII and non-ASCII contact details can stored and displayed via web-based WHOIS and command line WHOIS.

23.7 SRS GUI, Role-Based Access

The pamoja SRS GUI has numerous role-based logins described below. Several of these have been recently developed by CoCCA in response to ICANN's proposed gTLD requirements and are currently being used numerous ccTLD production environments.

Administrative Roles

- SRS Systems Administrator - Able to administer and configure the entire SRS system
- CERT / Law Enforcement - Able to view and query the SRS, but not alter records.
- TLD Administrator - Able to administer a TLD or group of TLDs
- TLD Viewer - Able to view but not alter records for a TLD or group of TLDs
- Zone Administrator - Able to administer a Stub Zone, or group of Stub Zones
- Customer Service - Can perform tasks on behalf of a number of registrars
- Name Approver - Can approve names matching the Zone Approval Patterns
- CHIP Approver - Can approve domains registered with CHIP codes or other Trademarks

Registrar Roles

- Registrar Master Account - Able to perform all registrar functions and create subordinate logins
- Registrar Technical - Able to modify domain details
- Registrar Helpdesk - Able to view domains and make various minor changes
- Registrar Finance - Able to view domains financial transactions and also edit financial data
- Registrar Finance - (Read Only) Same as above but view only.

* Currently in the process of migrating away from Heurstar (.ljq) and Afflias (.hnj)

ANNEX 18
Other Access Roles

- Premium WHOIS - Able to perform various queries in a SRS GUI and extract and save data to a CSV, also able to connect via the SRS EPP API for read-only query.
- Zone File Only - Able to login and request Zone Files

23.8 Zone File Dissemination / Resolution

The .parS will be resolved by propagation of zone file data periodically extracted from the SRS, sent to PCN DMSEC signing servers for signature, returned to CoCCA and then distributed by CoCCA's hidden master server to two redundant and independent anycast networks operated by Internet Software Consortium ("ISC" / http://isc.org) and Packet Clearing House ("PCH" / http://www.pch.net) - as well as two (2) public unicast TLD servers operated by CoCCA.

The .parS will be resolved by a minimum of 60 geographically distributed resolvers, all of which run ISC's BIND and CoCCA's TLD anycast technology for scalable geographic redundancy, strong defense from Denial of Service attacks, high quality of service, and give excellent (fast) responses to geographically diverse Internet users. DMSEC and IPv6 are already fully integrated into the PCH and ISC networks.

Registrars will be continuously inspect the availability and status of each TLD server instance via the SRS GUI and other CoCCA WEB sites. Should a TLD server become unreachable, registrars are to be automatically notified (via email) and EPP polling messages. More detailed information is available in the responses to Questions 24-43.

23.9 Dissemination of Domain Related Information

The SRS public WHOIS server will answer for the .parS TLD on port 43 in accordance with RFC 3912 and the requirements set out Specification Four (4), 1.1-1.7 and Specification Ten (10), Section 4.

The CoCCA SRS features a public port 443, web-based DNS interface that enables internet users to query and extract information which is at a minimum identical to that which is provided via the port 43 server but using technology that may be more convenient or accessible to many internet users than a port 43 command line query.

The CoCCA SRS also allows any Internet user (or any user with a login to the SRS) to order a complete Historical Abstract delivered in an easy to understand pdf format.

Individuals may optionally subscribe to CoCCA's Premium WHOIS service, which provides them with:

- secure access to the SRS (via both a web-based port 443 GUI and read only EPP on port 700).
- the ability to perform a variety of boolean queries online in real-time and save the output to a CSV
- the ability to create "interest lists" using Java regular expressions where they receive EPP polling messages and emails if a domain is registered that contains a string of interest to them.

Established CERT's and law enforcement agencies may request, and will generally be granted, read only GUI and EPP access to the CoCCA SRS free of charge. Currently this access is granted to the Australian Government CERT, who under an MOU may share information with other CERT's and national and international law enforcement agencies.

23.10 DNS Security Extension (DNSSEC)

CoCCA's SRS DNSSEC implementation allows registrars to provision public key material via EPP and the GUI. Under an agreement between CoCCA and PCN, .parS TLD Keys are to be stored offline and signed using PCN's DNSSEC platform that replicates the security process. Mechanisms and standards employed by ICANN in securing the Root of the DNS.

The CoCCA-PCN key storage implementation deviates from the ICANN model only by diversifying the locations of the secure sites such that two (2) of the three (3) sites are outside the United States. The Singapore facility is hosted by the National University of Singapore, on behalf of the Singapore Infocomm Development Agency (IDA). The Swiss facility is hosted in Zurich by SWITCH, the Swiss national research and education network. The U.S. facility is hosted by PCN Equinix in San Jose.

The CoCCA SRS DNSSEC implementation complies with RFC's 4033, 4034, 4035, 5910, 4509, 4441 and 5155. Additional information on the DNSSEC implementation is available in the response to question 43.

23.11 Escrow Deposits

CoCCA's Registry Services include deposit of escrow data in the format and following the protocols set out in Specification Two. CoCCA currently deposits coTLD data daily (in both the native CoCCA format and the draft alias-noguchi format) with both NCC group and CoCCA Data Escrow (NZ) Limited. CoCCA Data Escrow (NZ) Limited is a subsidiary and was established in 2009 to provide Fallback Registry and escrow services to users of the CoCCA SRS who run the software locally on their own infrastructure.

As part of CoCCA's Registry Services and to ensure continuity of operations, CoCCA deposits all updates to the panoya SRS source code with NCC, and daily Raware images of the production SRS with CoCCA Data Escrow Services (NZ) Limited. These same practices will be adopted for the .parS TLD when launched.

Data WHOIS data will be deposited with NCC Group, CoCCA Data Escrow and ICANN. Additional information on Escrow is available in the response to question 38.

23.12 Document Management
CoCCA’s Registry Services include maintenance of documents related to intellectual property rights, complaints, identification of contacts, court orders etc. These documents are maintained in the SRS and become part of a domain’s (or contacts) permanent history.

23.13 Support for Various Zone States
CoCCA’s Registry Services support Sunrise, Rolling Sunrise, Land-rush and Open Registrations for a given zone. Each "State" can be configured to match common policy options.

23.14 Accounting
CoCCA’s Registry Service’s includes a variety of standardized and ad-hoc reports accessible to TLD administrators via the GUI. Standardized reports include one that complies with the requirements set out in Specification Three “Format and Content for Registry Operator Monthly Reporting”.

23.15 Audit Trail
All SRS activity is logged and permanently archived; it can be easily retrieved via the GUI for law enforcement or complaint resolution. A “time-machine” feature allows a user with appropriate rights to view the domain information as it existed on any given date and time. Information is never purged from the SRS, information on deleted domains, hosts, contacts can be easily extracted.

23.16 Monitoring
CoCCA’s Registry Service’s include statistics on and real-time monitoring of the primary NOC. CoCCA’s DNS Servers, Escrow NOC (NZ) and failover NOC in Palo Alto California. Additional information is available in the answers to questions 24-42. Monitoring of the ISC and PCH anycast networks is done internally by those entities, with statistics and notices made available to CoCCA in near-real time. Where applicable and relevant monitoring information is made available to registrars by CoCCA via the SRS.

23.17 Maintenance of Failover Facilities
CoCCA Registry Services include maintenance of their geographically dispersed Escrow and Failover SRS facilities (Auckland and Palo Alto, a third is planned for Paris in early 2013).

23.18 Complaint Resolution Service (CRS)
CoCCA’s Registry Services include operating a “single desk” CRS to help resolve complaints, trigger Critical Issue Suspensions (“CIS”) and enforce a Uniform Rapid Suspension (“URS”) request. Asia Green IT System Bilgismayer San. ve Tic. Ltd. Sti. will bind all registrants in the .pars to the CoCCA CRS, Acceptable Use Policy and Privacy and NCCS Policy via the .pars Registrant Agreement (“RA”). CoCCA’s front-line CRS services are a “role” performed by CoCCA’s 24-7-365 NOC Support.

23.19 Registrar Support
CoCCA Registry Services provides registrars with 24-7-365 support via email and their virtual manned Network Operations Center (NOC). The CoCCA NOC Support has staff Auckland, Sydney, Jonestown (Guyana) and Paris for around the clock coverage. CoCCA NOC Support all have access to the same cloud hosted monitoring and customer service applications as well as the SRS.

23.20 Security and Stability Audit
The pamoja SRS application is used to manage critical TLD infrastructure, each release is tested prior to release or deployment by CoCCA developers, developers and systems administrators at registries that deploy the application locally. Each major release is tested and audited by Yonita (http://yonita.com/).

CoCCA constantly reviews its SRS software and sites to ensure they meet or exceed best practices in the industry, regular external audits of the security policy and CoCCA NOC are planned commencing 2013. The CoCCA NOC and failover facilities will be independently tested twice a year to ensure compliance with the CoCCA security policy, where applicable recommendations included in a security audit will be swiftly implemented.

23.21 Operational Testing and Evaluation (OTE&E) Environment
CoCCA’s Registry Service’s include the operation of an OTE&E SRS that enables registrars to evaluate new versions and features of the SRS software before they are deployed by CoCCA in production. Any ICANN accredited registrar will be granted access to OTE&E. Registrars not currently connected to the CoCCA SRS will be required by CoCCA to demonstrate competency in EPP and the .pars policies before being granted EPP or GUI access to CoCCA’s production SRS.

23.22 Authorization Key Retrieval
CoCCA’s Registry Service’s include automated public retrieval of domain AuthCoces by the administrative contact via a port 443 web page. The Authorization Key Facilitates expedited transfers from one registrar to another.

23.23 Public Drop - List
CoCCA’s Registry Services include publication of drop-lists of domains that are pending purge via a port 443 web page and email reports to registrars.

23.24 wildcard Brand Registrations
A mechanism thought to be unique to the CoCCA SRS that allows blocking registration of a domain’s ‘variants’ using java regular expressions. This requires approval and manual intervention on the part of CoCCA.

23.25 co-operation with Law Enforcement and CERTs
CoCCA works with Law Enforcement, CERTs and researchers and will generally grant registry continuous access free of charge to facilitate two-way data exchanges aimed at preventing and mitigating abuse in the SRS.
There are no known security or stability issues with the CoCCA’s SRS, PCH’s DNSSEC platform or IRC’s and PCH’s anycast networks at this time. Should any be identified resources are available internally at CoCCA, PCH and IRC to swiftly address and resolve security or stability issues as they arise.

24. Shared Registration System (SRS) Performance:

describe
- the plans for operation of a robust and reliable SRS. SRS is a critical registry function for enabling multiple registrars to provide domain name registration services in the TLD. The TLD must include the EPP interface to the registry, as well as any other interfaces intended to be provided, if they are critical to the functioning of the registry. Please refer to the requirements in Specification 6 (section 1.2) and Specification 16 (SLA Matrix) attached to the Registry Agreement;
- the resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).

A complete answer should include, but is not limited to:
- high-level SRS system description;
- representative network diagram(s);
- number of servers;
- description of interconnectivity with other registry systems;
- frequency of synchronization between servers; and
- synchronization scheme (e.g., hot standby, cold standby).

The .pars TLD will be added to CoCCA’s existing SRS, which currently has its primary Network Operations Centre (NOC) in Sydney Australia. The Sydney primary SRS is a single SRS instance hosting a dozen coTLDs. CoCCA’s Sydney SRS runs the latest versions of their "pamoa" TLD software application in a High Availability (HA) configuration. The Sydney SRS registry that will host .pars currently complies with the requirements specified in Specifications 4, 6 and 10 and will be scaled or modified to meet SLA requirements or any future ICANN gTLD specifications. Because of CoCCA’s commercial model and technology the primary SRS can be moved from one data center to another with only a few minutes outage.

From an Internet users perspective trusted, secure and responsive DNS implementations are the ultimate objective of Asia Green IT System Bilgynayar San. we Tic. Ltd. Sti. To ensure this CoCCA will use PCH’s DNSSEC and anycast infrastructure for offline storage, signing and resolving the .pars TLD. Additional DNS operations will be provided by the IRC SNS anycast platform and two CoCCA unicast DNS servers. Additional information and technical details on the DNSSEC and anycast DNS services can be found in the answers to questions 34, 35 and 43.

24.1 Scale of Operations

A decade of operational experience with TLDs that have implemented policies to discourage testing or otherwise incentivize add-drop registrations confirms the widely held belief that SRS registry databases are largely static. Once registered data associated with a domain is not frequently modified. More than 99% of the queries seen by CoCCA on a daily basis are WHOIS, EPP Domain:Info or Domain:Check queries (read queries) and do not tax a SRS’s resources excessively. Direct experience and anecdotal evidence from other small and mid-sized registrars suggests that between 80 and 85% of the records in the register change daily through do "write" operations - new registrations, renewals, name server changes, contact updates, automated changes of status, transfers etc.

For a theoretical registry of 1 million domains this equates to roughly 50,000 "write" transactions a day - or an average of 35 a min (50,000 / 1440 min/day). A recent test of CoCCA’s SRS software on an single RSS cloud server revealed that the pamoia software was able to process 4 million unique EPP registrations in a little over 5 hours. Performance tests can be designed in any number of ways, real world performance depends on a variety of factors - the specific policy and account settings for a given zone.

In terms of both transactional capability and storage, today's "off the shelf" hardware and the open source PostgreSQL database used by CoCCA can easily cope with demands that a small to medium sized registry is ever likely to make on an SRS system. While the CoCCA SRS EPP and WHOIS infrastructure and platform may seem comparatively modest, a decade of experience confirms it is more than capable of meeting the ICANN’s gTLD SLA requirements and comply with the required RFC’s.

If future demands require it, CoCCA’s SRS can easily (and affordably) be scaled by adding additional load balanced application servers and bandwidth.

24.1 SRS | High Level Description

Comprehensive information on and descriptions of the CoCCA SRS and NOC may be found the answers to questions 25-42 that follow.

24.1.1 SRS Infrastructure | Architecture

The following describes the key features of CoCCA’s current production SRS that will be utilized for the .pars.

* Primary SRS is operated from Global Switch, a tier 3+ facility and one of the largest carrier-neutral data centers in the Southern Hemisphere.


* Redundant links to the Internet through PIPE networks and Telstra.

[http://www.pipenetworks.com/](http://www.pipenetworks.com/)

* DNSSEC Key storage (offline) in Singapore at a PCH facility hosted by the National University of Singapore, on behalf of a Singaporean Infocomm Development Agency (IDA). Failover storage at a facility is hosted in Zurich by SWITCH, the Swiss national research and education network and in the U.S. at a facility is hosted by Equinix in San Jose.
* .pars zones signed by PCH in Frankfurt or Palo Alto
* SRS Escrow at tier three co-location facility (Maxnet) in Auckland NZ and Failover a tier four facility (Equinix) supported by PCH in Palo Alto, CA US. A fourth SRS "instance" is planned for Paris in early 2013.
* Dedicated, routable CoCCA Critical Infrastructure IPv4 and IPv6 address blocks.
  IPv4 resources: 203.119.04.0-24 (crit-infra)
  IPv6 resources: 2001:d00:3::/48 (crit-infra)
* Routers, Firewalls, Switches and load balancers all configured for failover.
* CoCCA’s panoma SRS application load balanced and configured for failover.
* PostgreSQL 9.1.3 database replicated synchronously to two secondary DB servers.
* DS Keys lodged by registrars via EPP or the CoCCA SRS GUI
* Servers Virtualized (VMware vsphere v5)
  VM image-based replication for high availability and off-site disaster recovery http://www.veeam.com/vmware-esx-backup.html
* Critical Data continuously replicated asynchronously to two off-site SRS instances - PCH, Equinix Palo Alto CA (pch.net) and CoCCA Data Escrow (HE) Limited, Auckland NZ (maxnet.co.nz)
* OTfR Environment for Registrars
  * Primary and Secondary hidden master DNS ( failover masters ).
  * CoCCA operated unicast DNS in Sydney Australia and Auckland New Zealand.
  * Two anycast solutions operated by PCH and ISC - over 80 DNS nodes.

24.1.2 Specification 6, Section 1.2 Compliance.

The .pars TLD will be added to CoCCA’s production SRS that currently hosts 12 ccTLDs under a single RFC 5736-5744, RFC 5910 and 3915 compliant EPP interface.

A list of the Registrars that currently connect to the CoCCA SRS for one or more ccTLDs follows below.

24.2 EPP Interface

The port 700 EPP interface for .pars will listen on the same IP and port as the EPP server for the other TLDs hosted by CoCCA - currently "production.coccoregistry.net:700", on launch the production EPP interface for .pars will be branded as epp.nic.pars.

24.3 WHOIS Interface (port 43 and 433)

The WHOIS Interface(s) for .pars will listen on the same IP and port as the WHOIS server for the ccTLDs and prospective gTLDs to be hosted by CoCCA - currently "whois.coccoregistry.net:43-443" on launch the interface for .pars will be branded as "whois.nic.pars". Each TLD ( ccTLD, gTLD ) in the CoCCA SRS may have different WHOIS disclosure settings based on the TLD policy. The .pars will comply with the ICANN gTLD disclosure requirements.

24.4 GUI Interface (port 693)

The GUI Interface for .pars will listen on the same IP and port as the GUI server for ccTLDs and prospective gTLDs to be hosted by CoCCA - currently https://production.coccoregistry.net:443. On launch, the interface for .pars will be branded as "registry.nic.pars".

24.5 Hidden Master DNS (s) (port 53)

The there are two hidden master servers. CoCCA will transfer the .pars zone from the "signature master" to PCH for DNSSEC signature using TSIG IXFR / AXFR and IP restrictions at the OS and firewall level. PCH will sign the zone and transfers it back to CoCCA using TSIG and IMXFR / AXFR. CoCCA will then loads the zone on a second "distribution master" which allows distribution to the PCH and ISC anycast transfer points and the CoCCA unicast DNS servers.

24.6 CoCCA Public Unicast DNS

DNS servers on virtual machines running BIND in the Sydney NCC and NZ SRS will pull and resolve the .pars TLD zones.

24.7 Public anycast DNS

CoCCA’s distribution master notifies the anycast providers (PCH and ISC) and .pars TLD zones are transferred to the respective provider’s transfer point IPs (hidden 1P for DNS transfers only) using TSIG IMXFR / AXFR and then propagated by PCH and ISC across their respective anycast networks.

24.8 ftp Server

Server to distribute zone files as required under Specification 4 Section 2.

24.9 Escrow Server

Server used to deposit TLD data with NCC and transfer data to CoCCA’s Failover and Escrow SRS. Uses Secondary IP
range.

24.10 Number of Servers
There are seven physical server appliances in Sydney NOC configured such that they host 17 virtual machines.

24.11 High Availability (HA) Configuration
The Sydney NOC’s network appliances are configured for failover and HA in either hot or warm standby mode. The PostgreSQL databases are locally replicated using R.1.1’s synchronous replication and asynchronously over the WAN to the Failover facilities. The status of the local and off-site replication is continuously monitored by the CoCCA NOC. CoCCA also ships WAL files so that in the event of an extend WAN outage the offsite SRS can be updated using Point in Time Recovery (PITR).

RDGS and EPP services are load balanced between two different application servers at the primary SRS (more application servers can easily be added). Public read-only RDGS may also load balanced by simply having the nagios monitoring software automatically modify the resource records and send WHOIS traffic to either of the secondary failover SRS’s for near-real time WHOIS. When the primary becomes available or SLA issues (DoS etc) are resolved, RDGS services are automatically switched back to the primary SRS.

The public IPs at the NOC used for EPP, WHOIS and GUI are on routable critical infrastructure ranges assigned to CoCCA by APNIC. In the event of an issue with the primary Internet link at the Sydney NOC (Pipe networks) CoCCA may either modify A and AAA records for GUI + RDGS and EPP services to the local failover link, or the entire IP range can be re-routed using BGP routing to a COCCA failover SRS. If the entire Sydney NOC suffers an extended outage the traffic can be routed to the the failover SRS (Palo Alto) or Recrow SRS (Auckland) as conditions dictate by either modification of resource records (A, cname ) or BGP of the COCCA AS.

VMware images of all virtual machines are made daily using Veeam Backup & Replication software

In addition to streaming replication, SRS data is sent to COCCA’s failover SRS and Recrow sites every 10 minutes (or sooner depending on activity) via SCP in the form of postgresql PITA files, and daily in the form of compressed database dumps and VMWare images.

24.12 List of Registrars Connected to the CoCCA SRS in Sydney AU as of March 30, 2012

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<tr>
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ANNEX 18
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<td>Register.it spa</td>
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25. Extensible Provisioning Protocol (EPP): provide a detailed description of the interface with registrars, including how the applicant will comply with EPP in RFC 3735 (if applicable), and 3730-3734.

If intending to provide proprietary EPP extensions, provide documentation consistent with RFC 3735, including the EPP templates and schemas that will be used.

Describe resource pricing, number and description of personnel roles allocated to this area.

A complete answer is expected to be no more than 5 pages. If there are proprietary EPP extensions, a complete answer is also expected to be no more than 5 pages per EPP extension.

CoCCA was among the first registry providers to embrace the EPP standard seven years ago. CoCCA's traditional clients have been small to medium sized ccTLD operators un-acquainted by the legal, contractual and governance issues that often result in protracted delays in rolling out new policy, technology or standards in larger ccTLDs or in the generic Level environment. CoCCA and the users of its SRS software have been historically free to trial and introduce innovative technology policy.

The CoCCA SRS is an “all in one” software package (RDDS- EPP- GUI - Accounting) however this does not prevent...
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it from being deployed in a clustered environment where multiple instances answer for a specific protocol under a load balanced, high availability environment. Using a load balance appliance EPP traffic can be sent to one or more servers which are in turn connected to the same database. In all small to medium sized deployments tested to date, load balancing the EPP service is not required - the load balancer is simply configured to provide failover and HA.

An aggressive three-year development program commenced in January 2009 with the objective of ensuring CoCCA's software was compliant with ICANN's new gTLD requirements - as well as the meeting needs of new and existing users in the ccTLD community.

25.1 Current EPP RFC Compliance:

RFC 5730  Extensible Provisioning Protocol (EPP)

This RFC is a base protocol document for EPP. EPP is an XML-based client-server protocol, atomic in its transactions, and developed to support multiple transports and lower level security protocols. There are no partial failures; all commands either succeed or fail definitively. Object-to-object associations are standard with limited application of parent-child relationships where delegate relationships are necessary for affected functionality, such as internal host data and its relationship to domain objects. The pamoja SRS fully implements the service discovery, commands, responses, and the extension framework described.

RFC 5730

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RFC 5731

This RFC explains the mapping of the primary EPP registry object, the domain object. It reviews associated attributes and states of the domain object as well as child object relationships (hosts). It also the details associations with other EPP objects. The pamoja SRS complies with the full XML specifications and descriptions and applies flexibility where permitted. For example, 5731 allows operators to implement the info command with different responses for a "sponsoring registrar" and a "non-sponsoring registrar" in regards to many domain object attributes. The pamoja SRS implements this as a base protocol document for EPP.

RFC 5732

The pamoja SRS implements this as a base protocol document for EPP. The pamoja SRS notes this RFC describes the mapping of relationships to host objects, which are by definition subordinate to the superordinate domain name object. Host objects that are defined as internal or in the namespace of the registry must be related to a superordinate domain object to be created. Internal hosts, as full child objects, face restrictions associated with the management of their superordinate domain object. External hosts are hosts belonging to another domain namespace and as such are not subordinate in the parent namespace. Internal hosts can have a glue or an A record associated with them. External hosts refer to another namespace or zone for the associated A record.

RFC 5733

Another RFC implemented in the Pamoja SRS server, this RFC describes the contact object mappings in EPP. Contact objects are used to contain related data surrounding the standardized contact types in TLD registries including attributes such as contact type, country, telephone numbers, email addresses, etc. As a standalone object, a contact object can be created and associated with no domain objects or with any number of domain objects available in the registry. This is used commonly by registrars to update common contact information associated across large numbers of domains in a single transaction. Like the domain object, it can be secured with a passphrase or "authinfo" code. Contact object data represents the definitive data source for authoritative WHOIS (WHOIS) in new TLDs.

RFC 5734

The pamoja SRS implements this RFC as the preferred industry transport and in compliance with ICANN's requirements. This RFC describes a standard implementation of TCP incorporating TLS. The transport of choice for the EPP registry community has been TCP. Implementers are encouraged to take precautions against denial of service attacks through the use of standard technologies such as firewall and border router filters.

RFC 5735

The pamoja SRS implements this RFC as applicable to any extensions it utilizes as this RFC provides specific and detailed guidance on EPP extensions. An important principle in creating extensions is, as opposed to modifying, the EPP protocol was to fully preserve the integrity of the existing protocol schema. Additionally, a valid extension itself should be extensible. Another important requirement in the RFC is to include announcements of all available extensions in the EPP server greeting element before establishing an interactive client session.

RFC 3915

The pamoja SRS supports this extension since this all CoCCA managed TLDs implement the grace period implementation known as the Redemption Grace Period or "RGP". When RGP is in use, domains are deleted into the RGP where Registrars may request a restoration of the domain. This is a billable event and requires a three-step process: placement of the domain into a pending restore state, submission of a restore report explaining why the domain is being restored, and finally the restoration of the domain. The RFC extends the domain update command, adds related domain statuses, such as "redemptionPeriod" and "pendingRestore," and extends the responses of
domain info and other details. The RFC provides a lifecycle description of the RGP and defines the format and content for client to server submission of the associated restore reports.

RFC 5910

The pamoja SRS will support DNSSEC and therefore will also support this extension from initiation of the registration process. DNSSEC is a mechanism for cryptographically verifying that each delegate zone in the DNS hierarchy has been referred to or is referring to its genuine parent or child zone respectively. Since TLD zone files are generated from authoritative registry data, this extension specifically provides the ability to add elements to the domain-create and domain-update functions and to the domain-info response, allowing registrars to submit associated delegated signer (DS) information of the child zone indicating it is digitally signed and that the parent zone recognizes the indicated key as a valid zone key for the child zone.

SRS General

The pamoja SRS Session Management - pamoja listens on port 700 for client requests.
The pamoja SRS Message Exchange - pamoja complies with the EPP message exchange rules.
The pamoja SRS Data Unit Format - pamoja uses the prescribed packet formats.

25.2 EPP Security:

CoCCA’s SRS performs username-clid-password-zsl certificate checks and also contains application level code to restrict connections to a set of IP addresses for each client and login.

Additional security is provided by firewall IP restrictions that restrict port 700 access to the SRS to trusted IP’s and the use of stateful firewalls and load balancing devices to mitigate DoS attacks or other malicious activity.

25.3 EPP - Demonstrating Capability

CoCCA authors the most widely deployed EPP SRS solution and has a long history of both development of and production experience operating an EPP SRS. The CoCCA MCC currently has 12 TLDs on its production EPP SRS, over 20 TLD managers have deployed the CoCCA EPP solution locally for production use.

In order to demonstrate capability and compliance with the RFC’s in 24.1 and CoCCA’s Extensions in 25.3. Asia Green IT System Bilgayar San. ve Tic. Ltd. Sti. has instructed CoCCA to make available to evaluators an Operational and Testing and Evaluation (OT&E) EPP Interface should they desire to evaluate CoCCA’s RFC compliance. Alternatively, evaluators may download CoCCA’s pamoja SRS, install locally and contact CoCCA for configuration advice.

The URL to download pamoja is https://download.coccaregistry.net. Installers are available for Linux64 (Centos < Ubuntu), OSX (10.6+) and Windows+ servers.

25.3 EPP Extensions

The CoCCA SRS currently provides several extensions to EPP, using the practices defined in RFC-3735. The CoCCA greentext currently defines the following four extensions:

```
<xml>
  <cojuri>urn:ietf:params:xml:ns:host-1.0</cojuri>
  <clientextension>
    <url>urn:ietf:params:xml:ns:rpg-1.0</url>
  </clientextension>
  <exturi>https://cocca-ip-verification-1.1</exturi>
  <exturi>https://cocca-contact-proxy-1.0</exturi>
  <exturi>https://cocca-reseller-1.0</exturi>
</xml>
```

...  

25.3.1 Registry Grace Period Extension

<exturi>urn:ietf:params:xml:ns:rpg-1.0</exturi>

Implement as defined in RFC-3915 - http://www.ietf.org/rfc/rfc3915.txt

25.3.2 Reseller Mapping Extension

<exturi>https://cocca-reseller-1.0</exturi>

Extensions for Domain:Create and Domain:Update

This extension tags a domain as being registered via one of registrars’ resellers. The reseller reference is provided in the reference section, and is recorded against the domain as it is registered or updated. The reseller list must be maintained by the Registrar through the CoCCA Registry web interface.

If a registrar decides to load reseller information and map domains, the .para WHOIS server (port 43 and 443), Historical Abstracts, and Premium WHOIS will display the reseller contact information as well as the Registrar information. If ICANN advises that display of reseller information in the port 43 WHOIS is inconsistent with the response format required in Specification 4, 1.4.2 then CoCCA will disable port 43 and or port 443 display of reseller data for the .para TLD. Reseller information would still be stored and available for Historical Abstracts and users of the CoCCA’s Premium WHOIS service.

"xm version="1.0" encoding="UTF-8"">

<xs:schema targetNamespace="https://production.coccaregistry.net/cocca-reseller-1.0"
25.3.3 Clearinghouse for Intellectual Property Extension

Extension to connect to an external database to validate IP rights.

<extURI>https://.../coccaregistry.net-cocca-ip-verification-1.1</extURI>

Extension for Domain:Create

<xml version="1.0" encoding="UTF-8"/>

<xsd:schema targetNamespace="https://.../cocca-ip-verification-1.1"
xmlns="https://.../coccaregistry.net-cocca-ip-verification-1.1"
xmlns:xsi="http://www.w3.org/2001/XMLSchema"
xmlns:xns="http://www.w3.org/2001/XMLSchema"
xmlns:x="http://www.w3.org/2001/XMLSchema"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:xsns="http://www.w3.org/2001/XMLSchema"
xmlns:xs:element="qualified"
 xmlns:element="extension"
 xmlns:complexType="extension"
 xmlns:element="reference" type="xs:string">
</xsd:schema>
This extension allows registrars to provide proof of their Intellectual Property claim for a name, when registering. It can be used to specify Clearing House for IP codes, or Trademarks. A CHIP request XML is as follows:

```
<extension>
  <coocaip:extension xmlns:coocaip="https://cocaip.org/cocaip-verification-1.1"/>
  <coocaip:chip/>
  <coocaip:code/> XXXXX <coocaip:code/>
  <coocaip:extension/>
</extension>
```

An extension containing trademark information is as follows:

```
<extension>
  <coocaip:extension xmlns:coocaip="https://cocaip.org/cocaip-verification-1.1"/>
  <coocaip:trademarks/>
  <coocaip:chip/>
  <coocaip:registeredMark>Cocaip</coocaip:registeredMark>
  <coocaip:registrationNumber>12345</coocaip:registrationNumber>
  <coocaip:registrationLocality>MS</coocaip:registrationLocality>
  <coocaip:capacity>OWNER</coocaip:capacity>
  <coocaip:companyNumber>1234</coocaip:companyNumber>
  <coocaip:trademark/>
  <coocaip:extension/>
</extension>
```

At the time of application it is not envisioned that this extension will be used for the .pars TLD. However it demonstrates an existing technical capacity to query and synchronize data with external databases in order to validate IP or other rights.

25.3.4 Contact Proxy Extension

```
<extURI>https://app.ote.pars.cocacoregistry.net/cooca-contact-proxy-1.0</extURI>
```

Extension to allow registrars to lodge several sets of contact details for a given domain and select which one is displayed in the port WHOIS.

https://production.cocacoregistry.net/cooca-contact-proxy-1.0 and https://production.cocacoregistry.net/cooca-contact-proxy-create-update-1.0 - extensions for Contact:Create and Contact:Update.

```
<xml version="1.0" encoding="UTF-8">'
```


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ANNEX 18

1.0.xsd

  elementFormDefault="qualified"

  (xs:import namespace="https://production.coccaregistry.net/coccare-contact-proxy-1.0" schemaLocation="cocca-
  contact-proxy-1.0.xsd")

  (xs:annotation)
  (xs:documentation)
  Extensible Provisioning Protocol v1.0
  Extension for creating or updating a contact, with proxy information. This proxy information
  is provided as a WMDIS response, instead of the contact's real information if zone settings
  allow. Proxy information may be specified in full, by providing all the details or by using a
  reference to a previous contact proxy info. If you want to clear a contact's proxy info, send
  an existingProxy type request with an empty reference string.
  (xs:documentation)
  (xs:annotation)

  (xs:element name="extension")
  (xs:complexType)
  (xs:choice)
  (xs:element name="newProxy" type="proxyType")
  (xs:element name="existingProxy")
  (xs:complexType)
  (xs:sequence)
  (xs:element name="reference" type="proxy:referenceType")
  (xs:sequence)
  (xs:complexType)
  (xs:element)
  (xs:choice)
  (xs:complexType)
  (xs:element)

  (xs:complexType name="proxyType")
  (xs:sequence)
  (xs:element name="proxyDetails")
  (xs:complexType)
  (xs:sequence)
  (xs:element name="reference" minOccurs="0" type="proxy:referenceType")
  (xs:annotation)
  (xs:documentation)
  This is an optional field you can use to give this proxy info a particular reference.
  Each reference must be unique, so if you have an existing contact proxy info and
  with this reference value, you will UPDATE that record, changing the proxy info for
  any existing contact referencing that proxy.
  If you don't specify a reference, one will be created for you and returned in the EPP
  response.
  (xs:documentation)
  (xs:annotation)

  (xs:element)
  (xs:element name="email")
  (xs:simpleType)
  (xs:restriction base="xs:token")
  (xs:maxLength value="7255")
  (xs:minLength value="1")
  (xs:restriction)
  (xs:simpleType)
  (xs:element)
  (xs:element name="voice" type="proxy:phoneNumberType")
  (xs:element name="fax" minOccurs="0" type="proxy:phoneNumberType")
  (xs:element name="localAddress" type="proxy:addressType" minOccurs="0")
  (xs:sequence)
  (xs:complexType)
  (xs:element)
  (xs:sequence)
  (xs:complexType)

  (xs:element name="resData")
  (xs:annotation)
  (xs:documentation)
  If a contact is created or updated with contact proxy information specified, or if the registrar
  creating the contact has a default proxy specified, then the reference value identifying the proxy
  is returned in the response, in the extension resData field described here. If the contact was updated
to clear the reference field (i.e. setting the contact's proxy using the existingProxy type, but leaving
the reference field empty) then the reference value will be empty, confirming the update.
  (xs:documentation)
  (xs:annotation)
  (xs:complexType)
  (xs:sequence)
  (xs:element name="reference" type="proxy:referenceType")
This extension allows the association of a contact proxy with a contact.

The contact:create and contact:update extensions can specify an existing proxy contact by ID, or create a new proxy contact. To associate a contact with an existing contact proxy, use this form:

```xml
<extension>
  <proxyupdate:extension xmlns:proxyupdate="https://production.coccaregistry.net/cocca-contact-proxy-create-update" xsi:schemaLocation="https://production.coccaregistry.net/cocca-contact-proxy-create-update.xsd" result="1.0">1.0</proxyupdate:extension>
</extension>
```

where XXXXX is the ID of the proxy contact you wish to use. To create a new contact and associate it with a contact, use this form of the create or update extension:

```xml
<extension>
  <proxyupdate:extension xmlns:proxyupdate="https://production.coccaregistry.net/cocca-contact-proxy-create-update" xsi:schemaLocation="https://production.coccaregistry.net/cocca-contact-proxy-create-update.xsd" result="1.0">1.0</proxyupdate:extension>
</extension>
```

At the time of application it is not envisioned that this extension will be used for the .para TLD.

Other:

In addition to the above statuses, the CoCCA Registry provides additional lifecycle statuses over and above those defined in RFC-5731. The CoCCA Activation statuses are provided using namespace status elements in the Domain:Create and Domain:Info responses, and are accompanied by an RFC-3735 compliant extension section. A Domain:Create response for a newly registered domain would appear as follows:

```xml
<response>
  <ns1:DomainInfo xmlns:ns1="urn:ietf:params:xml:ns:app-1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:ietf:params:xml:ns:app-1.0 app-1.0.xsd" result="1000" code="1000">
    <ns1:DomainInfoResponse>
      <ns1:DomainInfoStatus>ns1:Active</ns1:DomainInfoStatus>
      <ns1:DomainInfoStatusType>ns1:Active</ns1:DomainInfoStatusType>
    </ns1:DomainInfoResponse>
  </ns1:DomainInfo>
</response>
```

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25.4 EPP Access Requirements

1. IP Address white listing (firewall and application layer)
2. Signed registry issued SSL certificates
3. Username-Password

Authentication requires that the IP address the connection is made from be white listed IP, that the entity connecting use a COCCA-issued SSL certificate and that correct clientID and passwords are used. By default, registrars have only GUI access to the SRS. EPP is enabled by request and only after a Registrar has been certified on COCCA’s OPEL platform.

25.5 COCCA GUI Environment

In addition to providing the standard implementation of EPP that runs on Port 700, COCCA also provides a secure web-based Graphical User Interface running on Port 443 that allows Registrars to register and manage domains in their portfolio without connecting by EPP.

25.6 EPP Via the GUI

In cases where a registrar uses the SRS GUI, all domain, host and contact operations supported by the RFC’s are executed by pamoja’s internal EPP engine to ensure that GUI and port 700 EPP interfaces behave identically.

These methods of authentication include:
1. IP Address white listing
2. Using a one-time password (“OTP”) delivered via hardware token, soft token or SMS is issued by COCCA.

25.7 Registrars

A list of registrars that have already successfully integrated and connected to COCCA’s SYD SRS is attached. COCCA’s SYD SRS is used by 200+ Registrars, many of which currently utilize the XML based EPP protocol for the purpose of providing automated services to their clients.

25.8 Resourcing and Continuous Development

COCCA’s software development team and systems administrators support both their own in-house SRS and that of over 23 other TLD managers who have deployed the pamoja SRS software locally on their own infrastructure. Development is on-going and active. The COCCA SRS has been developed over the past 9 years, the bulk of the development on the EPP platform has been completed, however two full time developers are employed by COCCA to customize, maintain and improve the software for the TLD’s that use it.

Because of the co-operative nature of the development process COCCA works closely with over a dozen developers and network engineers employed by users of COCCA’s TLD software to resolve bugs, continuously improve pamoja’s performance and add new features.

26. Whole describe:

• how the applicant will comply with WHOIS specifications for data objects, bulk access, and lookup as defined in Specifications 4 and 10 to the Registry Agreement;
• how the Applicant’s WHOIS service will comply with RFC 3912; and
• resourcing plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).
A complete answer should include, but is not limited to:

- A high-level WHOIS system description;
- Relevant network diagram(s);
- IT and infrastructure resources (e.g., servers, switches, routers and other components);
- Description of interconnectivity with other registry systems; and

Frequency of synchronization between servers.
To be eligible for a score of 2, answers must also include:

- Provision for Searchable WHOIS capabilities; and
- A description of potential forms of abuse of this feature, how these risks will be mitigated, and the basis for these descriptions.

A complete answer is expected to be no more than 5 pages.

CoCCA currently delivers proven, innovative WHOIS and Registration Data Directory Services ("RDDS") technology to the TLDs hosted by CoCCA and to the TLDs that deploy the pamoja SRS on their own infrastructure. CoCCA's Specification Four compliant WHOIS and RDDS technology will be utilized by CoCCA for the .pars TLD. Under CoCCA's SRS Architecture one WHOIS server will answer for all the TLDs in the SRS. Each TLD Sponsor can configure the WHOIS such that it serves different results depending on the wishes of the Asia Green IT System Hilgitaran San. ve Tic. Ltd. Sti. and applicable ICANN requirements.

26.1 WHOIS Architecture and Infrastructure Overview
CoCCA's flexible WHOIS architecture is designed for high availability, complies with RFC 3002 and surpasses the requirements in Specifications 4 and 10. The flexible pamoja WHOIS server may be configured to provide a variety of information, and in a variety of formats that supplements ICANN's proposed "TLD" requirements.

As registrations appear (or are modified) in the registration database, changes are committed to a replicated read only secondary database utilized by CoCCA's WHOIS server. Because the replication is synchronous WHOIS data is presented in real time. If at a future date WHOIS query response times become an SLA issue, WHOIS responses may be cached using "infinite cache" horizontal caching technology, which has been tested and can readily scale to meet future demand, alternately RDDS services may be answered by a SRS instance off-site (one of the CoCCA secondary-follower SRS') for near real-time WHOIS and RDDS.

26.2 Port 43 WHOIS (command line)
CoCCA has confirmed that the format of the domain status, individual and organizational names, address, street, city, state-province, postal code, country, telephone and fax numbers, email addresses can and will be configured to conform to the mappings specified in EPP RFC's 5730-5734. The originating IP address and date time of all WHOIS queries are logged and will be stored for a minimum of 28 days in the production SRS.

GUI configuration and command line flags allow a client to request output in ASCII, Unicode, ASCII and Unicode or HTML output (with tables). For IDN TLDs, a variety of command line WHOIS options have been tested in conjunction with the Arabic TLDs that use the CoCCA SRS. CoCCA supports all the current IETF standards and several developed for current IDN users. CoCCA's SRS can be readily modified should ICANN mandate a particular technology in the future.

26.2.1 Domain Name Data:
* Proposed Production Query format: whois "n - whois.nic. (TLD) domain
* Response format: Currently compliant with Specification 4, Section 1.4.2 (pages 40-41).

26.2.2 Registrar Data:
* Proposed Production query format: whois "n - whois.nicpars registrar
* Response format: Currently compliant with Specification 4, Section 1.5.2 (pages 41-42) -- with the exception of the registrar "WHOIS Server" object (p. 42), under the proposed .pars thick registry model registrars will not operate their own WHOIS servers.

Inclusion of this object seems redundant and may cause confusion regarding the authoritative WHOIS server for the .pars. If required by ICANN the registrar WHOIS object data will be collected and displayed by CoCCA.

26.2.3 Name Server Data:
* Proposed Production Query format: whois "n - whois.nic. (TLD) (Host or IP)
* Response format: Currently compliant with Specification 4, Section 1.6.2 (p. 42)

26.3 Public WHOIS service via a secure port 443 web-based interface:
CoCCA's pamoja software has a publicly accessible port 443 GUI service that allows individuals to query the SRS for registration data for individual domain, registrar or host records.

CoCCA has confirmed that the format of the domain status, individual and organizational names, address, street, city, state-province, postal code, country, telephone and fax numbers, email addresses can and will be configured to conform to the mappings specified in EPP RFC's 5730-5734.

To prevent abuse, CoCCA implements rate limiting via CAPTCHA for each individual transaction. The procedure would follow as per below.

1) An individual would navigate in a browser to https:/whois.nic. (TLD)
2) Click on the appropriate button (Domain, Registrar, or Name Server)
3) Enter the applicable parameters:
    -----domain name, including the TLD (e.g., EXAMPLE.TLD)
    -----Full name of the registrar, including punctuation (e.g., Example Registrar, Inc.)
    -----Full host name or the IP address (e.g., 192.168.1.19 or 192.168.1.19)
4) Enter the CAPTCHA phrase or symbols
5) Click on the Submit button

Possible outcomes from the query:

* If an exact match for the domain, host, or registrar exists in the SRS, the Port 443 WHOIS will display the same information and with the same formatting, as the port 43 WHOIS (see above and Specification 4, Sections 1.4 * 1.6).

* If there is no exact match but a super-ordinate domain exists the SRS data for the super-ordinate name is to be displayed. By way of example if an individual searches for abc.domainspars and abc.domainspars does not exist then the SRS would display the information on domainspars and advise the individual accordingly.

26.4 WHOIS and RDDS | Demonstrating Capability

CoCCA has almost a decade of experience running multiple TLDs and providing WHOIS services. WHOIS and RDDS are integrated into CoCCA’s pamoja software. In order to demonstrate capability and compliance with the Specification Four, Section One, Asia Green IT System Bilgisayar San. vs Tic. Ltd. Sti. has instructed CoCCA to make available an Operational and Testing and Evaluation (OT&E) WHOIS and RDDS interface on request. Alternatively, evaluators may download CoCCA’s pamoja SRS, install locally and contact CoCCA for configuration advice.

The URL to download pamoja is https://downloads.coccoregistry.net. Installers are available for Linux** (Centos - Ubuntu 1), OSX (10.4+) and WIN** servers.

26.5 Network Diagrams

CoCCA’s RDDS services serve data directly from the SRS, there is no separate WHOIS database. If performance becomes and issues pamoja’s RDDS read-only services can be configured to extract data from a replicated copy of the SRS.

Individuals or entities that desire to run multiple queries against the SRS for law enforcement purposes, IP protection or to mitigate cyber-crime need simply subscribe to CoCCA’s Premium RDDS Service and may query the SRS via EPP as well as port 43 and the 443 GUI. Premium RDDS users are granted EPP read-only access (on request) and need not be ICANN Accredited registrars. In many cases EPP may be a better tool for automation of multiple queries than port 43 WHOIS.

The systems supporting WHOIS are fully redundant with hardware and software that can easily scale to meet the Asia Green IT System Bilgisayar San. vs Tic. Ltd. Sti.’s growth projections of the TLD. For comprehensive description of the TYD NOC see question 31 and 32.

The WHOIS server at the CoCCA Data Centre in Sydney currently answers for 12 TLDs and processes on average fewer than 8000 WHOIS requests per hour. The current WHOIS server and database has been tested and can answer in excess of 9,000 TPS as currently configured - network latency may impact real world results depending on the origin of the query.

26.6 Synchronization Frequency Between Servers

CoCCA’s WHOIS architecture is designed to ensure WHOIS data is current, accurate and reliable. CoCCA’s RDDS services serve data directly from the SRS, in the default configuration there is no separate WHOIS database. CoCCA uses PostgreSQL and synchronous replication data is committed to the production SRS master database and a secondary database (read only) server configured to serve WHOIS data, so that at all times the SRS and CoCCAs WHOIS servers serve the same data.

CoCCA streams SRS data off-site asynchronously (and by log file shipping as a failover) to their SRS servers in Palo Alto and Auckland to enable those SRS’s to serve near-real time WHOIS data if the primary SRS experiences an issue that negatively impacts CoCCA’s ability to meet SLA’s for the .para TLD.

If WHOIS caching is required on the .para TLD grows, compliance with the SLA requirements in the ICANN agreement may necessitate that Failover SRS or Escrow SRS answer RDDS queries or that cache servers be deployed, in such a circumstance, the WHOIS response would be near real-time (accurate to within a min or two of the primary SRS).

26.7 Compliance with Specification 4

CoCCA will provide free RDDS Services via both port 43 and a web-based port 443 site in accordance with RFC 3912.

Additionally, the CoCA will also provide fee-based Premium RDDS service described in further detail below. CoCCA and the Asia Green IT System Bilgisayar San. vs Tic. Ltd. Sti. acknowledge that ICANN reserves the right to specify alternative formats and protocols and if such change were to occur CoCCA will implement specification changes as soon as practical.

CoCCA and the Asia Green IT System Bilgisayar San. vs Tic. Ltd. Sti. will provide bulk access of thin RDDS data to ICANN to verify and ensure operational stability of registry services, as well as to facilitate compliance checks on accredited registrars. Access will be provided to ICANN on a weekly basis and the format will be based on section 3 of Specification 4. Further, exceptional access to thin RDDS will be provided to ICANN per Specification 2.

Should ICANN request it CoCCA will provide ICANN with a Premium RDDS login at no charge which will provide them with continuous access to the SRS to extract thin SRS data for the .para at its leisure.

The proposed format of the data objects for domains, name servers , and the registrar output are provided below:

1.4. Domain Name Data:
1.4.1. Query format: whois EXAMPLE.TLD
1.4.2. Response format:
Domain Name: EXAMPLE.TLD
26.8 Supplemental Data
Subject to ICANN Approval, Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. will ensure the SSR is configured to display the following Supplemental RDDS data (objects only displayed if applicable).

Activation Expiry Date: 2011-12-31T11:11:11Z
Activation Date: 2011-12-31T11:11:11Z
Contact Confirmation Expiry Date: 2011-12-31T11:11:11Z
Contact Confirmation Date: 2011-12-31T11:11:11Z
Registration Grace Expiry Date: 2011-12-31
Registration MIN Expiry Date: 2011-12-31
Redemption Expiry Date: 2011-12-31
Purge Date: 2011-12-31
Renewal Grace Expiry Date: 2011-12-31
Transfer Grace Expiry Date: 2011-12-31

Reseller ID: 4261797-ERL
Reseller Name: ACM Reseller A
Reseller Street: 123 RESELLER STREET
Reseller City: RESELLER VILLE
Reseller State-Province: RS
Reseller Postal Code: 12345
Reseller Country: US
Reseller Phone: +1.55555551219
Reseller Phone Ext: 1239
Reseller Fax: +1.5555551219
Reseller Fax Ext: 4329
Reseller Support Email: helpdesk@reseller. (TLD)

26.9 Compliance with Specification 10
COCCA’s WHOIS service will comply and/or exceed the Registration Data Directory Service (RDDS) performance specifications outlined in Specification 10 of the proposed Registry agreement. For the existing TLDs supported by COCCA, all service levels already exceed the Specification 10 Requirements:

* RDDS Availability = 90%
* RDDS Query = 90%
* RDDS Update = 90%

COCCA’s current RDDS availability statistics are available online at http://stats.coccaregistry.net

RDDS Services that are near real time can be provided from the failover or second SSR’s by simply changing the 1st CRAWL for the whois.nic.(TLD) if there are RIA related or loading issues. This has been tested and is being done automatically at any time by COCCA’s monitoring software with near immediate effect (~30 seconds).

26.10 Historical Abstracts
In addition to COCCA’s RDDS services, detailed Historical Abstracts for individual domains are also made readily available to the general public, law enforcement and rights owners.

Historical Abstracts are a compilation of all information available on a domain (including deleted and archived domains) that are held in the registry. This includes the time and date of all changes in contacts, hosts, registrars, resellers, Austin’s as well as all registration, activation, confirmation, renewal, restore or commercial transactions related to the maintenance of domain in the SSR.

A representative sample of a Historical Abstract detailing the full history of a domain is attached.

26.11 Premium RDDS (port 443 and port 700 EPP)
Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti., with the service support of COCCA, intends to offer Boolean partial and exact match search capability of all Domain, Contact, Host, Registrar data in the SSR within the Directory Service via a web interface. This Premium service will be billed at a monthly rate depending on the number of queries.

ICANN’s requirement that thin SSR data be made available in bulk makes it trivial for any entity who has thin data provided by the Centralized Zone Data Access Provider to run automated queries against the .para WHOIS public WHOIS server and extract thick SSR data for all the domains in a zone. COCCA’s Premium RDDS nature access to registration data by IP Owners, Law Enforcement and CIRA’s efficient EPP and GUI and timely (real-time), Premium RDDS does not expose any information that ICANN’s TLD policy does not effectively require Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. to otherwise make publicly available to the public via WHOIS and the services of CIRA Provider.

Because experience has demonstrated that entities often attempt to use the WHOIS for a variety of purposes, rights protection, research etc., and because WHOIS is a rather blunt instrument which does not provide always provide the most useful advice on reserved domains, wildcard string registrations etc. entities with a Premium RDDS Service will, on request, be granted read-only EPP access to retrieve domain information.

In order to make it unnecessary for IP owners or others to continuously query the SSR via EPP or command line WHOIS subscribers to the Premium RDDS may create lists that use regular java expressions and boolean operations that will notify them by email and if applicable EPP polling messages when a domain that matches a given string is registered.

To mitigate abuse of this feature, Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. will implement the
following measures to ensure legitimate authorized users and assure the features is in compliance with any applicable privacy laws or policies:

* Premium RDDS subscribers must agree, as a condition of access to comply with Section 2.1.5 of Specification 4. To monitor that RDDS services are not being abused and used to "support the transmission by e-mail, telephone, or facsimile of mass unsolicited, commercial advertising or solicitations to entities other than user's own existing customers, or [i]i]i enable high volume, automated, electronic processes that send queries or data to the systems of Registry Operator or any ICANN-accredited registrar" CoCCA will need the SRS with unique records and that enable them to track reported abuse back to an individual RDDS subscriber.

* Because this is only offered as a premium and paid service, the request must follow the CoCCA application process to confirm the user identification and process the financial transaction. Thus, the typical end-user will not have access to this service.

* All GUI searches are conducted via authenticated user access using a combination of username and password and OTP tokens.

* CoCCA will monitor for out of band usage patterns of the Premium RDDS service and take appropriate action if policy thresholds are exceeded.

26.12 Zone File Access

Subscribers to the Premium RDDS may download .par.s zone files via the port 43 GUI up to six (6) times in any 24 hour period.

CoCCA will comply all the requirements set out in Specification 4, Sections 2.1-2.1.7. Specifically, CoCCA will operate a dedicated server supporting FTP, and other data transport access protocols in a manner specified by ICANN and the Centralized Zone Data Access Provider.

26.13 Resource Plans

The .par.s TLD will be added to CoCCA's SRS at their primary data center in Sydney which currently supports the features noted above.

The Asia Green IT System Biliyayar San. ve Tic. Ltd. Sti. will dedicate 2 professionals to coordinate the operation of the .par.s TLD. At the same time, the technical professionals at CoCCA will be supporting the vast majority of the technical aspects of operating the .par.s TLD.

27. Registration Life Cycle: provide a detailed description of the proposed registration lifecycle for domain names in the proposed gTLD. The description must:

* explain the various registration states as well as the criteria and procedures that are used to change state;
* describe the typical registration lifecycle of create/update/delete and all intervening steps such as pending, locked, expired, and transferred that may apply;
* clearly explain any time elements that are involved - for instance details of add-grace or redemption grace periods, or notice periods for renewals or transfers; and
* describe resource plans for this aspect of the criteria (number and description of personnel roles allocated to this area).

The description of the registration lifecycle should be supplemented by the inclusion of a state diagram, which captures definitions, explanations of trigger points, and transitions from state to state. If applicable, provide definitions for aspects of the registration lifecycle that are not covered by standard EPP RFCs. A complete answer is expected to be no more than 5 pages.

Asia Green IT System Biliyayar San. ve Tic. Ltd. Sti. will adopt the CoCCA harmonized life cycle currently adopted by a dozen ccTLDs. The .par.s life-cycle described below builds on the CoCCA technology and policy launched in November 2011 that sought to increase the accuracy of WHOIS data, minimize harm and increase consumer trust in TLDs. The life-cycle for the .par.s TLD builds on the traditional gTLD life-cycle by adding direct Registrant-Registry interaction.

The proposed .par.s life-cycle ensures key elements of the .par.s TLD abuse prevention and mitigation framework are adhered to by delaying mapping of the Registrant's desired NS delegation information until the registrant has Activated a domain. All .par.s registrations are provisional until Activated. Activation requires that the registrant confirm (with CoCCA) the accuracy of the contact information lodged by the registrant and agrees to the .par.s Registrant Agreement (RAI), AUP and Privacy RDDS Policy.

Activation takes place via automated processes that store the time; date and IP address of the Activation as part of the domains history. Registrants will also be required to confirm (with CoCCA) the accuracy of the contact details and agreement with the .par.s RA, AUP and Privacy RDDS Policy at a) the time of renewal, b) on transfer and c) on the anniversary of registration. The following Life-Cycle describes the CoCCA SRS EPP and WHOIS behavior at various stages in the Life-Cycle.

27.1 Registration | Initial Registration

Not Registered

SRS EPP domain:check response

("xml version="1.0" encoding="UTF-8" standalone="no""")


 xsi:schemaLocation="urn:ietf:params:xml:ns:epp-1.0 epp-1.0.xsd">

(response)
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```
{result code="1000"}
{msg} Command completed successfully {/msg}
{/result}
{msgQ count="309" id="21153"} {/msgQ}
{resultData}
(domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0" xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd")
(domain:cd)
{domain:name avail="0" profileÜN.example {/domain:name}
{/domain:cd}
{/domain:chkData}
{/resultData}
{trID}
{clTRID} 1333577879410 {/clTRID}
{svTRID} 1333577879414 {/svTRID}
{/trID}
{/response}
{/app}
SRS WHOIS response
$ whois no-exist.example
Domain Name: no-exist.example
Domain Status: Available

TERMS OF USE: (Legal Notice)


Note if a string cannot be registered for policy reasons the following the SRS will return the following. EPP domain:check Status

{xml version="1.0" encoding="UTF-8" standalone="no">
{response}
{result code="1000"}
{msg} Command completed successfully {/msg}
{/result}
{msgQ count="309" id="21153"} {/msgQ}
{resultData}
(domain:chkData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0" xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd")
(domain:cd)
{domain:name avail="0" profileÜN.example {/domain:name}
{domain:reason} Registry policy {/domain:reason}
{domain:cd}
{/domain:chkData}
{/resultData}
{trID}
{clTRID} 1333575251168 {/clTRID}
{svTRID} 1333575251168 {/svTRID}
{/trID}
{/response}
{/app}

WHOIS Status Display

$ whois profilenity.example
Domain Name: profilenity.example
Domain Status: Not Registered
NOTES: This name is not allowed by the policy of this registry, and cannot be registered


----------------------------------------
Registered I Status "Pending Activation"

The Activation and Confirmation requirements run in parallel to Grace, WIM, Pending Delete, Pending Purge and other SRS states. As soon the application is lodged via the SRS EPP and WHOIS servers will return the following.

EPP domain:info Status

{xml version="1.0" encoding="UTF-8" standalone="no">
{response}
{result code="1000"}
{msg} Command completed successfully {/msg}
{/result}
{msgQ count="309" id="21153"} {/msgQ}
{resultData}
(domain:infData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0" xsi:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd")
```

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A provisional application may be activated by the Registrant or Administrative Contact at any time during the first 28 days after the registration request is lodged in the SRS. On the 29th day after registration if a domain has not already been deleted by the Registrar, Asia Green IT System Biligayar Gan. ve Tlc. Ltd. Sti. deems the application to have been withdrawn by the registrant and the status is changed to "Pending Purge - Restore Not Possible".

```
(xml version="1.0" encoding="UTF-8" standalone="no")
(app xmlns="urn:o:psap:params:xml:ns:app-1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="urn:o:psap:params:xml:ns:app-1.0 app-1.0.xsd")

(response)
(result code="2303")
(msg) Object does not exist (-msg)
(-result)
(trID)
<cTRID> TR-2 </cTRID>
<evTRID> 1333584255410 </evTRID>
(-trID)
(-response)
(-app)
```

EPP domain:check Status

```
(xml version="1.0" encoding="UTF-8" standalone="no")
(app xmlns="urn:o:psap:params:xml:ns:app-1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xsi:schemaLocation="urn:o:psap:params:xml:ns:app-1.0 app-1.0.xsd")

(response)
(result code="1000")
(msg) Command completed successfully (-msg)
(-result)
<msgQ count="309" id="21153"/>
(resData)
(domain:chkData xmlns:domain="urn:o:psap:params:xml:ns:domain-1.0"
 xsi:schemaLocation="urn:o:psap:params:xml:ns:domain-1.0 domain-1.0.xsd")
(domin:cd)
(domain:name avail="0") purge.example (-domain:cd)
(-domain:cd)
(-domain:chkData)
(-resData)
<trID>
<cTRID> 1333584255410 </cTRID>
<evTRID> 1333584255410 </evTRID>
(-trID)
(-response)
(-app)
```

WHOIS Status Display (Domain Status: Excluded - Pending Purge). The Registrant and their Registrar are sent an email and EPP polling message indicating the status change.

On the 31st day after registration, a domain that has not been activated is purged from the SRS and instantly available for registration. Registrars are sent a polling message and email informing them that the domain application has been rejected and the domain has been deleted.

27.1.4 Commercial Considerations:

Funds are debited from the Registrars account instantly and refunded in full after 31 days if a domain is not activated and where Asia Green IT System Biligayar Gan. ve Tlc. Ltd. Sti. has deemed the application to register to have been withdrawn. Names that are not activated are not delegated in accordance with the Registrants wishes and cannot be used for caching.

27.2 Registered Activated

Once activated the EPP Domain:info Status is automatically changed to "Active - Delegated" and the WHOIS display to "Active - Delegated".

Unless ICMN objects, the WHOIS server (port 43 and 443) and EPP Domain:info query will also display the following values - after display of the values required in the EPP RFC's and in Specification 4 Section 1.4.

- Activation Date: 2011-12-31T11:11:11Z
- Contact Confirmation Date: 2011-12-31T11:11:11Z
- Registration Grace Expiry Date: [Activation Date: 2011-12-31T11:11:11Z]
- Note: [Grace Period expires as soon as a name is activated]
- Registration MFA Expiry Date: 2011-12-31

27.3 Registration Grace

A one (1) day Grace period applies to all registrations. Provisional (pending activation) registrations. If a name is activated the Grace Period is instantly expired. This policy effectively mitigates the prospect of abuse of the .para TLD or CoCCA's SRS for domain tainting, kiting or other similar activity, while allowing a registrar 24 hours to reverse a registration that included a typographical error or was found to be fraudulent without incurring a commercial penalty.

EPP domain:info Status

```
(xml version="1.0" encoding="UTF-8" standalone="no")
```
WHOIS Status Display

Unless ICANN objects, the WHOIS server (port 43 and 443) and EPP Domain:info query will also display the following values - after display of the values required in the EPP RFC's and in Specification 4 Section 1.4.

- Activation Expiry Date: 2011-12-31T11:11:11Z
- Contact Confirmation Expiry Date: 2011-12-31T11:11:11Z
- Registration Grace Expiry Date: 2011-12-31T11:11:11Z
- Registration MIN Expiry Date: 2011-12-31T11:11:11Z

27.3.1 Registration Grace | Behavior
Domains deleted during Grace do NOT go into redemption and are instantly available. Domains may NOT be transferred during GRACE. The Domain Status shown in a WHOIS and EPP query during grace is "clientTransferProhibited".

27.3.2 Registration grace | Commercial Considerations
A full refund equal to 100% of the registration value is applied to a registrars account for domains that are not activated in the first 24 hours. If a domain is activated in the first 24 hours then deleted it is considered to have been deleted during the "MIN" period as Grace expires on Activation. See Section 28 below for explanation of "MIN".

27.4 MIN Period
The MIN period is a life-cycle element that is probably unique to the COCCA SRS - and mostly commercial in nature. The MIN period for the .pars is 14 days, the MIN period starts when a name is registered.

Unless ICANN objects, the WHOIS server (port 43 and 443) and EPP Domain:info query will also display the following value - after display of the values required in the EPP RFC's and in Specification 4 Section 1.4.

- Registration MIN Expiry Date: 2011-12-31T11:11:11Z

27.4.1 Registration MIN | Behavior
Domains deleted by a registrar during the MIN period do NOT go into redemption. Domains may not be transferred during MIN. (The Domain Status shown in a WHOIS and EPP query is "clientTransferProhibited"). An EPP polling message is sent when the MIN period expires.

27.4.2 Registration MIN | Commercial Considerations
Since the Grace period is only one day - and only for domains that are not activated. Asia Green IT System Bilipiyavar Sdn. Bhd. and Sdn. Bhd. will give registrars a partial refund (80% of the annual registration fee) for Activated names that are deleted in the first 14 days after registration.

27.5 Renewal
Under the .pars TLD RA registrants are required to confirm the accuracy of the contact details and accept the .pars TLD RA, AUP and Privacy Policy with the registry within 28 days of renewal of the domain is suspended until such time as the RA is accepted and contact details confirmed.

27.6 Expiry
The SRS supports "registrar configurable auto renew", registrars may custom configure the auto-renew behavior...
via CoCCA's GUI. Some registrars may wish to auto renew domains on expiry while others may not. If a registrar has configured auto renew the SRS, and they have available credit, the SRS will renew the domain for the period selected by the registrar (up to the maximum allowable) on the day it expires. If a name expires the following apply.

Unless ICANN objects, the SRS will automatically update the domain record so that a query of the WHOIS server (port 43 and 443) or EPP Domain: info query will also display the following values - after display of the values required in the EPP RFC's and in Specification 4 Section 1.4.

> Contact Confirmation Expiry Date: 2011-12-31T11:11:11Z
> Renewal Grace Expiry Date: 2011-12-31T11:11:11Z

27.6.1 Expiry Grace | Suspension
On Expiry a domain automatically enters a seven day Expiry Grace period in which the domain is Suspended by the SRS and parked on a Asia Green IT System BIGisayer Gen. ve Tic. Ltd. Sti. parking page.

("xml version=""1.0"" encoding="UTF-8" standalone="no""
<app name="urn:ietf:params:xml:ns:app-1.0" xmlns:si="http://www.w3.org/2001/XMLSchema-instance"
xmlns:schemaLocation="urn:ietf:params:xml:ns:app-1.0 app-1.0.xsd">
<response>
(result code="1000")
<msg>Command completed successfully</msg>
</result>
<msg count="354" id="21153"></msg>
</response>
</domaint:infoData xmlns:domain="urn:ietf:params:xml:ns:domain-1.0"
xmlns:xml:schemaLocation="urn:ietf:params:xml:ns:domain-1.0 domain-1.0.xsd">
<domain:infoData domain: EXPIRED=1 domain: EXPIRED-TIME=0 domain:EXPIRED-TIME=0)
<domain:name>example.com</domain:name>
</domain:infoData>
</response>
</domaint:infoData>
</extension>
</extension>
</response>
</app>

An expired and suspended name is not locked and may be renewed without a restore fee in the first seven (7) days after expiration. Suspended domains may NOT be transferred.

27.6.2 Expiry | Pending Delete - Restorable (Redemption)
On the eighth day after expiration the SRS will change the domain's Status to "Pending Delete Restorable" for a period of 28 days. Suspended and Pending Delete domains may NOT be transferred. At any point between after day seven (7) and before day 29 a registrar may Restore a domain via EPP [RFC-3915] after restoration a domain must be renewed.

The SRS will automatically update the domain record so that a query of the WHOIS or EPP will also display the following values.

> Redemption Expiry Date: 2011-12-31
> Purge Date: 2011-12-31

27.6.3 Expiry | Pending Purge (No longer Restorable)
On the 29th day after expiration the SRS will change the status of the domain to "Pending - Purge" and apply a registry lock. The WHOIS status and EPP Domain: info query would be displayed as Pending Purge. The domain would stay in this state for seven (7) days until purged from the SRS 35 days after Expiry. Once purged it is available - subject to any restrictions or policies in effect at the time.

See Attached Life - Cycle Diagram

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28. Abuse Prevention and Mitigation: Applicants should describe the proposed policies and procedures to minimize abusive registrations and other activities that have a negative impact on Internet users. A complete answer should include, but is not limited to:

- An implementation plan to establish and publish on its website a single abuse point of contact responsible for addressing matters requiring expedited attention and providing a timely response to abuse complaints concerning all names registered in the TLD through all registrars of record, including those involving a referral;
- Policies for handling complaints regarding abuse;
- Proposed measures for removal of orphan glue records for names removed from the zone when provided with evidence in written form that the glue is present in connection with malicious conduct (see Specification 6); and
- Reassurance plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).

To be eligible for a score of 2, answers must include measures to promote WHOIS accuracy as well as measures from one other area as described below.

- Measures to promote WHOIS accuracy (can be undertaken by the registry directly or by registrars via requirements in the Registry-Registrar Agreement (RRA)) may include, but are not limited to:
  - Authentication of registrant information as complete and accurate at time of registration. Measures to accomplish this could include performing background checks, verifying all contact information of principals mentioned in registration data, reviewing proof of establishment documentation, and other means;
  - Regular monitoring of registration data for accuracy and completeness, employing authentication methods, and establishing policies and procedures to address domain names with inaccurate or incomplete WHOIS data; and
  - If relying on registrars to enforce measures, establishing policies and procedures to ensure compliance, which may include audits, financial incentives, penalties, or other means. Note that the requirements of the RAA will continue to apply to all ICANN-accredited registrars.

- A description of policies and procedures that define malicious or abusive behavior, capture metrics, and establish Service Level Requirements for resolution, including service levels for responding to law enforcement requests. This may include rapid takedown or suspension systems and sharing information regarding malicious or abusive behavior with industry partners;

- Adequate controls to ensure proper access to domain functions (can be undertaken by the registry directly or by registrars via requirements in the Registry-Registrar Agreement (RRA)) may include, but are not limited to:
  - Requiring multifactor authentication (i.e., strong passwords, tokens, one-time passwords) from registrants to process updates, transfers, and deletion requests;
  - Requiring multiple, unique points of contact to request and approve update, transfer, and deletion requests; and
  - Requiring the notification of multiple, unique points of contact when a domain has been updated, transferred, or deleted.

A complete answer is expected to be no more than 20 pages.

28.1 Policy Matrix

Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. has chosen to adopt CoCCA’s tested acceptable use-based policy matrix, recommendations for minimizing harm in TLDs, and subject the .pars TLD to the CoCCA Complaint Resolution Service (“CRS”). Any individual who has a concern regarding abuse involving a .pars domain, glue record, or the CoCCA PCH or ISC™ network services as they relate to .pars needs to lodge a complaint via the CRS. CoCCA’s policy regarding glue records is quite simple, Registrars cannot create or use a host if the upper-ordinate domain does not exist. When a domain is purged from the SRS CoCCA automatically deletes any glue records. All other glue record related issues can be dealt with via the CRS.

The CoCCA Best practice policy matrix has been developed over a decade and has currently been adopted by 16 TLDs. It was developed for (and by cTLDs managers that desired to operate an efficient standards-based SRS system complemented by a policy environment that addressed a registrants use of a string as well as the more traditional gTLD emphasis rights to string.

A key element of CoCCA’s policy matrix is that it provides for registry-level suspensions where there is evidence of AUP violations. The .pars TLD will join other TLDs that utilize the CoCCA’s single-deck CRS. The CRS provides a framework for the public, law enforcement, regulatory bodies and intellectual property owners to swiftly address concerns regarding the use of .pars domains, and the CoCCA network. The AUP can be used to address concerns regarding a domain or any other resource record that appears in the .pars zone.

The CRS procedure provides an effective alternative to the court system while allowing for Complaints against domains to be handled in a way treats each complaint in a fair and equal manner and allows for all affected parties to present evidence and arguments in a constructive forum.

In certain cases, it may be necessary for the CRS to trigger a Critical Issue Suspension, which suspends service of a domain, or removes a host record, when there is a compelling and demonstrable threat to the stability of the Internet, critical infrastructure or public safety. The intent of any CIS is to minimize any abuse that may occur in a timely manner. Any CIS may be appealed through the CoCCA ombudsman’s Amicable Complaint Resolution Service.

28.1 Contractual Framework

Under the proposed framework Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. will bind registrants to a .pars TLD Registrant Agreement (“RA”). This RA is a collateral agreement that supersedes any Registrar - Registrant agreement and binds all Registrants to the .pars AUP, Privacy and WHOIS policy, CoCCA CRS and any other requirements or dispute mechanisms mandated by ICANN.

The draft .pars AUP follows below in sections 28.4. The RA and WHOIS and Privacy Policy may be viewed at http://coccaregistry.net/pars-policy

28.2 Minimizing Harm, Pro-active Measures

Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. will adopt the following five (5) key provisions of CoCCA’s already field – tested policies and technology aimed at preventing and mitigating abuse.

28.2.1 "Trust but Verify" Applicants for .pars registrations must confirm to the registry that they agree to be bound by the registrant agreement and confirm the accuracy of contact details lodged by the Registrar with the registry. Until the Registrar or Administrative contact confirm their contact details with the Registry directly, and view accept the Registrant Agreement .pars domain are excluded from the zone. See Life-Cycle Policy.

Automated Activation processes are already in place for 12 TLD currently using the CoCCA SRS. The process involves direct registry - registrant communication using email details provided to the registry by the
Registrar. An automated email is sent to the Registrar and Admin contact that contains a link. The recipient must click on the link where they are directed to a web page that 1) displays the contact information the Registrar provided, 2) displays the .par RA and AUP policy.

All responses (positive or negative) are logged against the domains permanent history in the SRS and the time: date IP address stored.

The process also allows the registry the opportunity to independently verify the accuracy of contact data supplied by the registrar, or at least that there is a functioning email - improving WHOIS accuracy. The SRS uses dynamically generated images as a challenge-response verification to prevent automated processes activating domains and to directly collect and store additional identifying information about individuals Activating a domain, which can be utilized to control fraud or investigate cyber crimes.

Although registrars are required to advise registrants of the TLD policies and conditions, with the prevalence of highly automated registration systems and expansive reseller networks it cannot be guaranteed that registrants have reviewed or agreed to the policy.

The registrar or administrative contact must confirm the accuracy of the WHOIS data on not only on Registration but also the anniversary of Registration and Renewal. On any change of Registrar or Transfer the new Registrar must also agree to the RA and AUP directly with the Registry before the changes to the contacts are committed in the registry.

These procedures and the underlying technology are in use now and undergoing constant refinement in response to Registrar and Registrant suggestions.

28.2.2 Registrants' rights to a limited license

The .par RA and AUP limit a registrants' rights to a limited license to use but not to sub-lease the use of any portion of the allocated SLD, subject to continuing compliance with all policies in place during that time. Registrants must warrant they will not assign the licence or sub-lease any sub-domain without:

(a) securing the sub-licensees agreement to the RA, AUP and all other applicable policies; and
(b) obtaining the registry's consent in writing.

Rationale: It has occurred that registrants have registered a second level domain in order to set up what amounts to a third level registry, effectively sub-licensing to third parties the use of portions of their allocated second level domain. Most abuse seems to occur in lower level domains created by Registrants or third parties.

The .par TLD policy is recursive, however combating abusive activity in a TLD is complicated if the registry has no information as to the user of the subordinate domain or any way to suspend a single domain created by a registrant at a subordinate level.

28.2.3 Fast flux mitigation

Fast flux mitigation - queue for manual intervention by SRS admins all DNS delegation modifications that exceed four (4) requests in any 28 day period or three (3) in a one week period.

Rationale: This minimises a registrant's ability to frequently redelegate a domain, in order to overcome service limitations imposed by Internet service providers. Frequent redelegation may also assist a malicious user to obscure their identity. Limiting frequent redelegations enhances the effectiveness of service termination as a sanction by an Internet service provider.

28.2.4 Anycast Resiliency

A denial of service attack from, say, a single ISP will usually only affect a single node. All other nodes in the world will not notice anything about the attack and the rest of the Internet will thus not notice it either. A local attack is therefore only affecting the local neighborhood. Distributed denial of service attacks usually affects a few nodes only, but because the attack is spread out between nodes, so is the amount of traffic flowing to each node. With 80+ nodes and two Anycast networks, the .par TLD is well protected against abuse targeting the .par DNS resolvers.

28.2.5 High Risk Strings

Asia Green IT System Bilgayar San. ve Tic. Ltd. Sti. will require manual intervention by the registry operator to check the list of high-risk strings. The list is maintained by the registry and will be updated as necessary to include new strings.

28.2.6 Asia Green IT System Bilgayar San. ve Tic. Ltd. Sti. CERT Law Enforcement Collaboration

Asia Green IT System Bilgayar San. ve Tic. Ltd. Sti. will provide CERT, Law Enforcement and other interested parties direct feed - only Access to the SRS on application for research and other activities related to identifies and mitigates abuse. The CoCCA already provides direct access to the Australian Government CERT.

The CoCCA SRS contains a variety of login types with various permissions, one such type is "Cert Law Enforcement" which allows GUI - based query as well as EPP and Zone Access.

28.3 COCCA Complaint Resolution Service

The Complaint Resolution Service ("CRS") provides a transparent, efficient and cost effective way for the public, law enforcement, regulatory bodies and intellectual property owners to have their concern addressed regarding use of a TLD managers network or SRS services. The CRS provides a single framework in which cybercrime, accessibility of prohibited Internet content and abuse of intellectual property rights are addressed. The framework relies on three tiers of review: Immediate action to protect the public interest, amicable complaint resolution led by an independent ombudsman, and where applicable, adjudication by an expert. The CRS provides an efficient and swift alternative to the Courts.

All complaints made against a domain to CoCCA are referred through the CRS protocol. When a complaint is filed, a CoCCA Complaints Officer (CCO) ensures that it meets the necessary criteria. If it does, notice is sent to involved parties and CRS Proceedings begin. If a Registrant responds to the complaint, it may be referred to an Ombudsman for Amicable Complaint Resolution (ACR). If ACR does not achieve acceptable resolution, binding arbitration by an Expert be requested by the Complainant.

In cases, a Critical Issue Suspension (CIS) may become necessary. If a CIS has been determined to be necessary, the domain, or other resource record in a zone will be disabled until a resolution is found using the
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28. Acceptable use policy

INTRODUCTION

AGITSys supports the free flow of information and ideas over the Internet. AGITSys does not exercise editorial control over the content of any message or web site made accessible by domain name resolution services in the .PARS TLD.

AGITSys may discontinue, suspend, or modify the services provided to the registrant of a .PARS Domain name for example, through modification of .PARS zone files, to address alleged violations of this AUP (described further below). AGITSys may determine in its sole discretion whether use of the AGITSys network or a .PARS Domain name is prima facie violation of this AUP. AGITSys or affected parties may utilize the AGITSys AUP CRS and/or the courts in the jurisdiction and venue specified in the Registrant Agreement to resolve disputes over interpretation and implementation of this AUP, as described more fully in the AGITSys AUP CRS.

Users of the AGITSys Network are obliged and required to ensure that their use of a .PARS Domain name or the AGITSys Network is at all times lawful and in accordance with the requirements of this AUP and applicable laws and regulations of Turkey.

This AUP should be read in conjunction with the AGITSys Registrant Agreement, Complaint Resolution Policy, Privacy Policy, Acceptable Use Policy, and other applicable agreements, policies, laws and regulations. By way of example, and without limitation, the Registrant Agreement sets forth representations and warranties and other terms and conditions, breach of which may constitute non-compliance with this AUP.

PROHIBITED USE

A "Prohibited use" of the AGITSys Network or a .PARS Domain name is a use which is expressly prohibited by provisions of this AUP. The non-exhaustive list of restrictions pertaining to use of the AGITSys Network and .PARS Domain names in relation to various purposes and activities is as follows. Registration of one or more .PARS Domain names or access to services provided by AGITSys may be cancelled or suspended for any breach of, or non-compliance with this AUP:

1. COMPLIANCE WITH AGITSys AUP

1.1 The AGITSys Network and .PARS Domain names must be used for lawful purposes and comply with this AUP. The creation, transmission, distribution, storage of, or linking to any material in violation of applicable law or regulation or this AUP is prohibited. This may include, but is not limited to, the following:

(1.1.1) Communication, publication or distribution of material (including through links or framing) that infringes upon the intellectual and/or industrial property rights of another person, intellectual and/or industrial property rights that is obscene, but are not limited to: copyrights (including future copyright), design rights, patents, patent applications, trademarks, rights of personality, and trade secret information.

(1.2) Communication, publication or distribution of material (including through links or framing) that denigrates the Persian Language, Culture and History:

(1.3) Registration or use of a .PARS Domain name in circumstances in which, in the sole discretion of the AGITSys:

(1.3.a) The .PARS Domain name is identical or confusingly similar to a personal name, a company, trademark or other legal or trading name as registered with the relevant Turkish agency, or a trade or service mark in which a third party complainant has contested rights, including without limitation in circumstances in which:

(1.3.a.1) The use deceives or confuses others in relation to goods or services for which a trade mark is registered in Turkey, or in respect of similar goods or closely related services, against the wishes of the registered proprietor of the trade mark or

(1.3.a.2) The use deceives or confuses others in relation to goods or services in respect of which an unregistered trade mark or service mark has become distinctive of the goods or services of a third party complainant, against the wishes of the third party complainant.

(1.3.a.3) The use trade on or parades off a .PARS Domain name or a website or any content or services accessible through resolution of a .PARS Domain name or in a manner which is misleading, authorized, associated or affiliated with the established business, name or reputation of another;

(1.3.a.4) The use constitutes intentionally misleading or deceptive conduct in breach of AGITSys policy, or the laws of Turkey; or

(1.3.b) The .PARS Domain name has been used in bad faith, including without limitation the following:

(1.3.b.1) The User has used the .PARS Domain name primarily for the purpose of unlawfully disrupting the business or activities of another person;

(1.3.b.2) By using the .PARS Domain name, the User has intentionally created a likelihood of confusion with the third party complainant's intellectual or industrial property rights and the source, sponsorship, affiliation, or endorsement of websites, email, or other online locations or services or of a product or service Nicole described or linked to the Domain name;

(1.3.b.3) For the purpose of selling, renting or otherwise transferring the Domain name to an entity or to a commercial competitor of an entity, for valuable consideration in excess of a User's documented out-of-pocket costs paid directly or indirectly acquiring the Domain name;

(1.3.b.4) As a blocking registration against a name or mark in which a third party has superior intellectual or industrial property rights.

(1.4) .PARS Domain name registration which is part of a pattern of registrations where the User has registered domain names which correspond to well-known names or trademarks in which the User has no apparent rights, and the .PARS Domain name is part of that pattern;

(1.5) The .PARS Domain name was registered arising out of a relationship between two parties, and it was mutually agreed, as evidenced in writing, that the Registrant would be an entity other than that currently in the register.

(1.6) Unlawful communication, publication or distribution of information and trade secrets.

(1.7) Publication or distribution of content which, in the opinion of the AGITSys:

(1.7.a) is capable of disruption of systems in use by other Internet users or service providers (e.g. viruses or malware);

(1.7.b) seems or apparently seeks authentication or login details used by operators of other Internet sites (e.g. phishing); or

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(1.7.c) May mislead or deceive visitors to the site that the site has an affiliation with the operator of another Internet site (e.g. phishing).
(1.8) Communication, publication or distribution, either directly or by way of embedded links, of images or materials (including, but not limited to pornographic material and images or materials that a reasonable person as a member of the community of Turkey would consider to be obscene or indecent) where such communication, publication or distribution constitutes an offence under the laws of Turkey, whether incorporated directly into or linked from a web site, email, posting to a news group, internet forum, instant messaging notice which makes use of domain name resolution services in the .TLD.
(1.9) Material that a reasonable member of the community of Turkey would consider pornographic, indecent, and/or obscene or which is otherwise prohibited includes, by way of example and without limitation, real or manipulated images depicting child pornography, bestiality, excessively violent or sexually violent material, sexual activity, and material containing detailed instructions regarding how to commit a crime, an act of violence, or how to prepare and/or use illegal drugs.
(1.10) Communication, publication or distribution of defamatory material or material that constitutes racial vilification.
(1.11) Communication, publication or distribution of material that constitutes an illegal threat or encourages conduct that may constitute a criminal offence.
(1.12) Use, communication, publication or distribution of material that is in contempt of the orders of a court or another authoritative government actor within Turkey.
(1.13) Use, communication, publication or distribution of confidential or personal information or data including confidential or personal information about persons that collected without their knowledge or consent.
2. ELECTRONIC MAIL
(2.1) AGITSys expressly prohibits Users of the AGITSys Network from engaging in the following activities:
(2.1.1) Communicating, transmitting or sending unsolicited bulk e-mail messages or other electronic communications ('junk mail' or 'spam') of any kind including, but not limited to, unsolicited commercial advertising, promotional announcements, political or religious tracts. Such messages or material may be sent only to those who have expressly requested it. If a recipient asks a User to stop sending such e-mails, then any further e-mail messages or other electronic communications would in such event constitute spam and violate the provisions and requirements of this AUP.
(2.1.2) Communicating, transmitting or sending any material by e-mail or otherwise that harasses, another person or that threatens or encourages bodily harm or destruction of property including, but not limited to, malicious e-mail and flooding a User, site, or server with very large or numerous pieces of e-mail or illegitimate service requests.
(2.1.3) Communicating, transmitting, sending, creating, or forwarding fraudulent offers to sell or buy products, unsolicited offers of employment, messages about "make-money-fast", "pyramid" or "Ponzi" type schemes or similar schemes, and "chain letters" whether or not the recipient wishes to receive such messages.
(2.1.4) Adding, removing, modifying or forging AGITSys Network or other network header information with the effect of misleading or deceiving another person or attempting to impersonate another person by using forged headers or other identifying information ("spoofing").
(2.1.5) Causing or permitting the advertisement of a .TLD Domain name in an unsolicited email communication.
3. DISRUPTION OF AGITSys NETWORK
3.1 No-one may use the AGITSys Network or a .TLD Domain name for the purpose of:
(3.1.1) Restricting or inhibiting any person in their use or enjoyment of the AGITSys Network or a .TLD Domain name or any service or product of AGITSys.
(3.1.2) Actually or purportedly reselling AGITSys services and products without the prior written consent of AGITSys.
(3.1.3) Transmitting any communications or activity, which may involve deceptive marketing practices such as the fraudulent offering of products, items, services or to any other party.
(3.1.4) Providing false or misleading information to AGITSys or to any other party through the AGITSys Network.
(3.1.5) Facilitating or aiding the transmission of confidential information, private, or stolen data such as credit card information (without the owner's or cardholder's consent).
4. NETWORK INTEGRITY AND SECURITY
4.1 Users are prohibited from circumventing or attempting to circumvent the security of any host, network or network accounts ("cracking" or "hacking") on, related to, or accessed through the AGITSys Network. This includes, but is not limited to:
(4.1.1) Accessing data not intended for such user;
(4.1.2) Logging into a server or account which such user is not expressly authorized to access;
(4.1.3) Using, attempting to use, or attempting to ascertain a username or password without the express written consent of the operator of the service in relation to which the username or password is intended to function;
(4.1.4) Probing the security of other networks;
(4.1.5) Executing any form of network monitoring which is likely to intercept data not intended for such user.
4.2 Users are prohibited from using any network security breach or disruption of any Internet communications including, but not limited to:
(4.2.1) Accessing data of which such User is not an intended recipient; or
(4.2.2) Logging onto a server or account, which such User is not expressly authorized to access.
For the purposes of this section 4.2, "disruption" includes, but is not limited to: port scans, TCP/UDP floods, packet spoofing; forged routing information; distributed attempts to overload or disrupt a service or host; using the AGITSys Network in connection with the use of any program, script, command, or sending messages with the intention or likelihood of interfering with another user's terminal session by any means, locally or by the Internet.
4.3 Users who compromise or disrupt AGITSys Network systems or security may incur criminal or civil liability, AGITSys will investigate any such incidents and will cooperate with law enforcement agencies if a crime is suspected to have taken place.
5. NON-EXCLUSIVE, NON-EXHAUSTIVE
This AUP is intended to provide guidance as to what constitutes acceptable use of the AGITSys Network and of .TLD Domain names. However, the AUP is neither exhaustive nor exclusive.
6. COMPLAINTS
Persons who wish to notify AGITSys of abusive conduct in violation of this AUP may report the same pursuant to the AGITSys Acceptable Use Policy Enforcement Procedure, which is instituted by submitting to AGITSys a
completed AGITSy's Acceptable Use Policy Violation Complaint Form.

7. ENFORCEMENT
AGITSy may, in its sole discretion, suspend or terminate a User's service for violation of any of the requirements or provisions of the AUP on receipt of a complaint if AGITSy believes:
(1.1.a) a violation of the AUP has or may have occurred; or
(1.1.b) suspension and/or termination may be in the public interest.
AGITSy may delegate its right to take any action to an Internet security agency or may act upon any report from an Internet security agency without prior notification to the User.
If AGITSy elects not to take immediate action, AGITSy may require Registrants and a complainant to utilize the AUP Complaint Resolution Service and Policy to ensure compliance with this AUP and remedy any violation or suspected violation within a reasonable time prior to suspension or terminating service.

8. LIMITATION OF LIABILITY
In no event shall AGITSy be liable to any User of the AGITSy Network, any customer, nor any third party for any direct, indirect, special or consequential damages for actions taken pursuant to this AUP, including, but not limited to, any lost profits, business interruption, loss of program or other data, or otherwise, even if AGITSy was advised of the possibility of such damages. AGITSy's liability for any breach of a condition or warranty implied by the Registrant Agreement or this AUP shall be limited to the maximum extent possible to one of the following (as AGITSy may determine):

(i) paying the services again; or
(ii) paying the cost of having the services supplied again.

9. REMOVAL OF CONTENT RESPONSIBILITY
At its sole discretion, AGITSy reserves the right to:
(1) Remove or alter content, zone file data or other material from its servers provided by any person that violates the provisions or requirements of this AUP;
(2) re-delegate, redirect or otherwise divert traffic intended for any service;
(3) notify operators of Internet security monitoring, virus scanning services and/or law enforcement authorities of any apparent breach of this AUP or .PANS TLD Policies and/or
(4) terminate access to the AGITSy Network by any person that AGITSy determines has violated the provisions or requirements of this AUP.
In no event shall AGITSy be responsible for the content or message of any newsgroup posting, e-mail message, or web site regardless of whether access to such content or message was facilitated by the AGITSy Network. AGITSy does not have any duty to take any action with respect to such content or message by creating this AUP, and users of the AGITSy Network are obliged and required to ensure that their use of a .PANS Domain name or the AGITSy Network is at all times in accordance with the requirements of this AUP and any applicable law and/or regulation.

29.5 CoCCA CRs - Policies and Procedures

1. Statement of Purpose

1.1. This Complaint Resolution Service ("CRS") provides a transparent, efficient and cost effective way for the public, law enforcement, regulatory bodies and intellectual property owners to have their concerns addressed regarding use of a TLD Managers network or services.

1.2. The Service provides a single framework in which cyber-crime, accessibility of prohibited Internet content via a member's network or services and abuse of intellectual property rights are addressed. The framework relies on three tiers of review: immediate action to protect the public interest, scalable complaint resolution lead by an independent Ombudsman, and where applicable, adjudication by an Expert. The CRS provides an efficient and swift alternative to the Courts.

This document should be read in conjunction with the Acceptable Use Policy ("AUP") applicable to the domain or TLD you are considering lodging a complaint against. If after having reviewed the applicable AUP Policy it is determined a violation has occurred, a complaint may be lodged by completing the CoCCA CRS Complaint Form.

NOTE: IF YOU DO NOT LODGE THE SIGNED COMPLAINT FORM THAT FOLLOWS BELOW ON PAGES 8-13 OF THIS DOCUMENT, YOUR COMPLAINT WILL NOT BE REVIEWED.

Complaints will be reviewed in accordance with the following Steps:

Step One | Confirmation | Communication
A CoCCA Complaints Officer ("CCO") will review all formally lodged complaints for compliance with the CRS and the applicable AUP. If the CCO considers that the Complaint does not address the matter covered by the AUP, or is unsigned or otherwise violates this Procedure, the Complaint will be promptly notified of the deficiencies identified.

The Complainant shall have five (5) Days from the receipt of notification within which to correct the deficiencies and return the Complaint, failing which the CCO will deem the Complaint to be withdrawn. This will not prevent the Complainant from submitting a different Complaint.

On receipt of the Complaint the CCO will lock domain and associated records until a period of ten (10) Days after the CCO and Parties are notified of a Decision by the Ombudsman or an Expert, at which time the domain name may be unlocked.

Step Two | Immediate Review of Request for Suspension in the Public Interest
On receipt of a properly lodged Complaint, the CCO will initiate a review. When specifically requested by the Complainant the CCO may initiate a Critical Issue Suspension ("CIS").

A request for a CIS may be granted in cases where there is a compelling and demonstrable threat to the stability of the Internet, critical infrastructure or public safety. A "critical issue suspension" does not terminate the registrant's rights or their domain license; it simply modifies the DNS records in the zone temporarily disabling resolution. All suspensions under the CRS, including a CIS, may be appealed to the Ombudsman's office for...
amenable resolution, an
Expert Panelist for binding arbitration or a court of competent jurisdiction.

Where the CCO has triggered a CIS, notice will be sent to the Registrant, Administrative Contact, Registrar and
Ombudsman within 24 hours of triggering the CIS.

Step Three / Formal Notification

The CCO will send a copy of the Complaint to the Respondent (normally the Registrant and/or Administrative
Contact) and the TLD Sponsor designated contact with an explanatory note within 5 days by:

a) Sending the Complaint by post, fax or e-mail to the Respondent at the contact details shown as the Registrant
or any other contacts in the TLD Register for the Domain Name that is the subject of the Complaint.

b) The CCO may also, at their discretion send the complaint to any addresses provided to the CCO by the
Complainant so far as this is practicable.

c) Except as set forth otherwise, all written communication to a Party or a party’s representative under the
Policy or this Procedure shall be made by fax, post or e-mail.

d) Communication shall be made in English. E-mail communications (other than attachments) should be sent in
plain text or PDF format so far as this is practicable.

During the course of the proceedings under the CRS, if either Party wishes to change its contact details it must
notify the CCO of all changes. However, no change shall be made in the Registrant Information for the Domain
Name without mutual agreement of the parties or unless a settlement is reached. Except as otherwise provided in
this Procedure or as otherwise decided by the CCO or if appointed, the Expert, all communications provided for
under this procedure shall be deemed to have been received:

a) if sent by courier, when signed for by the recipient;

b) if sent via the Internet, on the date that the communication was transmitted.

Unless otherwise provided in this Procedure, the time periods provided for under the Policy and this Procedure
shall be calculated based on the time zone of the CCO.

Any communication between:

a) the CCO and any Party shall be copied by the CCO to the other Party and if appointed, the Ombudsman or
Expert;

b) a Party to another Party shall be copied by the sender to the CCO. The CCO will copy such correspondence to
the Ombudsman or Expert, if appointed.

Commencement of Complaint Resolution Service proceedings

The CCO will promptly notify the Parties by email of the date of the Commencement of Complaint Resolution
Service proceedings. The date
and time of transmission of such email in the time zone of the CCO according to the email header generated by
the CCO’s transmitting email system will be the date of Commencement of CRS proceedings.

The Response

Within fifteen (15) Days of the date of Commencement of Complaint Resolution Service proceedings, the Respondent
may submit a Response.

The Respondent must send the Response to the CCO signed in electronic form at the addresses set out in the
explanatory cover sheet. In determining whether a Response was submitted in a timely manner, the date and time
of receipt (as determined by the CCO’s receiving email server) shall be considered by the CCO as the date and
time of submission, provided that such email i) contains a scanned copy of documents which include signatures,
ii) contains all attachments, iii) is of a form and format which may be opened by the CCO. The Response shall:

a) include any grounds that the Respondent wishes to rely upon to rebut the Complainant’s assertions;

b) specify whether the Respondent wishes to be contacted directly or through an authorized representative, and
set out the e-mail address, telephone number, fax number, and postal address which should be used in
communications with the Respondent;

c) disclose to the CCO whether any legal proceedings have been commenced or terminated in connection with the
Domain Name(s) which is the subject of the Complaint;

d) conclude with the following statement followed by the signature of the Respondent or its authorized
representative:

"The information contained in the response is to the best of the respondent’s knowledge true and complete and
the matters stated in this response comply with the Policy and Procedure and applicable law."

Within (3) Days following the receipt of a signed copy of the Response, the CCO will forward the Response to the
Complainant. If the Respondent does not submit a Response, the Domain will be suspended 15 days after the CRS
proceedings commence.

Reply by the Complainant

Within five (5) Days of receiving the Respondent’s Response from the CCO, the Complainant may submit a Reply to
the Respondent’s Response, which shall not exceed 2000 words (not including annexes). The Reply should be
corresponding to new points raised in the Response not previously dealt with in the Complaint.

Step Four | Amicable Complaint Resolution | Ombudsman

No Amicable Complaint Resolution (“ACR”) will occur if the Respondent does not file a Response. Within three (3)
Days of the receipt of the Complainant’s Reply (or the expiry of the deadline to do so), the CCO will arrange
with the Ombudsman’s office for Amicable Complaint Resolution to be conducted. ACR will be conducted in a manner
that the Ombudsman, at his or her sole discretion, considers appropriate.

Negotiations conducted between the Parties during ACR (including any information obtained from or in connection
to negotiations) shall be confidential as between the Parties. Any such information will not be shown to an
Expert, should one latter be appointed. Neither the Ombudsman nor any Party may reveal details of such
negotiations to any third parties unless a decision-making body of competent jurisdiction orders disclosure.
Neither Party shall use any information gained during mediation for any ulterior or collateral purpose or
include it in any submission likely to be seen by any court or decision-making body of competent jurisdiction or
an arbitral tribunal of competent jurisdiction in this Complaint or any later Complaint or litigation.

If the Parties reach a settlement during the ACR, then the existence, nature and terms of the settlement shall
be confidential as between the Parties unless the Parties specifically agree otherwise, a court or decision-
making body of competent jurisdiction orders otherwise, or applicable laws or regulations require it.

No binding verbal agreements can be reached as part of the ACR: any settlement reached by the Parties must be in writing to be
enforceable.

If the Parties did not achieve an acceptable resolution through ACR within ten (10) Days, the Ombudsman will
send notice to the Parties that the Complainant has the option to request appointment of an Expert. The
Complainant will have ten (10) Days upon receipt of the notice from the Ombudsman to pay the applicable fees to
CoCQA if he or she wants to move forward with binding arbitration by an Expert.

Step Five | Appointment of the Expert and Timing of Decision (Optional)

If the Ombudsman does not receive the Complainant’s request to refer the matter to an Expert together with the
applicable fees within ten (10) Days, the Complaint will be deemed to have been withdrawn. This will not prevent
the Complainant submitting a different Complaint.

Within five (5) Days of the receipt of the applicable fees from the Complainant, the Ombudsman will appoint an
Expert on a rotational basis from a list of Experts. An Expert may only be a person named in the CoCQA list of
Experts, which the Ombudsman will maintain and publish along with the Experts’ qualifications. No Expert’s
appointment will be challenged on the grounds that they are insufficiently qualified. Once the Expert has been
appointed, the
Parties will be notified of the name of the Expert appointed and the date by which the Expert will forward,
except in the case of exceptional circumstances, his or her decision to the CCO and copy the Ombudsman.

The Expert shall be both impartial and independent before accepting the appointment. During the proceedings the
Expert will disclose to the Ombudsman any circumstances giving rise to the justifiable doubt as to their
impartiality or independence. The Ombudsman will have the discretion to appoint a substitute Expert if
necessary, in which case the timetable will be adjusted accordingly.

In addition to the Complaint, and if applicable the Response, the Reply, any appeal notice and appeal notice
response, the Expert may request further statements or documents from the Parties. However, the Expert will not
be obliged to consider any statements or documents from the Parties which he or she has not received according
to the Policy or this Procedure or which he or she has not requested. The Expert may request a further statement
that will be limited to a defined topic but will not be obliged to consider any material beyond that requested.

Step Six | Expert Decision

The Expert will decide a Complaint on the basis of the Policy, the Procedure and the submissions made by the
Party. If, in the absence of exceptional circumstances, a Party does not comply with any provision in the
Policy, Procedure or any request by the Ombudsman or the Expert, the Expert may draw such inferences from the
Party’s non-compliance, as he or she deems appropriate.

Unless exceptional circumstances apply, an Expert shall forward his or her Decision to the Ombudsman within ten
(10) Days of his or her appointment. The Decision shall be in writing and signed by the Expert. It will
provide the reasons on which the decision is based, indicate the date on which it was made, the place the
decision was made and identify the name of the Expert. Within three (3) Days of the receipt of a Decision from
the Expert, the Ombudsman will communicate the full text of the Decision to each Party via email with the date
for the implementation of the Decision in accordance with the Policy.

Effect of Court Proceedings

If, before or during the course of proceedings under the Complaint Resolution Service, the Ombudsman is made
aware that legal proceedings have begun in or before an applicable court or decision-making body of competent
jurisdiction or an arbitral tribunal of competent jurisdiction, and that such legal proceedings relate to a
Domain Name which is the subject of a Complaint, he or she will suspend the Complaint Resolution Service
proceedings pending the outcome of the legal proceedings.

A Party must promptly notify the Ombudsman if it initiates or becomes aware of legal proceedings in a court or
decision-making body of competent jurisdiction, or arbitral tribunal of competent jurisdiction relating to a
Domain Name that is the subject of a Complaint under the procedures of the Complaint Resolution Service.
Either party may request, before or during the Complaint Resolution Service Proceedings, an interim measure of protection from a court.

**Expert Fees**

The applicable fees in respect of the referral of proceedings under the Complaint Resolution Service to an Expert are (in United States Dollars), for Complaints involving 1-5 Domain Names and only one Complainant, $2500 plus applicable taxes, such as goods and services taxes ("GST"). For Complaints involving 6 or more Domain Names, and/or more than one Complainant, the Ombudsman will set a fee in consultation with the Complainant. Fees are calculated on a cost-recovery basis, and are passed on in their entirety to the Expert(s). CoC CA does not charge for its mediation or administrative services in respect of the Complaint Resolution Service.

**Exclusion of Liability**

Neither CoCCA nor its councilors, officers, members, employees or servants nor any Expert, Mediator or any employee of any Expert or Mediator shall be liable to a Party for anything done or omitted, whether negligently or otherwise, in connection with any proceedings under the Complaint Resolution Service unless the act or omission is shown to have been in bad faith.

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29. Rights Protection Mechanisms: Applicants must describe how their registry will comply with policies and practices that minimize abusive registrations and other activities that affect the legal rights of others, such as the Uniform Domain Name Dispute Resolution Policy (UDRP), Uniform Rapid Suspension (URS) system, and Trademark Claims and Sunrise services at startup. A complete answer should include:

- A description of how the registry operator will implement safeguards against allowing unqualified registrations (e.g., registrations made in violation of the registry’s eligibility restrictions or policies), and reduce opportunities for behaviors such as phishing or pharming. At a minimum, the registry operator must offer a Sunrise period and a Trademark Claims service during the required time periods, and implement decisions rendered under the URS on an ongoing basis, and
- A description of resource plans for the initial implementation of, and ongoing maintenance for, this aspect of the criteria (number and description of personnel roles allocated to this area).

To be eligible for a score of 2, answers must also include additional measures specific to rights protection, such as abusive use policies, trademark procedures, registrar pre-notification, or authentication procedures, or other covenants. A complete answer is expected to be no more than 10 pages.

Asia Green IT System Bilguyar San. v.e Tic. Ltd. Sti. is fully aware of the importance of protecting the rights of others in the .pari TLD and has made rights projections a core objective. The .pari TLD Rights Protection is something CoCCA has prioritized by necessity throughout its nine-year history. CoCCA currently complies with UDRP proceedings and will comply with URS proceedings as well with methods for handling Sunrise and Trademark Claims outlined below and guided by Specific Requirements of the proposed Registry Agreement.

CoCCA also offers a wide range of services including, a wildcard registration program to block variants of a domain for trademark holders as well as an "Alert" service that any interested party can subscribe to, alerting them if a specific string is registered in any CoCCA TLD. CoCCA recognizes that ICANN has not completed the Trademark Clearing House (TCH) program. While CoCCA cannot fully describe the details of implementation for this application based on incomplete work, CoCCA intends to comply and/or exceed the final ICANN program.

In particular, CoCCA offers the following procedures to help protect the rights of trademark owners:

- Sunrise Services
- Trademark Claims Service
- Name Selection Policy
- Acceptable Use Policy
- Unqualified Registration Safeguards
- Wildcard Registrations - Alert Services
- Clearinghouse of Intellectual Property API
- TLD WHOIS
- RPM Compliance auditing of Registrars
- UDRP, URS, RDRP and RRSRP and CRS
- Limited License
- Rapid Takedowns & Suspension
- Malware Mitigation
- Fast Flux Mitigation
- Phishing Mitigation
- DNSSEC Deployment
- Law Enforcement and Anti-Abuse Community Collaboration

29.1 Registration Abuse Prevention Mechanisms - Pre Launch

To support Asia Green IT System Bilguyar San. v.e Tic. Ltd. Sti.’s objectives, CoCCA will implement specific measures in compliance with ICANN’s Applicant Guide Book. At a minimum, ICANN states that Asia Green IT System Bilguyar San. v.e Tic. Ltd. Sti. must offer sunrise registration for a period of thirty days during pre-launch in conjunction with the Trademark Clearing House.

CoCCA’s RPM framework contains several levels of safeguards to deter unqualified registration and other malicious behaviors during pre-launch. This not only exceeds requirements, but also provides customers of the TLD predictably in service offerings and protections.

29.1.1 Sunrise & Land-rush

To meet the ICANN requirement of a 30-day Sunrise process for those with verifiable trademark rights or owners of exact matching strings in other TLDs, CoCCA shall implement for Asia Green IT System Bilguyar San. v.e Tic. Ltd. Sti. a Sunrise period for domain registrations. The validations of domain names that are an identical match will occur via the Trademark Clearinghouse via not-to-be Green IT System Bilguyar San. v.e Tic. Ltd. Sti. or Asia Green IT System Bilguyar San. v.e Tic. Ltd. Sti.’ approved Registrar.

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ANNEX 18
During the sunrise, Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. will be responsible for determining eligibility of the registration and it will require the Registrant to affirm that they meet Sunrise Eligibility Requirements (SERs) and incorporate a Sunrise Dispute Resolution Policy (UDRP).

The Sunrise will be followed by a 30 day Registration Land-rush for members of the community-business owners-residents etc. The process will end in General Availability or Open Registration. Eligible Trademark holders may continue to register marks on an ongoing basis.

29.1.2 Trademark Claim Service

Per ICANN’s Applicant Guide Book, Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. is required to provide a Trademark Claim service during pre-launch phases and for at least 60 days from the date of open registration. During the Trademark Claim period, Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. or the Registrar will provide notice to the prospective registrants where an identical match is identified in the Trademark Clearinghouse. The notice will include warranties that the prospective Registrant must understand and adhere that the domain will not infringe on the rights of the respective Trademark holder. A notice will also be sent to the designated Trademark holder of marks where an identical match has been identified.

29.1.3 Name Selection Policy

The .pars TLD will enforce a name selection policy that ensures that all names registered in the .pars TLD will be in compliance with ICANN mandated technical standards. These include restrictions on 2 character names, tagged names, and reserved names for Registry Operations. All names must also be in compliance with all applicable RFCs governing the composition of domain names. Registrations of Country, Geographical and Territory names will only be allowed in compliance with the restrictions as outlined in the answer to Question 22.

Additionally, Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. requires that domain names within the .pars TLD should consist of proper characters unique within top-level domain, followed by the characters ‘.pars’. Domain names should meet the following technical requirements. They shall:

- contain no more than 63 characters;
- begin and end with a letter or a digit;
- contain no characters different from letters, figures and a hyphen (allowable characters are the letters of the Roman alphabet; capital and lowercase letters do not differ);
- contain no hyphens simultaneously in the third and forth positions.

Acceptable Use Policy

Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. has developed an Acceptable Use Policy (AUP) that is referenced in the answer to Question 28. This AUP clearly defines what type of behavior is expressly prohibited in conjunction with the use of a .pars domain name. Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. will require, through both the Registry Registrar Agreement (RRA), and a Registry Registrant Agreement (RA) that this AUP be accepted by a registrar prior to activation of a domain in the .pars TLD. See Life-Cycle and 29.2 Rights Protection Mechanisms – Post Launch.

CoCCA offers a suite of post-launch Rights Protection Mechanisms. Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti., supported by CoCCA services, will promote the security and stability of the TLD with the following:

Unqualified Registration Safeguards

- Wildcard Registration / Alert services

Clearinghouse of Intellectual Property API

- Thick WHOIS

- RPM Compliance auditing of Registrars
- UDRP, URS, PDRP and ARDRP
- Limited Licenses
- Rapid Takedown & Suspension
- Malware Mitigation
- Phishing Mitigation
- DMESEC Deployment
- Law Enforcement and Anti-Abuse Community Collaboration

29.2.1 Unqualified Registration Safeguards

Asia Green IT System Bilgisyar San. ve Tic. Ltd. Sti. plans to adopt the CoCCA Acceptable Use Policy (AUP) and Complaint Resolution Service Policy (CRS) as part of the operation of the .pars gTLD. See 29.X.

The CoCCA model differs from the "classic" gTLD shared registry system in that Registrants are bound by a collateral agreement between themselves and the TLD Operator. This collateral agreement binds them to the TLD AUP policy, WHOIS policy and Complaint Resolution Service.

Although registrars are required to advise registrants of the TLD policies and conditions, with the prevalence of highly automated registration systems and expansive reseller networks it cannot be guaranteed that registrants have reviewed or agreed to the policy. An email reiterating these policies will be sent to each registrant to ensure that new applicants are made aware of and confirm their agreement to these policies.

The same process therefore allows the registry the opportunity to verify the accuracy of customer data supplied by the registrar, use dynamically generated images as a challenge-response verification to prevent automated processes activating domains and to directly collect and store additional identifying information about registrants, which can be utilized to control fraud.

29.2.2 Trademark Claim Services

CoCCA currently supports a Wildcard option, which will extend to all new gTLDs in which a brand owner's trademark holder may register a Primary domain and then can upload evidence of the trademark or other rights via PDF in the GUI.

The Registrant may then apply online to request a .name or other wildcard block using java regular expressions for that text string. CoCCA will manually review the request for approval, collisions with other strings etc. If approval is granted, any attempt to register any domain that triggers that string returns "not available for policy reasons" via EPP or GUI.

The domain must be kept current and up to date in order for the Wildcard Registration to be active if the Primary registration lapses, or is subject to a dispute or UDRP ruling and is transferred the Wildcard is removed.

29.2.3 Alert

Subscribers to the Premium WHOIS service may request email alerts if a domain matching a given string, or
containing a specified string, is registered.

29.2.3 Clearing House for Intellectual Property (CHIP)
CHIP is a new technology that is designed to allow trademark owners to efficiently and effectively safeguard and manage their rights on the Internet, and in particular in the domain name space. CoCCA and ICANN, the company that operates CHIP, have collaborated in the past to allow trademark owners to retroactively (or proactively) associate trademark information with specific domain names. This technology is available but may or may not be used depending on the outcome of developments in with gTLD clearinghouse.

29.2.4 Thick WHOIS
CoCCA will provide Thick WHOIS to enhance accessibility and stability and reduce malicious behavior thereby promoting increased rights protection mechanisms and investigations where applicable. All WHOIS services meet Specification 4 of the Registry Agreement in support of Thick WHOIS. The agreement between Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. and its Registrars specifies that Registrant information should be complete and accurate and instances where incomplete information occurs will be investigated to prevent reoccurrence. Given the current state nature of WHOIS, CoCCA intends to adapt to new formats and protocols as they go into effect.

29.2.5 Registrar Relationship
Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. views the protection of legal rights of a user’s domain name and that of trademark owners as a strategic imperative to operating a successful TLD. Therefore, ICANN accredited Registrars will only be used and be bound to the registry-registrar agreement. Certain components of the RPM framework will be administered on behalf of Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. To ensure compliance with designated RPMs, CoCCA will conduct annual reviews and enforce non-compliance where necessary. In cases where Registrars fail to meet Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti.’ standards, the Registrar will lose its certification to register domains of the TLD until all issues are resolved.

29.2.6 Uniform Dispute Resolution Policy (UDRP)
The UDRP is a proven rights protection mechanism whereby complainants can object to a domain registration via a UDRP provider. The Registrant in question has the opportunity to respond to the complaint and defend its registration and use as good faith. The UDRP provider and assigned panel provide a decision based on the information submitted by both the complainant and the respondent. Where the complainant is successful in proving a bad faith registration ownership of the domain will be transferred accordingly and in line with ICANN policy. Conversely, where the Registrant is unable to prove bad faith, the domain will remain with the assigned Registrar. Registrars of Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti.’ must implement and respond to UDRP policy where applicable. Penalties will apply where Registrars are found to be in breach.

29.2.7 Uniform Rapid Suspension (URS)
CoCCA is required to implement the Uniform Rapid Suspension (URS) per the Applicant Guidebook. If an infringement is discovered, the complainant may file an objection with a URS provider. The URS provider will investigate compliance via an administrative review. Upon a successful review, the URS provider will notify Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. to place the domain in question in lock status within NEED A TIMEFRAME, meaning that no changes to registration date will occur, but the domain continues to resolve. Upon lock of the domain, the Registrar will be notified and have an opportunity to respond. If the complainant proves the domain is used in an abusive manner, the domain name will be suspended for the remainder of the registration period and will resolve to an informational site provided by the URS provider. The complainant will have the opportunity to extend the registration for one additional year. Conversely, if the evidence does not result in a successful determination of abuse, the URS Provider will contact CoCCA and controls of the registered domain will be returned to the Registrar.

29.2.8 Post-Delegation Dispute Resolution Procedure (PDRP)
Per the Applicant Guidebook, CoCCA is required to implement the Post-Delegation Dispute Resolution Procedure (PDRP) that allows a complainant the right to object to Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti.’ manner of operation or use of the gTLD. A PDRP provider will accept objections and perform a threshold review. CoCCA will respond to the complaint as necessary to defend the operation and use Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti.’. This process results in a decision to allow the complaint to proceed with a threshold.

29.2.9 Registration Restrictions Dispute Resolution Procedure (RRDPR)
The Registration Restrictions Dispute Resolution Procedure (RRDPR) outlines the resolution proceedings whereby the complaint determines that Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. has failed to comply with its defined registration restrictions. The parties to the dispute will be the gTLD registry operator and the harm established party where proper standing has been reviewed and confirmed. A successful complaint proves that the complaint determines whether a strong association exists between the string and that a strong association exists between the string and the string.

29.2.10 Limited License
Limited license- Registration policies and terms and conditions limit registrants’ rights to a limited license to use (but not to sub-license the use of any portion of) the Allocated TLD, subject to continuing compliance with all policies in place during that time.

29.2.11 Rapid Transfer & Suspension
CoCCA, at Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti.’ request, will comply with any takedown or suspension. Usually, these types of requests are based on court orders of competent jurisdiction, but not limited to such. Before any domain take down, CoCCA contains an internal checklist that will be followed to ensure validation of the request. If for any reason the validation procedure fails, the CoCCA Ombudsmann will be notified. Upon confirmation that the registered domain is to be suspended or removed from the zone, CoCCA will execute its audit procedures to confirm the identity, name, number, date, time, domain name, description and reason for the take down, and any other evidence that may be necessary to properly document the take down. The Ombudsmann, Registrar, and Registrant will be notified before and at the time of take down execution.

29.2.12 Malware Mitigation

ANNEX 18
Where commercially sensible, or a risk factor has been identified, COCCA will perform automated and regular scanning for malware of all domains (or a subset of domains) in the registry. Often, Registrants are unaware and uncompensated by malware deployments. Scanning for malware reduces occurrences for this type of abusive behavior, and facilitates for registered domain names in the TLD.

29.2.14 Phishing Mitigation
COCCA will establish and act upon the results of a regular poll against one or more trusted databases for phishing sites operating in second level or subordinate domain names within the TLD. Phishing activity most often occurs through a subordinate domain, rather than a directly registered second level domain. For this reason the registry should query for any wildcard occurrence of a domain that has been flagged as a phishing site or one that contains malware.

29.2.15 DNSSEC Deployment
As part of Asia Green IT System Bilingual San. ve Tic. Ltd. Sti., mission to maintain a highly secure and stable TLD, COCCA will implement DNSSEC as part of its backend registry services. DNSSEC helps mitigate, for example, phishing attacks that use cache poisoning to redirect unsuspecting users to fraudulent websites or addresses. DNSSEC protects the DNS system from abuse threats in the following aspects:

- Security of Domain Resolution - DNSKEY/RRSIG provide authentication and integrity verification to ensure data will be compromised during transmission. The COCCA credit name server trust anchor is signed by the public key and then delivered to the Internet Trust Anchor Repository (ITAR) for TLD verification. DNSSEC resource records will also be used to verify negative responses messages of queried resource records to ensure deletion does not occur during transmission.

- Security of Zone File Distribution - SEIC allows communication among authentication servers to ensure that it is the correct server and that data is not compromised during transmission.

29.2.16 Law Enforcement and Anti-Abuse Community Collaboration
COCCA does and will continue to cooperate closely with anti-abuse communities, experts, and law enforcement in the mitigation and prevention of abuse behavior. Not only will best practices be shared, but also collaboration on the latest issues will remain a priority. In addition to collaboration instances may take the form of early notification by security agency of malicious content. Another form of cooperation may be the provision of user information (including historical and non-publicly available information, where available) to the security agency, to assist identification of wrongdoers. The existence of existing arrangements for dealings between security agencies and the registry operator facilitates the ability for both registry and law enforcement to react promptly to threats.

- With respect to suspensions, the registrant will be given an opportunity to remedy via automated processes, given the time sensitive nature of criminal activity automated suspension based on triggers - flags, or at the request of law enforcement should be enabled. Critical domains can be manually "Super Locked" in the registry to ensure they are not removed from the zone or suspended inadvertently by automated suspension technology. Automated suspensions will only be initiated when required to protect the public interest or network integrity. They should not be initiated to simply protect an entity's or individual's intellectual or other property rights - those sorts of disputes should be dealt with via a formal complaint resolution service.

29.3 Resource Plans
Asia Green IT System Bilingual San. ve Tic. Ltd. Sti. will dedicate 2 professionals to coordinate the operation of the .gTLD. At the same time, the technical professionals at COCCA will be supporting the vast majority of the technical aspects of operating the .gTLD. As the .gTLD is a community-supported effort, it is also expected that members of the community will help Asia Green IT System Bilingual San. ve Tic. Ltd. Sti. develop policies and procedures that govern the operation of the .gTLD.

The following Asia Green IT System Bilingual San. ve Tic. Ltd. Sti. team members will be used to support the rights protection plan: COCCA NOC Support, Consultant.

COCCA acting as Asia Green IT System Bilingual San. ve Tic. Ltd. Sti.' registry services provider maintains a resource model to meet the demands of RPM implementation and on-going operation of the protection mechanisms. COCCA maintains a qualified and experienced technical staff to support registry services that meet or exceed defined service levels.

The COCCA workforce-staffing model is sized to provide the appropriate services for each managed TLD. The demand nature of technologies and innovation, the COCCA staff model is constantly reviewed and adjusted to achieve optimization without sacrifice to customer satisfaction and service level requirements. In cases where growth dictates an increase in staff, COCCA maintains a proven staffing process for acquiring qualified candidates. Details of staffing resource plans can be found in responses to questions of the Financial Projections section of the application.

There are eight COCCA CRS Officers whose role is to monitor registry services and review Complaints lodged online or from Law Enforcement/CEOs. COCCA has an established formal relationship with.

The complaints are dealt with in accordance with the CRS and AUP - Registrant Agreement, which allows the CRS officers discretion to suspend a domain instantly or send the complaint to the Embusman for a formal complaint resolution. CRS officers are available twenty-four hours a day, seven days a week, and three hundred and sixty five days a year.

COCCA estimates it will require the following personnel to support the RPM implementation and operations for Asia Green IT System Bilingual San. ve Tic. Ltd. Sti.:

- Complaint Resolution Service Officers: 8
- Complaint Resolution Expert - Minimum of Eight

30A. Security Policy: provide a summary of the security policy for the proposed registry, including but not limited to:

- identification of any independent assessment reports demonstrating security capabilities, and provisions for periodic independent assessment reports
- description of any augmented security capabilities or capabilities commensurate with the nature of the applied for gTLD string, including the identification of any existing international or industry relevant security standards the applicant commits to following (reference site must be provided); and
- list of any recommendations made to registrants concerning security levels.
To be eligible for a score of 2, answers must also include:

- Evidence of an independent assessment report demonstrating effective security controls (e.g., ISO 27001).

A summary of the above should be no more than 20 pages. Note that the complete security policy for the registry is required to be submitted in accordance with 30.2).

Asia Green IT System Bilgisayar San. ve Tic. Ltd. Sti. and CoCCA desire to ensure the highest levels of security are applied and maintained for all elements in the chain that ultimately result in the resolution of a .par TLD on the Internet. CoCCA, together with partners PCH and ISC will endeavor to ensure the secure operation of Registry Services for the .par TLD as described below.

30.1 DNSSEC - Facility for Key Storage

For reasons of economies of scale and because CoCCA has a nearly decade long relationship with PCH, the .par key is to be stored offline at a Singapore facility hosted by the National University of Singapore, on behalf of the Singaporean Infocomm Development Agency (IDA), other DNSSEC key-store facilities that are part of PCH’s project are hosted in Zurich by SWITCH, the Swiss national research and education network and at a U.S. facility hosted by Equinix in San Jose California. The PCH DNSSEC project facilities mirror the security and processes used by ICANN for maintenance of the root.

See Attachment: PCH_BG_Backgrounder.pdf

30.1.1 Signature of the .par

The .par zones generated by the CoCCA SRS will include the DS records submitted by registrars, zones will be transferred from CoCCA’s hidden signing master DNS to four PCH inbound masters using AXFR < AXFR and TSIG. PCH will transfer the zones using IXFR < AXFR and TSIG to their signer servers in Frankfurt and Palo Alto. The signed zone is then exported to PCH’s two outbound DNSSEC DNS for secure AXFR < IXFR TSIG transfer back to CoCCA’s inbound DNSSEC master in Sydney. Key signing keys and zone signing keys are to be rolled out in accordance with best practices and ICANN requirements. CoCCA and PCH’s DNSSEC implementation fully adheres to applicable RFCs and to the requirements of Specification 6, section 1.3.

30.1.2 Secure Distribution of the Signed Zones

CoCCA has employed the use of a double Anycast and Unicast network for the purpose of distributing signed zones across the DNS. Due to CoCCA’s desire to ensure that this process is not compromised, CoCCA logs and monitors the zone signing and distribution process, and also ensures that the management of signed zones is performed by CoCCA.

On receipt of the signed zones from PCH, CoCCA will perform some basic validation against the zones sent to PCH, and then transfer these zones onto a hidden distribution master DNS which will transfer zones via TSIG and IXFR< AXFR to ISC’s SMC platform, PCH’s Anycast platform and CoCCA’s Unicast DNS servers. If a critical issue was found that was impacting both the primary and secondary SRS, and if instructed by CoCCA, PCH may distribute the zones to their own Anycast network, the ISC SMC Anycast network and the CoCCA Unicast nodes.

The procedures above have been tested by ccTLDs on CoCCA’s SRS platform.

30.2 Securing the .par DNS Infrastructure and Nodes

The .par TLD will rely on ISC’s and PCH’s Anycast networks and CoCCA’s Unicast for resolution. ISC authors BIND and pioneered the use of DNSSEC and Anycast technology. PCH manages what is arguably the largest, most geographically dispersed Anycast network. CoCCA currently operates Unicast TLD servers for 12 TLDs. All three entities utilize best of class technology and have rigorous security policies in place to secure, monitor and respond to threats that may compromise the resolution of the .par TLD.

Both PCH and ISC are members of NAP-Sec and have RIP sniffer capabilities. Both organizations are well positioned and able to coordinate with ISPs that may be transiting or sourcing Denial of Service attacks (DoS) or other attack traffic to mitigate it closer to its source. The geographically diverse PCH and ISC Anycast services are extremely resilient against DoS attacks, if a node fails or is otherwise compromised, it will swiftly be taken out of the PCH or ISC Anycast cloud, causing traffic to flow to other nodes with minimal or no service disruption. The two independently operated and managed Anycast network’s total distributed capacity will allow the .par to absorb even a coordinated DoS attack originating from multiple locations at once.

The geographically diverse Anycast network proposed for .par necessitates locating dozens of nodes in a variety of co-location facilities varying from Tier 4 to Tier 2 and each facility has different security policies for physical access. From a security and stability perspective, the critical issue is that all nodes be monitored in real time by PCH, ISC and CoCCA and any node that experiences SLA issues (or is otherwise compromised) is swiftly taken offline or out of the Anycast network. Under CoCCA’s agreements with PCH and ISC, any SLA or security issues with any node in their respective Anycast networks is to be reported immediately so that CoCCA may advise registrars or take any other appropriate action.

30.3 CoCCA’s Sydney SRS Security Policy

30.3.1 CoCCA SYD NCC SRS Physical Access

CoCCA’s primary NCC is located at Global Switch in the Sydney CBD, an enhanced Tier-3 facility and one of the largest carrier neutral data centers in the southern hemisphere. CoCCA’s SRS servers are housed in a dedicated, cage-locked provided by PIPE networks. PIPE also provides CoCCA with the primary bandwidth used by the Sydney SRS.

In order to gain physical access to CoCCA’s servers, an individual must be pre-authorized by CoCCA, pipe and Global Switch - and have formally been inducted by Global Switch. Once approved to enter the facility, an individual must be inspected and be granted access by the Global Switch Security Operations Centre - which is managed 24/7 by security personnel. After passing security, physical access requires passing through a mantrap. Access to the floor, pipe co-location room and master cage is controlled by key-cards with strict access control
lists.

Access to CoCCA's cage and rack require a combination of key-cards and physical keys both of which are distributed by, and only available to, CoCCA staff. All spaces are under constant CCTV surveillance by global switch security and the PIPE Networks' NOC.

CoCCA's policy is to severely restrict physical access to network appliances, currently only six individuals have physical access to the CoCCA SRS in Sydney and all access is logged. CoCCA's security policy for physical access is collateral to the Global Switch and PIPE Networks.

30.3.2 CoCCA SYD NOC | SRS Admin Remote Access

The number of individuals with the ability to directly access and administer network appliances is very small - currently six, a number not expected to grow with additional QTLS. Remote access is only accessible through VPN with the mandatory requirement to use one time passwords (OTP) for authentication purposes. SRS server command line logins use both OTP as well as traditional username and password authentication methods - enabling each login to be traced to an individual.

CoCCA NOC Support Staff, Registrar Support and Complaints Abuse Officers and Asia Green IT System Bilimsayar San. ve Tic. Ltd. Sti. staff may only access the SRS via port 443 with OTP from trusted IP addresses. CoCCA NOC Support Staff, Registrar Support and Complaints Abuse Officers and Asia Green IT System Bilimsayar San. ve Tic. Ltd. Sti. staff have no physical or remote administrative access to servers or network appliances.

30.3.3 CoCCA's "pamoja" SRS Software Testing

In designing any security regime it is important to clearly identity potential threats and design the policy to address them. The SRS data is a compilation of publicly available data, and all information on Registrants, Registrars, and Resellers is available via WHOIS, RDDS services or Historical Abstracts. CoCCA does not store credit card or other commercially sensitive confidential information on registrants or registrars in the SRS (or elsewhere). The security threat is not theft of SRS data, it is loss of data or tampering with data.

Information relating to the management of the Data Escrow processes performed by NOC and CoCCA Data Escrow (NZ) Limited, including information in relation to the backup policies are explained in response to question 38. The Data Escrow process ensures that data is protected against security breaches that result in the loss or unauthorized modification of SRS data, especially as the data can be recovered from several sources. The CoCCA security policy is designed to protect against unauthorized modification of production SRS data.

The only information stored in the SRS that could present a risk should the entire SRS be compromised, stolen and released "into the wild" are SRS credentials and AutCodes. The credentials and AutCodes are Hashed (MD5) and Encrypted in the DB. GUI access to CoCCA's production systems is only granted from trusted IP's with a requirement for OTP use. For EPP access to the production SRS, the registrar's IP must be white-listed and they must connect with a CoCCA issued Ssl certificate. Even if one were able to steal the SRS DB and decrypt the login credentials or AutCodes, other security measures such as IP address locking, OTP and CoCCA issued certificates ensure potential data thieves would not be able to use them to access CoCCA's production SRS or modify data.

Securing the SRS largely requires ensuring the SRS software cannot be exploited by users. The SRS has four public facing websites, the WHOIS, RDDS, Historical Abstracts and Key Retrieval. The GUI login is not public facing.

CoCCA uses the same "pamoja" SRS database application that it distributes to over 20+ other TLD managers. While the application is tested internally by CoCCA and other TLD manager's, developers and system administrators, CoCCA has a policy that major releases be tested by an independent software testing laboratory. Currently we have contracted with Yonita (http://yonita.com). Yonita tests / audits the pamoja SRS application (not CoCCA's NOC) for:

* Security vulnerabilities
* Standard quality defects
* Performance anti-patterns
* Database and transaction misuses
* Concurrent issues
* Architectural bad practices

30.3.4 Monitoring and Detecting Threats

CoCCA monitors network traffic and activity through automated processes and seeks to detect threats that impact the SRS and more broadly CoCCA's Registry Services.

PCH and ISC directly monitor and attempt to detect threats that impact the DNSSEC signing and storage facilities as well as PCH's and ISC's respective Anycast networks. Any incident that impacts the security and stability of the .pars TLD in either the PCH DNSSEC facilities or nodes on the ISC or PCH Anycast networks is logged and reported to the CoCCA NOC immediately. ISC and PCH have near-real time reporting for all the Anycast nodes in their clouds and make this information available to CoCCA.

30.3.5 CoCCA SRS NOC | Essential Services Policy

CoCCA's Security Policy mandates that only essential SRS services (production EPP, WHOIS, RDDS, and SRS GUI with limited access) are to be hosted at the Sydney NOC.

Public facing policy websites, email servers, help-desk software, svn, GIT, team sites, OPE environments, and software development servers are all hosted externally using various commercial cloud - based services. None of these cloud-based servers are configured in such a way that they have access to any SRS services that are not normally available to the public.
30.3.6 CoCCA SRS NOC | Public Access Restrictions Policy

CoCCA's security policy dictates that only the port 43 WHOIS server, port 443 web-based WHOIS, port 443 AuthCode retrieval site, and port 443 Historical Abstract Site and a single unicast DNS server for the .para TLD are to be publicly accessible.

Registrars, CoCCA's registrar support staff, law enforcement or CERTs may access the port 443 GUI interface only if their IP addresses have been white listed in advance and they authenticate using clientele, login and an OTP. CoCCA's use of OTP tokens allows CoCCA to track activity in the SRS by individual not just loginID (username).

30.3.7 CoCCA SRS NOC | Intrusion Detection

CoCCA Security Policy requires that all SRS traffic originating from outside the NOC be subjected to automated intrusion detection. CoCCA's firewalls (Watchguard XTM) are configured for intrusion detection and are able to inspect encrypted HTTPS traffic. CoCCA's Barracuda load balancers provide an additional layer of firewall protection, DoS and automated intrusion detection. CoCCA's NOC firewalls are configured in accordance with best practices with both port and application layer filtering. The load balancers are configured for NAT and are also configured for intrusion detection and DoS attacks.

30.3.8 CoCCA SRS NOC | Auditing an Logging

CoCCA's Security Policy requires that all access to the SRS via the port 443 GUI is logged with originating IP, clientele, OTP (generated by security token), and that the sessions are time and date stamped. All EPF and WH0IS access logs are to be stored for seven days in the production SRS where they can be readily accessed before being archived. Firewall and VPN access is also logged.

30.3.9 CoCCA SRS NOC | Incident Response

CoCCA NOC support staff are on hand 24-7-365 to monitor the Registry Services offered at the primary SRS in Sydney and the availability of the Failover and Escrow SRS facilities. NOC staff perform three "roles":

1) monitoring of the CoCCA Sydney NOC and Failover SRS's - and a dozen or so other SRS's that CoCCA supports;
2) registrar support for the CoCCA NOC and four other locally hosted ccTLDs; and
3) serve as front-line Complaint Resolution Service Officers able to trigger a CoCCA Critical Issue Suspension (CIS) or Uniform Rapid Suspension on a 24-7-365 basis.

The level of SRS access and skills required to perform all three roles are similar. CoCCA NOC support staff have no VPN access or other access to appliances at the CoCCA SRS. The GUI access they have is limited to Customer Service functions, and all the applications they use (helpdesk, monitoring, accounting, email) are hosted outside the primary NOC.

CoCCA's NOC support is a virtual "function" performed by individuals in New Zealand, Guiana and France (additional NOC staff will be trained and other centers incorporated into the service in Q4 2012). If there is a failure in any of CoCCA's Registry Services functions, the role of the NOC support is to:

1) raise the alarm with CoCCA systems administrators or developers as conditions and events dictate;
2) liaise with PIPE Networks, PCH, ISC, IANA - ICAHN and registrars as required.

30.3.10 Provisioning against DNS Denial of Service attacks

A Denial of Service (DoS) attack on a network service floods it with fraudulent requests so that there is no capacity left for legitimate requests. CoCCA's Anycast DNS service is outsourced to PCH and ISC's Anycast networks. CoCCA's managed Anycast DNS services Anycast DNS System Bilgaway San. ve Tic. Ltd. Sti. has at least two "last resort" DNS nodes under direct management. Both PCH and ISC networks provide the .para with substantial protection against DoS attacks, including Anycasting, over provisioning, and network traffic shaping.

Both PCH and ISC utilize traffic shaping methods that rate limit the number of queries per IP address to help prevent abuse and to trigger an investigation of elevated traffic levels to see whether an attacker is testing resource limits or whether ISC or PCH should provision additional bandwidth-nervers or remove the node temporarily. In cases of an active DoS against ISC, CoCCA or PCH each will make every effort to identify the offending traffic and all sources to squelch offending traffic at the ISP borders before reaching the servers as well as augmenting capacity to handle any legitimate elevated traffic levels.

30.3.11 Provisioning against WHOIS and EPF Denial of Service attacks

CoCCA actively monitors all Registry Services to ensure they meet any required SLA. In the event of a DoS attack that threatens to lower the SIA for WHOIS or EPF services required in the ICAHN Agreement, CoCCA will work with our upstream providers (who also monitor the traffic) and attempt to squelch offending traffic at the ISP borders before it reaches the CoCCA RDNS servers. In the event the traffic is found to be legitimate, the bandwidth can be swiftly increased as required.

30.3.12 Failover Routing

CoCCA currently has multiple links to the Internet but does not load balance across them all. The secondary (failover) link is used to replicate and transfer backup NAL and VN image data files to CoCCA's Failover SRS infrastructure (currently located in Palo Alto) and Escrow NOC. If there is a critical infrastructure issue at PIPE Networks, EPF routing will be used to move our critical infrastructure on our IP4 and IP6 address blocks to the failover Telstra link or to one of the two SRS instances outside of Australia. A forth node will be added in Paris (France) in early 2013.

If the issue relates to an SLA problem, changing the A record and CNAME for RDNS services may be sufficient to resolve such an issue in a timely manner. If required by a pro-longed outage EPF routing may be used to re-rout
the entire ranges to a failover facility.

30.3.13 Commitments to Registrars

Taken from the .pars WHOIS and Privacy Policy

"6. DATA SECURITY

6.1 CoCCA shall take reasonable steps to protect the Personal Information it holds from misuse and loss and from unauthorized access, modification or disclosure.

7. OPENNESS

7.1 This Policy sets out CoCCA’s policies on its management of Personal Information. CoCCA shall make this document available to anyone who asks for it.

7.2 On request by any person, CoCCA shall take reasonable steps to let the person know, generally, what sort of Personal Information CoCCA holds, for what purposes, and how it collects, holds, uses and discloses that information.

8. ACCESS AND CONNECTION

8.1 All Registrant information lodged by a registrar that is maintained in the CoCCA SRS is publicly available from CoCCA’s RDDS services — WHOIS, Premium WHOIS, and Historical Abstracts.

See the .pars RDDS Policy (Attached) for more information.

8.2 If CoCCA holds Personal Information about a Registrant and the Registrant is able to establish that the information is not true, accurate, and complete and/or up-to-date, CoCCA shall take reasonable steps to facilitate corrections to the information so that current information is accurate, complete and up-to-date — except where the data is contained in an historical record or archive."

30.3.14 Independent Security Assessments

In addition to software and source security Audits, CoCCA has engaged the services of Connell Wagner Pty Ltd (now known as Aurecon Group Brand (Pte) Ltd) for the purpose of performing independent security audits of the primary data center.

On the condition that a gTLD is approved, CoCCA will engage the services of Aurecon to perform independent security audits to ensure the CoCCA system fully complies with all published security requirements set forth by ICANN. Such reports will be provided to ICANN on request. With new IT infrastructure planned for deployment in 2012 and early 2013, CoCCA will contract further independent assessments with third parties.

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