

Final Issue Report

Translation and Transliteration of Contact Information

STATUS OF THIS DOCUMENT

This is the Final Issue Report on the translation and transliteration of contact information requested by the Generic Names Supporting Organization (GNSO) Council. The Preliminary Issue Report was published for public comment thirty (30) days, ending 01 March 2013. This Final Issue Report takes into consideration the comments published in the forum.

SUMMARY

This Final Issue Report is submitted to the GNSO Council in response to a request received from the Council pursuant to a motion proposed and carried during the Council meeting on 17 October 2012.

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1 Executive summary

- 1.1 This Final Issue Report addresses three issues associated with the translation and transliteration of contact information at the request of the Generic Names Supporting Organization (GNSO) Council as approved in its motion on 17 October 2012.¹ These issues are focused on Domain Name Registration Data and Directory Services, such as the WHOIS, in generic Top Level Domains (gTLDs). In the context of these issues, “contact information” is a subset of Domain Name Registration Data. It is the information that enables someone using a Domain Name Registration Data Directory Service (such as WHOIS) to contact the domain name registration holder. It includes the name, organization, and postal address of the registered name holder, technical contact, as well as administrative contact. Domain Name Registration Data is accessible to the public via a Directory Service (also known as the WHOIS service). The Registrar Accreditation Agreement (RAA 3.3.1) specifies the data elements that must be provided by registrars (via Port 43 and via web-based services) in response to a query, but it does not require that data elements, such as contact information, must be translated or transliterated.
- 1.2 The three issues addressed in this Final Issue Report as described in the GNSO Council’s motion are:
- Whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script.
 - Who should decide who should bear the burden translating contact information to a single common language or transliterating contact

¹ See: <https://community.icann.org/display/gnsocouncilmeetings/Motions+17+October+2012>

information to a single common script. This question relates to the concern expressed by the Internationalized Registration Data Working Group (IRD-WG) in its report that there are costs associated with providing translation and transliteration of contact information. For example, if a policy development process (PDP) determined that the registrar must translate or transliterate contact information, this policy would place a cost burden on the registrar.

- Whether to start a PDP to address these questions.

As noted above, for the purpose of considering the PDP, these issues are focused on Domain Name Registration Data and Directory Services (such as the WHOIS) in gTLDs.

- 1.3 The translation and transliteration of contact information were two of many issues addressed by a cross-community working group – IRD-WG – in its Final Report.² In particular, Recommendation 2 of the Final Report forms the basis for the issues considered in this Final Issue Report, as follows:

The GNSO council and the SSAC should request a common Issue Report on translation and transliteration of contact information. The Issue Report should consider whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script. It should also consider who should bear the burden and who is in the best position to address these issues. The Issue Report should consider policy questions raised in this

² See Final Report of the Internationalized Registration Data Working Group at:
<http://gnso.icann.org/en/issues/ird/final-report-ird-wg-07may12-en.pdf>.

document and should also recommend whether to start a policy development process (PDP).

- 1.4 On 17 October 2012 the GNSO Council approved a motion requesting staff to initiate an Issue Report considering the three issues described above based on Recommendation 2 in the IRD-WG Final Report.
- 1.5 Section 4 of this Final Issue Report explores the three issues identified individually; provides references to documents and processes that can inform future policy work; and indicates some areas where further data and information gathering could be of potential value.
- 1.6 The launch of a dedicated PDP limited to consideration of these issues has been confirmed by the General Counsel to be properly within the scope of the ICANN policy process and within scope of the GNSO and is recommended by ICANN Staff.
- 1.7 Staff recommends that the GNSO Council should initiate a PDP, but should delay the next step in the PDP process (the formation of a Drafting Team to develop a charter for the PDP Working Group) on the issue of translation and transliteration of contact information. These issues should be viewed in the context of the ongoing work within ICANN focusing on the purpose of collecting, maintaining and providing access to gTLD registration data as this relates to the Board resolutions adopted on 08 November 2012.³
- 1.8 In particular, on 08 November 2012 the ICANN Board of Directors provided a rationale for several resolutions (2012.11.08.01 - 2012.11.08.02) relating to the

³ See <http://www.icann.org/en/groups/board/documents/resolutions-08nov12-en.htm#1.a>.

WHOIS, in response to the recommendations it received from the WHOIS Policy Review Team and the SSAC described above.⁴ The Board directed the CEO to:

launch a new effort to redefine the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, as a foundation for new gTLD policy and contractual negotiations, as appropriate (as detailed in the 1 November 2012 Board paper entitled, “Action Plan to Address WHOIS Policy Review Team Report Recommendations” – ICANN Board Submission Number 2012-11-01 [PDF, 266 KB]), and hereby directs preparation of an Issue Report on the purpose of collecting and maintaining gTLD registration data, and on solutions to improve accuracy and access to gTLD registration data, as part of a Board-initiated GNSO policy development process;⁵

- 1.9 The Board’s Action Plan envisions the possibility of a PDP on the issue of translation and transliteration of contact information as follows:

The Board directs the CEO to have Staff: 1) task a working group to determine the appropriate internationalized domain name registration data requirements, evaluating any relevant recommendations from the SSAC or GNSO; 2) produce a data model that includes (any) requirements for the translation or transliteration of the registration data, taking into account the results of any PDP initiated by the GNSO on translation/ transliteration, and the standardized replacement protocol under development in the IETF’s Webbased Extensible Internet Registration Data Working Group;

⁴ See <http://www.icann.org/en/groups/board/documents/resolutions-08nov12-en.htm#1.a>.

⁵ See the Action Plan to Address WHOIS Policy Review Team Report Recommendations at: <http://www.icann.org/en/groups/board/documents/briefing-materials-1-08nov12-en.pdf>.

- 1.10 The Action Plan further tasks the CEO to create an Expert Working Group on gTLD Directory Services to:

create material to launch GNSO policy work and inform contractual negotiations, as appropriate. Working group output is expected within 90 days and will ideally include a straw-man model for managing gTLD registration data. The working group's output form the basis for an Issues Report to accompany Board-initiated, expedited GNSO policy work that is expected to result in consensus policy that, at a minimum, addresses the purpose of collecting, maintaining and making available gTLD registration data, and related accuracy, data protection, and access issues.

On 13 December 2013 the ICANN CEO announced the formation of the Expert Working Group.⁶ On 14 February 2013 ICANN announced the selection of the members of the Expert Working Group on gTLD Directory Services.⁷

- 1.11 These and other recent activities are relevant to the issue of translation and transliteration of contact data and may provide key information that could inform the decision to start a PDP or further define the scope of the PDP. Staff notes that these activities were not envisioned when the IRD-WG when it began its work in 2009, nor were they available for review when the IRD-WG developed its Final Report recommendations. Nonetheless, these activities

⁶ See Expert Group on gTLD Director Services launched at:
<http://www.icann.org/en/news/announcements/announcement-2-14dec12-en.htm>.

⁷ See Expert Working Group on gTLD Directory Services Members Selected at:
<http://www.icann.org/en/news/announcements/announcement-14feb13-en.htm>.

directly relate to the translation and transliteration issue and any work resulting from the Board resolution may affect the scope of the PDP.

- 1.12 Accordingly, Staff recommends that the GNSO Council should initiate a PDP on the issue of translation and transliteration of contact data. However, Staff recommends that the GNSO Council should delay the next step in the PDP process (the formation of a Drafting Team to develop a charter for the PDP Working Group) until the Expert Working Group on gTLD Directory Services completes its recommendations in order to ensure that the resulting policy recommendations would be consistent with any new model or approaches to contact data that may result from the Expert Working Group's deliberations.

2 Objective

- 2.1 This report is submitted in accordance with Step 2 of the Policy Development Process described in Annex A of the ICANN Bylaws.⁸

- 2.2 In this context, and in compliance with ICANN Bylaw requirements:

a. The proposed issues raised for consideration:

A set of three issues relating to the translation and transliteration of contact information are proposed for consideration within a PDP. These issues are focused on Domain Name Registration Data and Directory Services, such as the WHOIS, in gTLDs. Contact information is the information that enables someone using a directory service such as the WHOIS to contact the domain name registration holder. It includes the name, organization, and postal address of the registered name holder, technical contact as well as administrative contact.

The proposed three issues are:

⁸ See Annex A of the ICANN Bylaws at: <http://www.icann.org/general/bylaws.htm#AnnexA>.

1. Whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script.
2. Who should decide who should bear the burden of translating contact information to a single common language or transliterating contact information to a single common script.
3. Whether to start a policy development process (PDP) to address these questions.

b. The identity of the party submitting the issue:

GNSO Council.

c. How that party is affected by the issue:

The GNSO is responsible for developing and recommending to the ICANN Board substantive policies relating to gTLDs. The GNSO includes various stakeholder groups and constituencies, which are affected in various ways by issues relating to domain name registration data contact information. Two of the GNSO stakeholder groups that could be directly affected by the outcome of a PDP to address the issues identified above are the Registrar Stakeholder Group and the Registry Stakeholder Group. In addition, users of Domain Name Registration Directory Services, such as WHOIS, also could be affected by the outcome of a PDP. The issues and their possible affects are discussed in further detail in Section 4 below.

d. Support for the issue to initiate the PDP:

The GNSO Council voted unanimously in favor of requesting an Issue Report on Recommendation 2 of the IRD-WG, translation and transliteration of contact information at its meeting of 17 October 2012. Recommendation 2 states:

The GNSO council and the SSAC should request a common Issue Report on translation and transliteration of contact information. The Issue Report

should consider whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script. It should also consider who should bear the burden and who is in the best position to address these issues. The Issue Report should consider policy questions raised in this document and should also recommend whether to start a policy development process (PDP).

e. Staff recommendation:

i. Whether the issue is within the scope of ICANN's mission statement:

ICANN's mission statement includes the coordination of the allocation of certain types of unique identifiers, including domain names, and the coordination of policy development reasonably and appropriately related to these technical functions.

ii. Whether the issue is broadly applicable to multiple situations or organizations:

Translation and transliteration of domain name registration contact information is potentially applicable to every domain name registration. Thus, it affects a high percentage of generic TLD (gTLD) registrants (individuals and organizations), registrars, and registries.

iii. Whether the issue is likely to have lasting value or applicability, albeit with the need for occasional updates:

Translation and transliteration of domain name registration data contact information will have lasting value and applicability, as the policy could apply to gTLD registries and registrars.

- iv. Whether the issue is likely to enable ICANN to carry out its commitments under the Affirmation of Commitments:

Policies affecting the display of internationalized registration data, such as the translation and transliteration of contact information, relate directly to the WHOIS Policy Review under the Affirmation of Commitments.

- v. Whether the issue will establish a guide or framework for future decision-making:

Policies affecting the display of internationalized registration data, such as the translation and transliteration of contact information, may establish a guide or framework, which would be applicable in other areas.

- vi. Whether the issue implicates or affects an existing ICANN policy:

The RAA (RAA 3.3.1) specifies the following data elements that must be provided by registrars (via Port 43 and via web-based services) in response to a query:

- The Registered Name
- The names of the primary nameserver and secondary nameserver(s) for the Registered Name
- The identity of the registrar (which may be provided through registrar's website)
- The original creation date of the registration
- The expiration date of the registration
- The name and postal address of the Registered Name Holder

- The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the technical contact for the Registered Name
- The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the administrative contact for the Registered Name

However, the RAA does not require the translation or transliteration of any elements of registration data. If a PDP determined that contact information must be translated or transliterated, this could require changes to the RAA depending on who must provide these functions. Some registries are subject (in their registry agreements with ICANN) to slightly different requirements regarding which data must be publicly accessible.⁹ In ccTLDs, the operators of these TLDs set their own or follow their government's policy regarding what constitutes this data and what is to be displayed in the Domain Name Registration Data Directory Service.

- 2.3 Based on the above, the launch of a dedicated PDP limited to consideration of these issues has been confirmed by the General Counsel to be properly within the scope of the ICANN policy process and within the scope of the GNSO.
- 2.4 In accordance with the ICANN Bylaws, this Final Issue Report will be published for public comment in order to allow for community input on additional information that may be missing from the Final Issue Report, or the correction or updating of any information in the Final Issue Report. In addition, the public comment period will allow for members of the ICANN Community to express their views to the GNSO Council on whether or not to initiate a PDP. Following review of the public comments received the Issue Report will be updated as

⁹ See for example <<http://www.icann.org/en/tlds/agreements/biz/appendix-05-08dec06.htm>.

appropriate, and to include a summary of the comments received, for delivery to the GNSO Council for its consideration and determination on whether to initiate the PDP.

3 Background

3.1 Process background

3.1.2 In April 2009 ICANN’s Security and Stability Advisory Committee (SSAC) issued SAC 037, *Display and usage of Internationalized Registration Data: Support for characters from local languages or scripts*.¹⁰ In this document, the SSAC examined how the use of characters from local scripts affects the Internet user experience with respect to domain name registration data submission, usage, and display. The SSAC made three recommendations:

1. That ICANN’s Board of Directors task the GNSO, Country Code Names Supporting Organization (ccNSO), and the SSAC to form a working group to study the feasibility and suitability of introducing display specifications or standards to deal with the internationalization of registration data.
2. That ICANN host a workshop on the internationalization of registration data during the next ICANN meeting (June 2009, Sydney).
3. That ICANN should consider the feasibility of having applications that query registration data services incorporate “standard” internationalization functionality.

3.1.3 ICANN’s Board of Directors acted on Recommendation 1 by approving a resolution (2009.06.26.18) requesting that the GNSO and the SSAC, in consultation with staff, convene working group to study the feasibility and

¹⁰ <http://www.icann.org/en/groups/ssac/documents/sac-037-en.htm>

suitability of introducing display specifications to deal with the internationalization of registration data.¹¹ Subsequently, the SSAC and the GNSO formed the IRD-WG to study the issues raised by the ICANN Board.

- 3.1.4 In November 2010 the IRD-WG produced an Interim Report requesting community input on several questions relating to possible models for internationalizing Domain Name Registration Data.¹² On 03 October 2011 the IRD-WG posted a draft Final Report for a 45-day public comment period.¹³
- 3.1.5 After considering the public comments received, on 07 May 2012, the IRD-WG submitted a Final Report to the GNSO Council and the SSAC for consideration.¹⁴
- 3.1.6 The SSAC approved the Final Report in May 2012. At its meeting on 27 June 2012 (in Prague) the GNSO Council passed a motion by which it approved the delivery of the Final Report to the Board.¹⁵ In its motion, the Council also agreed to review the recommendations in the Final Report and to provide to the Board its advice with regard to those recommendations that may have policy implications.

¹¹ See ICANN Board Resolutions, 26 June 2009, "Display and Usage of Internationalized Registration Data," <<http://www.icann.org/en/minutes/resolutions-26jun09.htm#6>>.

¹² See Interim Report of the Internationalized Registration Data Working Group at: <http://gns0.icann.org/issues/ird/ird-wg-final-report-15nov10-en.pdf>.

¹³ See Draft Final Report of the Internationalized Registration Data Working Group at: <http://www.icann.org/en/public-comment/ird-draft-final-report-03oct11-en.htm>.

¹⁴ See Final Report of the Internationalized Registration Data Working Group at: <http://gns0.icann.org/en/issues/ird/final-report-ird-wg-07may12-en.pdf>.

¹⁵ See <https://community.icann.org/display/gnsocouncilmeetings/Motions+27+June+2012>.

3.1.7 At its meeting on 17 October 2012, the GNSO Council approved a motion accepting the IRD-WG Final Report recommendations.¹⁶ The motion included the following clauses that resulted in the development of this Final Issue Report:

“WHEREAS the GNSO Council has reviewed the Final Report and considers that while expecting the ICANN Board to respond to the SSAC-GNSO joint letter, the Recommendation 2, translation and transliteration of contact information of IRD, of the Final Report requires timely action at the policy level which involves collaboration among domain name registrant, registrar, and registry.

“RESOLVED, the GNSO approves the Final Report and requests the ICANN Staff to prepare the IRD Issues Report on translation and transliteration of contact information (IRDIR-Rec2). The Issue Report should consider 1) whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script; 2) who should bear the burden and who is in the best position to address these issues; and 3) whether to start a policy development process (PDP) to address those questions.”

3.2 Issue Background

3.2.1 As noted above, the “contact information” referenced in this Final Issue Report is a subset of Domain Name Registration Data. It is the information that enables someone using a Domain Name Registration Data Directory Service (such as the WHOIS) to contact the domain name registration holder. It includes the name, organization, and postal address of the registered name holder, technical contact as well as administrative contact. Domain Name Registration Data is accessible to the public via a directory service (also known as the WHOIS

¹⁶ See <https://community.icann.org/display/gnsocouncilmeetings/Motions+17+October+2012>

service). This protocol is a client-server, query-response protocol. The RAA (RAA 3.3.1) specifies the data elements that must be provided by registrars (via Port 43 and via web-based services) in response to a query, but it does not require that data elements, such as contact information, must be translated or transliterated.

3.2.2 The IRD-WG defined Domain Name Registration Data as information that registrants provide when registering a domain name and that registrars or registries collect. As mentioned in Section 2 above, the RAA (RAA 3.3.1) specifies the data elements that must be provided by registrars (via Port 43 and via web-based services, such as WHOIS) in response to a query. (For ccTLDs, the operators of these TLDs set policies for the request and display of registration information.)

3.2.3 As the SSAC noted in SAC051 *SSAC Report on WHOIS Terminology and Structure*, “The term “WHOIS” is overloaded, referring to protocols, services, and data types associated with Internet naming and numbering resources, i.e., domain names, Internet Protocol (IP) addresses, and Autonomous System Numbers (ASNs).”¹⁷ The Report further notes that WHOIS can refer to any of the following:

1. The information that is collected at the time of registration of a domain name or IP numbering resource and subsequently made available via the WHOIS Service, and potentially updated throughout the life of the resource;
2. The WHOIS Protocol itself, which is defined in RFC 3912 (which obsoletes

¹⁷ See SAC051: SSAC Report on WHOIS Terminology and Structure at <http://www.icann.org/en/groups/ssac/documents/sac-051-en.pdf>.

RFCs 812 and 954); or

3. The WHOIS Services that provide public access to domain name registration information typically via applications that implement the WHOIS protocol or a web-based interface.

The SSAC recommended in its report that the terms Domain Name Registration Data Directory Service (rather than WHOIS) should be used when referring to the service(s) offered by registries and registrars to provide access to (potentially a subset of) the Domain Name Registration Data.

- 3.2.4 To balance the needs and capabilities of the local registrant with the need of the (potential) global user of this data, one of the key questions the IRD-WG members discussed is whether a Domain Name Registration Data Directory Service, such as the WHOIS, should support multiple representations of the same registration data in different languages or scripts.
- 3.2.5 The IRD-WG noted that much of the currently accessible domain registration data is encoded in US-American Standard Code for Information Interchange (US-ASCII). US-ASCII is a character-encoding scheme originally based on the English alphabet. This legacy condition is convenient for WHOIS service users who are sufficiently familiar with languages that can be displayed in US-ASCII.
- 3.2.6 However, US-ASCII data are less useful to the community of Domain Name Registration Data Director Service users who are only familiar with languages that require character set support other than US-ASCII. It is important to note that this community is likely to continue growing. Thus accommodating the submission and display of internationalized registration data is seen as an important evolutionary step for Domain Name Registration Data Directory Services such as the WHOIS.

3.2.7 In general, the IRD-WG recognized that the internationalized contact data can be translated or transliterated into the “must be present” representation. By “must be present” the IRD-WG meant that contact data must be made available in a common script or language. In this context, **Translation** is the process of conveying the meaning of some passage of text in one language, so that it can be expressed equivalently in another language. **Transliteration** is the process of representing the characters of an alphabetical or syllabic system of writing by the characters of a conversion alphabet. If transliteration were desired, then the “must be present” script would be the Latin script. If translation were desired, then the “must be present” language would be English.

3.2.8 The IRD-WG considered five models to address the translation and transliteration of domain name registration data contact information, but it was unable to reach consensus on a single model.¹⁸ However, it recognized that the translation and transliteration of contact information had policy implications, and thus its Final Report contained the following recommendation:

Recommendation 2: The GNSO council and the SSAC should request a common Issue Report on translation and transliteration of contact information. The Issue Report should consider whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script. It should also consider who should bear the burden and who is in the best position to address these issues. The Issue Report should consider policy questions raised in this document and should also recommend whether to start a policy development process (PDP).

¹⁸ See Annex A: Different Models Proposed in the Internationalized Registration Data Working Group Final Report at the end of this document.

- 3.2.9 The Affirmation of Commitments signed on 30 September 2009 between ICANN and the US Department of Commerce contains specific provisions for periodic review of four key ICANN objectives, including WHOIS Policy.¹⁹ The WHOIS Policy Review Team completed its review and published its Final Report on 11 May 2012.²⁰ In its Final Report the Review Team echoed the IRD-WG by calling for a Working Group to be formed (Recommendations 12 and 13) to develop internationalized domain name registration requirements that would include a data model that would address, “(any) requirements for the translation or transliteration of the registration data.” In addition, the SSAC further emphasized the IRD-WG’s recommendation in SAC055: *WHOIS: Blind Men and an Elephant (SSAC Comment on the WHOIS Policy Review Team Final Report)*.²¹ In the Report the SSAC agreed with the recommendations of the Review Team on translation/transliteration of registration data and called on the ICANN Board of Directors to adopt Recommendation 2 in the IRD-WG’s Final Report. The SSAC also stated that the ICANN Board should pass a resolution clearly stating the criticality of the development of a registration data policy defining the purpose of domain name registration data.
- 3.2.10 On 08 November 2012 the ICANN Board of Directors provided a rationale for several resolutions (2012.11.08.01 - 2012.11.08.02) relating to the WHOIS, in response to the recommendations it received from the WHOIS Policy Review

¹⁹ See Affirmation of Commitments at <http://www.icann.org/en/about/agreements/aoc/affirmation-of-commitments-30sep09-en.htm>.

²⁰ See WHOIS Policy Review Team Final Report at: <http://www.icann.org/en/about/aoc-review/whois/final-report-11may12-en.pdf>.

²¹ See SAC055: Blind Men and an Elephant (SSAC Comment on the WHOIS Policy Review Team Final Report) at <http://www.icann.org/en/groups/ssac/documents/sac-055-en.pdf>.

Team and the SSAC described above.²² In particular, the Board directed the CEO to:

launch a new effort to redefine the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, as a foundation for new gTLD policy and contractual negotiations, as appropriate (as detailed in the 1 November 2012 Board paper entitled, “Action Plan to Address WHOIS Policy Review Team Report Recommendations” – ICANN Board Submission Number 2012-11-01 [PDF, 266 KB]), and hereby directs preparation of an Issue Report on the purpose of collecting and maintaining gTLD registration data, and on solutions to improve accuracy and access to gTLD registration data, as part of a Board-initiated GNSO policy development process;²³

3.2.11 The Board’s Action Plan envisions the possibility of a PDP on the issue of translation and transliteration of contact information as follows:

The Board directs the CEO to have Staff: 1) task a working group to determine the appropriate internationalized domain name registration data requirements, evaluating any relevant recommendations from the SSAC or GNSO; 2) produce a data model that includes (any) requirements for the translation or transliteration of the registration data, taking into account the results of any PDP initiated by the GNSO on translation/ transliteration, and the standardized replacement protocol under development in the IETF’s Webbased Extensible Internet Registration Data Working Group;

²² See <http://www.icann.org/en/groups/board/documents/resolutions-08nov12-en.htm#1.a>.

²³ See the Action Plan to Address WHOIS Policy Review Team Report Recommendations at: <http://www.icann.org/en/groups/board/documents/briefing-materials-1-08nov12-en.pdf>.

3.2.12 The Action Plan further tasks the CEO to create an Expert Working Group on gTLD Directory Services to:

create material to launch GNSO policy work and inform contractual negotiations, as appropriate. Working group output is expected within 90 days and will ideally include a straw-man model for managing gTLD registration data. The working group's output form the basis for an Issues Report to accompany Board-initiated, expedited GNSO policy work that is expected to result in consensus policy that, at a minimum, addresses the purpose of collecting, maintaining and making available gTLD registration data, and related accuracy, data protection, and access issues.

On 13 December 2013 the ICANN CEO announced the formation of the Expert Working Group.²⁴ On 14 February 2013 ICANN announced the selection of the members of the Expert Working Group on gTLD Directory Services.²⁵

4 Discussion of proposed issues

4.1 Overview

This Final Issue Report addresses three issues associated with the translation and transliteration of contact information at the request of the GNSO Council as

²⁴ See Expert Group on gTLD Director Services launched at:
<http://www.icann.org/en/news/announcements/announcement-2-14dec12-en.htm>.

²⁵ See Expert Working Group on gTLD Directory Services Members Selected at:
<http://www.icann.org/en/news/announcements/announcement-14feb13-en.htm>.

approved in its motion on 17 October 2012.²⁶ As noted above, contact information is the information that enables someone using a Domain Name Registration Data Directory Service, such as the WHOIS, to contact the domain name registration holder. It includes the name, organization, and postal address of the registered name holder, technical contact as well as administrative contact.

4.1.1 Registrants submit information regarding Domain Name Registration Data to a sponsoring entity for inclusion in Domain Name Registration Data Directory Services such as the WHOIS. In all gTLDs, that entity is either a registrar or a reseller. In ccTLDs, that entity can be a registry, in addition to a registrar or a reseller. Registrants submit this information as part of the process of registering a domain name. The sponsoring entity collects the information. End users query the registration data directory service for a domain name, contact information, or nameserver information.

4.1.2 The RAA (RAA 3.3.1) specifies the following data elements that must be provided by registrars (via Port 43 and via web-based services) in response to a query:

- The Registered Name
- The names of the primary nameserver and secondary nameserver(s) for the Registered Name
- The identity of the registrar (which may be provided through registrar's website)
- The original creation date of the registration
- The expiration date of the registration
- The name and postal address of the Registered Name Holder

²⁶ See GNSO Council Motion at:

<https://community.icann.org/display/gnsocouncilmeetings/Motions+17+October+2012>.

- The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the technical contact for the Registered Name
- The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the administrative contact for the Registered Name

In ccTLDs, the operators of these TLDs set their own or follow their government's policy regarding what constitutes this data and what is to be displayed in the Domain Name Registration Data Directory Service, such as the WHOIS.

4.1.3 The contact information is the information that enables someone to contact the domain name registration holder. Only a subset of the information collected under Section 3.3 of the RAA is considered contact information, namely:

- The Registered Name
- The name and postal address of the Registered Name Holder
- The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the technical contact for the Registered Name
- The name, postal address, e-mail address, voice telephone number, and (where available) fax number of the administrative contact for the Registered Name

4.2 Issues to explore in a PDP

4.2.1 Is it desirable to translate contact information to a single common language or transliterate contact information to a single common script.

- 4.2.1.1 The IRD-WG noted in its Final Report that, “[t]o balance the needs and capabilities of the local registrant with the need of the (potential) global user of this data, one of the key questions ... is whether DNRD-DS [Domain Name Registration Data Directory Services] should support multiple representations of the same registration data in different languages or scripts.” In particular, the IRD-WG members discussed whether it is desirable to adopt a “must be present” representation of contact data, in conjunction with local script support for the convenience of local users. By “must be present” the IRD-WG meant that contact data must be made available in a common script.
- 4.2.1.2 In general, the IRD-WG recognized that, “the internationalized contact data can be translated or transliterated into the “must be present” representation. As noted above, in this context, **Translation** is the process of conveying the meaning of some passage of text in one language, so that it can be expressed equivalently in another language. **Transliteration** is the process of representing the characters of an alphabetical or syllabic system of writing by the characters of a conversion alphabet.” Based on this definition, and consistent with the current state of domain name registration data, the IRD-WG noted that if transliteration were desired, then the “must be present” script would be the Latin script. If translation were desired, then the “must be present” language would be English.
- 4.2.1.3 The IRD-WG discussed the issue of whether to translate or transliterate internationalized contact information and identified four options (see Annex A below). But the IRD-WG did not reach consensus on whether translation or transliteration is needed. The IRD-WG also lacked information to determine the commercial feasibility of translation and transliteration systems, and the impact translation or transliteration has on the accuracy of registration data. The IRD-WG did note that many language translation systems are inexact and cannot be applied repeatedly to translate from one language to another. Thus

the IRD-WG noted that there will likely be problems with both consistency and accuracy, such as:

- Translation/transliteration may vary significantly across languages using the same script.
- Two people may translate/transliterate differently even within a language and the same person may translate/transliterate differently at different times for the same language.
- How would a registrar determine which particular spellings to use for a particular registrant? How would a registrant ever verify the correctness of a translation or transliteration, even if presented such data by the registrar or by a third organization that does the translation/transliteration?

4.2.1.4 Furthermore, the IRD-WG noted that for a given script, there may exist multiple systems for transliteration into Latin scripts. In the case of Chinese, the multiple transliteration systems are not only quite different from each other, but most of the systems use particular Latin characters to represent phonemes that are quite different from the most common phoneme-character pairings in European languages.

4.2.1.5 Finally, it is unclear whether translation or transliteration would serve the needs of the users of contact data. For example it is unclear translating the name of the registrant and city would be useful. Would one have to translate "Los Angeles" into "City of the Angels" and translate "Beijing" into "Northern Capital"? The PDP should explore whether such translations facilitate or hinder contactability of the registrant.

4.2.2 More importantly, the PDP on the issues relating to translation and transliteration of contact information should consider who should bear the burden of translating contact information to a single common language or

transliterating contact information to a single common script. This question relates to the concern expressed by the IRD-WG in its report that there are costs associated with providing translation and transliteration of contact information. For example, if a PDP determined that the registrar must translate or transliterate contact information, this policy would place a cost burden on the registrar. The IRD-WG considered several alternatives to address translation and transliteration of contact information as follows:

- The registrant submits the localized information as well the translated or transliterated information.
- The registrant only submits the localized information, and the registrar translates and transliterates all internationalized contact information on behalf of the registrant.
- The registrant only submits the localized information, and the registrars provide a point of contact at a service that could provide translation or transliteration upon request for a fee to be paid by the requester.
- The registrant only submits the localized information, and the registry provides translation or transliteration.
- The end users of the registration data translate and transliterate the contact information.

4.2.3 During their deliberations the members of the IRD-WG recognized that many registrants will need to access domain names in their local scripts and languages is the one of the primary reasons for the expansion of internationalized domain names. Therefore, the IRD-WG determined that it is unreasonable to assume all registrants – wherever they happen to be – will be able to enter the registration data in scripts or languages other than their local script or language.

4.3 Whether to start a PDP on translation or transliteration of contact information

- 4.3.1 In its Final Report, the IRD-WG recommended that the GNSO Council and the SSAC should request a common Issue Report on translation and transliteration of contact information. The Issue Report should consider whether it is desirable to translate contact information to a single common language or to transliterate contact information to a single common script. The Issue Report should also consider who should bear the burden and who is in the best position to address these issues.
- 4.3.2 This Final Issue Report is the pre-cursor to a Final Issue Report and to the initiation of a PDP, if one is approved by the GNSO Council. This report will be published for public comment for not less than thirty (30) days. The public comment period will allow for members of the ICANN Community to express their views to the GNSO Council on whether or not to initiate a PDP.
- 4.3.3 As noted in Section 6 (Staff Recommendation) below, on 08 November 2012 the Board adopted several Resolutions that suggest that the recommendation of the IRD-WG on transliteration and translation of contact information could be considered in the larger context of the work of the Expert Working Group on gTLD Directory Services (as described above) that the Board directed ICANN's President and CEO to undertake.²⁷ In light of these recent developments, Staff recommends that the GNSO Council defer the initiation of a PDP until after the Expert Working Group publishes its report, to ensure that the resulting policy recommendations would be consistent with any new model or approaches to contact information that may result from the Expert Working Group's deliberations.

²⁷ See <http://www.icann.org/en/groups/board/documents/resolutions-08nov12-en.htm#1.a>

5 Discussion of possible policy outcomes

- 5.1 If a PDP is initiated on the issues discussed in this Report, a probable outcome may be the development of a Consensus Policy. If a Consensus Policy is proposed, it could be incorporated into the obligations of the registrars under the RAA. In addition, it is possible that a Consensus Policy could impact the procedures used by registries for the display of domain name registration data contact information, and could be incorporated into the obligations of registries under the applicable registry agreements. Such Consensus Policy also could affect users of Domain Name Registration Data Directory Services, such as the WHOIS.
- 5.2 If a policy development process is not initiated, or if there are no changes recommended at the conclusion of a PDP, the result would be that the status quo would continue.

6 Staff recommendation

- 6.1 Staff recommends that a PDP be initiated, but deferred, on the issue of translation and transliteration of contact information. These issues should be viewed in the context of the ongoing work of the Expert Working Group that is tasked by the ICANN Board to consider the purpose of collecting, maintaining and providing access to gTLD registration data according to the Board resolutions adopted on 08 November 2012.²⁸ These and other recent activities are relevant to this issue and may provide key information that could inform the decision to start a PDP or further define the scope of the PDP. Staff notes that these activities were not envisioned when the IRD-WG when it began its work in 2009, nor were they available for review when the IRD-WG developed its Final

²⁸ See <http://www.icann.org/en/groups/board/documents/resolutions-08nov12-en.htm#1.a>.

Report recommendations. Nonetheless, these activities directly relate to the recommendations on the issue of translation and transliteration of contact information, and any work resulting from the board resolution may impact the scope of the PDP. In addition to the Board resolutions described in more detail below the following other relevant activities:

1. SSAC Report on the Domain Name Registration Data Model (11 June 2012):²⁹ This Report addresses Recommendation 1 of the IRD-WG Final Report: the development of a data model for domain registration data.
2. WHOIS Policy Review Team Final Report (11 May 2012):³⁰ This Report includes recommendations that relate directly to, and even duplicate, the IRD-WG recommendation on translation and transliteration of contact information.
3. SSAC Comment on the WHOIS Review Team Final Report (14 September 2012):³¹ This Comment supports many of the recommendations in the WHOIS Policy Review Team Final Report and those in the IRD-WG Final Report. However, the key recommendation in the Comment is that, “The Board should pass a resolution clearly stating the criticality of the development of a registration data policy defining the purpose of domain name registration data.”

6.2 As noted above, of particular interest are the 08 November 2012 resolutions adopted by the ICANN Board of Directors, which have direct bearing on whether

²⁹ See SSAC Report on the Domain Name Registration Data Model (11 June 2012) at:
<http://www.icann.org/en/groups/ssac/documents/sac-054-en.pdf>.

³⁰ See WHOIS Policy Review Team Final Report at: <http://www.icann.org/en/about/aoc-review/whois/final-report-11may12-en.pdf>.

³¹ See SSAC Comment on the WHOIS Policy Review Team Final Report at:
<http://www.icann.org/en/groups/ssac/documents/sac-055-en.pdf>.

and when to begin a PDP on the issue of the translation and transliteration of contact information. These resolutions and their resulting directives suggest that the recommendation of the IRD-WG on transliteration and translation of contact information could be considered in the larger context of the purpose of domain name registration data. The Board's Resolution:

Directs the CEO to launch a new effort to redefine the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, as a foundation for new gTLD policy and contractual negotiations, as appropriate (as detailed in the 1 November 2012 Board paper entitled, "Action Plan to Address WHOIS Policy Review Team Report Recommendations"—ICANN Board Submission Number 2012-11-08-01 [PDF, 266 KB]³²), and hereby directs preparation of an Issue Report on the purpose of collecting and maintaining gTLD registration data, and on solutions to improve accuracy and access to gTLD registration data, as part of a Board-initiated GNSO policy development process;

- 6.3 Also as noted previously, in its "Action Plan to Address WHOIS Policy Review Team Report Recommendations" the Board further tasks the CEO to create an Expert Working Group on gTLD Directory Services to:

create material to launch GNSO policy work and inform contractual negotiations, as appropriate. Working group output is expected within 90 days and will ideally include a straw-man model for managing gTLD

³² See Action Plan to Address WHOIS Policy Review Team Report Recommendations at: <http://www.icann.org/en/groups/board/documents/briefing-materials-1-08nov12-en.pdf>.

registration data. The working group's output form the basis for an Issues Report to accompany Board-initiated, expedited GNSO policy work that is expected to result in consensus policy that, at a minimum, addresses the purpose of collecting, maintaining and making available gTLD registration data, and related accuracy, data protection, and access issues.

On 13 December 2013 the ICANN CEO announced the formation of the Expert Working Group.³³ On 14 February 2013 ICANN announced the selection of the members of the Expert Working Group on gTLD Directory Services.³⁴

- 6.4 Staff suggests that the recommendations of the Expert Working Group on gTLD Directory Services could provide guidance on how to address the issues relating to the translation or transliteration of registration data and whether to start a PDP. To be clear, Staff does not suggest that the Expert Working Group's recommendations will preclude a PDP, but notes that they may help to inform the work of the PDP Working Group. In fact, the Board's Action Plan envisions the possibility of a PDP on the issue of translation and transliteration as follows:

The Board directs the CEO to have Staff: 1) task a working group to determine the appropriate internationalized domain name registration data requirements, evaluating any relevant recommendations from the SSAC or GNSO; 2) produce a data model that includes (any) requirements for the translation or transliteration of the registration

³³ See Expert Group on gTLD Director Services launched at:
<http://www.icann.org/en/news/announcements/announcement-2-14dec12-en.htm>.

³⁴ See Expert Working Group on gTLD Directory Services Members Selected at:
<http://www.icann.org/en/news/announcements/announcement-14feb13-en.htm>.

data, taking into account the results of any PDP initiated by the GNSO on translation/ transliteration, and the standardized replacement protocol under development in the IETF's Webbased Extensible Internet Registration Data Working Group; 3) evaluate available solutions (including solutions being implemented by ccTLDs).

- 6.5 Moreover, Staff believes that the following work should be initiated as quickly as possible, either in the context of a PDP on the issue of translation and transliteration of contact information if one is initiated immediately, or as pre-PDP work to be done in advance of, and to inform, a future PDP:
- **Enumerate** the use cases for a transliterated (or translated) contact data. This will determine whether the information loss and consistency issues associated with translation/transliteration is acceptable.
 - **Discuss** why such use cases cannot be met with the localized contact information submitted.
 - **Study** the commercial feasibility of translation and transliteration systems for internationalized contact data.

7 Conclusion

In conclusion, Staff recommends that the GNSO Council should initiate a PDP on the issue of translation and transliteration of contact data. However, Staff recommends that the GNSO Council should delay the next step in the PDP process (the formation of a Drafting Team to develop a charter for the PDP Working Group) until the Expert Working Group on gTLD Directory Services completes its recommendations in order to ensure that the resulting policy recommendations would be consistent with any new model or approaches to contact data that may result from the Expert Working Group's deliberations.

Annex A: Different Models Proposed in the Internationalized Registration Data Working Group Final Report

1. Registrants provide domain contact data in “Must Be Present” script in addition to their local language. Registrars and registries will display both in the DNRD-DS.
2. Registrants provide data in any registrar-accepted script and registrars provide point of contact for transliteration or translation.
3. Registrants provide data in any registrar-accepted script and registrars provide transliteration tools to publish in “Must Be Present” script.
4. Registrants provide data in any registrar-accepted language and registrars provide translation tools to publish in “Must Be Present” script.

4.2.3 The following is a description of each of the four models in detail:

Model 1: Provide Directory Service Data in “Must Be Present” Script

Model 1 requires registrants to provide their directory service data in a “Must Be Present” script such as US-ASCII. The registrars have the option of asking registrants to provide their contact information in a local script. If registrants also provide information in their local script, then this information is displayed. Many IRD-WG members thought that that Model 1 was feasible because it would have the least potential impact on registrars and registries. However, they also thought that it would provide the fewest benefits for internationalized

registration data since local language display is optional. Figure 1 illustrates this model.

```
$ whois -h idnwhois.registrarX.ru      жук.рф
$ whois -h idnwhois.registrarX.ru      XN--F1AIOA.XN--P1AI

% Registrar X WHOIS server
% This query returned 1 object

domain:      жук.рф
domain-ace:   XN--F1AIOA.XN--P1AI
domain-variant:
domain-v-ace:
contact:     Petr Ivanov (Петр Иванов)
organisation: OSC «Cicle»
address:     Office 1, Lenin st., Kovrov
address:     Vladimir region, 601900
address:     Russia
phone:       +7 49232 48720
fax-no:      +7 49232 48722
e-mail:      cicle@cicle.ru
```

Figure 1: Model 1 for displaying contact information. In this model, registrants provide data in US-ASCII, and optionally in local script. The registrars display the information both in Cyrillic and US-ASCII.

Model 2: Provide Data in Registrar-Accepted Script and Point of Contact

In Model 2, registrants provide their registration data in a script that can be accepted by the registrar, and registrars provide a point of contact for transliteration and abuse issues on request. The registrars will also forward the same information to the registry. Many IRD-WG members also thought Model 2 was feasible. However, some IRD-WG members wondered whether this model would create inaccuracies. For example, in this model, registries may not verify the validity of the scripts they receive from registrants and may not take

responsibility for the accuracy of the information. If the verification of the script is not performed, it is possible that an entry that combines Cyrillic, simplified Chinese, and Indic scripts could be created as a valid WHOIS entry. In addition, some IRD-WG members were wary of any solution that relies upon registrar provision of a point of contact, whether to the public or to registrants. Figure 2 illustrates this model.

```
$ whois -h idnwhois.registrarX.ru      жук.рф
$ whois -h idnwhois.registrarX.ru    XN--F1AI0A.XN--P1AI

% Registrar X WHOIS server
% This query returned 1 object

domain:          жук.рф
domain-ace:      XN--F1AI0A.XN--P1AI
Registrar:      RU-CENTER LLC
Registrar POC:  http://nic.ru
phone:          +7 800 234-5689
fax-no:         +7 800 234-5699
email:          info@nic.ru
contact:        Петр Иванов
organisation:   ОАО Циркуль
address:        ул.Ленина, офис 1, г.Ковров
address:        Владимирская обл. 601900
address:        Россия
phone:          +7 49232 48720
fax-no:         +7 49232 48722
e-mail:         cicle@cicle.ru
```

Figure 2: Model 2 to display contact information. Registrants in this model provide localized information and registrars provide a point of contact to respond to translation issues.

Model 3: Provide Data in Any Script Accepted by the Registrar; Registrar Provides Transliteration Tools to Publish in “Must be Present” Script

In Model 3, registrants provide their registration data in any script accepted by the registrar, and registrars provide tools for publishing the data in a “must be

present” script. Many IRD-WG members raised concerns that Model 3 would incur added costs to registrars to produce transliterations. In addition, some IRD-WG members thought that transliteration would not be accurate enough to benefit law enforcement or intellectual property enforcement. Moreover, other members thought that Model 3 represents added value and that the focus on policy should be on baseline behavior, not on added value. Finally, some IRD-WG members were wary of any solution that relies upon registrar provision of transliteration services, whether to the public or to registrants. Figure 3 illustrates this model.

```
$ whois -h idnwhois.registrarX.ru      жук.рф
$ whois -h idnwhois.registrarX.ru    XN--F1AI0A.XN--P1AI

% Registrar X WHOIS server
% This query returned 1 object

domain:      жук.рф
domain-ace:  XN--F1AI0A.XN--P1AI
contact:     Petr Ivanov
organisation: OAO «Tsirkul»
address:     Office 1, Ulitsa Lenina, Kovrov
address:     Vladimirskaya oblast, 601900
address:     Rossiya
phone:       +7 49232 48720
fax-no:      +7 49232 48722
e-mail:      cicle@cicle.ru
```

Figure 3: Model 3 to represent contact information. In this model, registrants provide information in local language, and registrars *transliterate* registrants’ submission and display them in WHOIS.

Model 4: Provide Data in Any Script Accepted by the Registrar; Registrar Provides Translation Tools to Publish in “Must be Present” Script

In Model 4, registrants provide their registration data in any script accepted by the registrar, and registrars provide tools for translating and publishing the data in a “must be present” language. Many IRD-WG members raised concerns that Model 4 would incur added costs to registrars as they produce translations. In addition, some IRD-WG members thought that translation would not be accurate enough to benefit law enforcement or intellectual property enforcement. Moreover, other members thought that Model 4 represents added value and that the focus on policy should be on baseline behavior, not on added value. Finally, some IRD-WG members were wary of any solution that relies upon registrar provision of translation services, whether to the public or to registrants. Figure 4 illustrates this model.

```
$ whois -h idnwhois.registrarX.ru      жук.рф
$ whois -h idnwhois.registrarX.ru    XN--F1AIOA.XN--P1AI

% Registrar X WHOIS server
% This query returned 1 object

domain:      жук.рф
domain-ace:  XN--F1AIOA.XN--P1AI
domain-variant:
domain-v-ace:
contact:     Petr Ivanov
organisation: OSC «Cicle»
address:     Office 1, Lenin st., Kovrov
address:     Vladimir region, 601900
address:     Russia
phone:       +7 49232 48720
fax-no:      +7 49232 48722
e-mail:      cicle@cicle.ru
```

Figure 4: Model 4 to represent contact information. In this model, registrants provide information in their local language, and registrars *translate* registrants’ submission and display them in WHOIS.

A respondent proposed a fifth model in the public forum on the draft Final Report. This proposed model is that registrants would provide domain contact data in any registrar-accepted script, and also optionally could provide the translated/transliterated data in the English language/Latin script.