Trademark Clearinghouse Requirements

September 2012

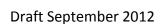




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1. Introduction

One way ICANN is working to protect intellectual property rights and the interests of registrants in the new gTLD program is the establishment of a Trademark Clearinghouse. The Clearinghouse is being designed to increase protections and reduce costs for rights holders and start-up registries alike. The Clearinghouse is expected to play an important role in the launch of the new gTLD Program and in ensuring ongoing protection of trademark rights.

Trademark rights, broadly defined, identify the source of a good or service. The (Trademark) Clearinghouse's remit is limited to verifying data concerning trademark rights recognized in a particular jurisdiction.

The Clearinghouse is a central repository of verified trademark information for text marks. ICANN will enter into an agreement with a service provider or providers, awarding the right to serve as a Clearinghouse service provider, i.e., to accept, verify and facilitate the transmission of information related to certain marks, as illustrated in Figure 1.

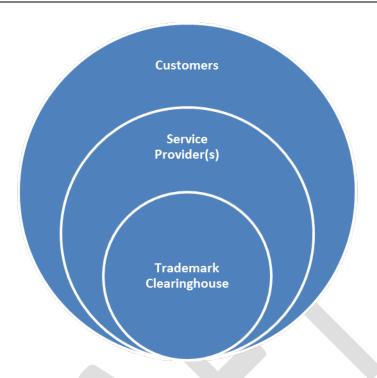


Figure 1. Clearinghouse, Service Provider(s), and Customers

The selection of Clearinghouse service provider(s) will be subject to predetermined criteria, but the foremost considerations will be the ability to store, verify and disseminate the data at the highest level of technical stability and security without interference with the integrity or timeliness of the registration process or registry operations.

Public commentary has suggested that the best way to protect the integrity of the data would be to separate the functions of database administration and data verification.

One entity will verify trademark data submissions and ensure that the mark qualifies as:

- A nationally or regionally registered word marks from any jurisdictions, or
- A word mark that has been validated through a court of law or other judicial proceeding, or
- A word mark protected by a statute or treaty in effect at the time the mark is submitted to the Clearinghouse for inclusion, or
- Are other marks that constitute intellectual property (this feature will n be added on a case by case basis as this is based on the registry's policy in accordance to the Application Guidebook).

This entity will also verify proof of use as required for sunrise eligibility.

The second entity will maintain the database and provide sunrise and trademark claims services.

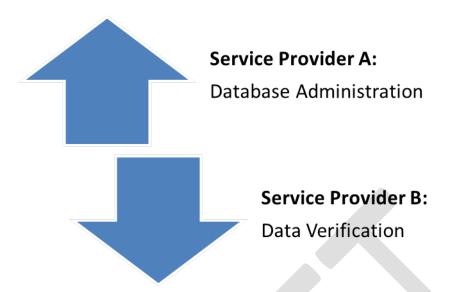


Figure 2. Separation of Service Provider Functions

The Clearinghouse service provider(s) will be selected through an open and transparent process to ensure low costs and reliable, consistent service for all those utilizing the Clearinghouse services.

The Clearinghouse service provider(s) shall have the relevant experience in database administration, data verification, as well as accessibility to and knowledge of the various relevant trademark laws.

1.1. Purpose of This Document

This document expands upon the Clearinghouse Request for Information (RFI) to define the specific requirements of the Clearinghouse at a detailed level. It is informed by:

- gTLD Applicant Guidebook and Implementation Recommendation Team (IRT) and Special Trademark Issues (STI) review team recommendations
- Public comment
- Recommendations from the community through the Implementation Assistance Group (see Community Involvement)

1.2. Document Structure

This document is structured hierarchically in a manner parallel to how the Clearinghouse will operate.

1.2.1 Services

At the highest level, the Clearinghouse provider(s) will be responsible for delivering a core set of services to customers (see 2. Trademark Clearinghouse Services for a detailed description). In some cases, specific mandatory requirements are associated with a service; in other cases, the requirements specify a minimum level of service and the service provider(s) may choose to offer additional services with the approval of ICANN. Such additional services may be requested by others or may initially be considered by the providers.

1.2.2 Business Processes

Each service is supported by one or more business processes. Some are traditional processes that can be defined as precise steps, decision points, and process flows; other processes are described in more general terms and require further definition in cooperation with the selected service provider(s).

1.2.3 Technical Requirements

Underlying the business processes are technical requirements for systems implementation and communication to enable the processes to function effectively and efficiently.

Figure 3 illustrates the relationship between services, processes, and technical requirements.

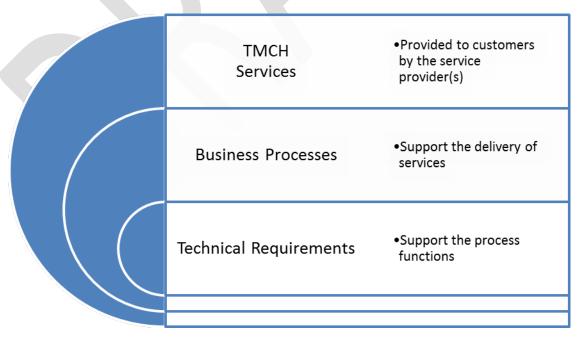


Figure 3. Services, Processes, and Technical Requirements.

There is not a one-to-one relationship between services, processes, and technical requirements. For example, a billing system could support several processes that in turn support multiple services.

1.3. Responsibilities and Governance

The Clearinghouse database will be a repository of verified trademark information and a disseminator of the information to a limited number of recipients (as defined hereinafter "Target Customers") as described in service and process descriptions and in technical requirements throughout this document. The Clearinghouse functions will be performed in accordance with a limited charter, contracts for Validation (verification) and Database Operation contractor services, and this requirements document. The Clearinghouse contractors cannot create policy; ICANN oversees the Clearinghouse contractors as the primary contracting authority and policy-making organization. Before material changes are made to the Clearinghouse functions, they will be reviewed as appropriate through the ICANN public participation model.

Inclusion in the Clearinghouse is not proof of any right, nor does it create any legal rights. Failure to submit trademarks into the Clearinghouse should not be perceived to be lack of vigilance by rights holders or a waiver of any rights, nor can any negative influence be drawn from such failure.

The Clearinghouse shall be a separate, operationally independent entity. It will operate based on market needs and collect fees from those who use its services. While the Clearinghouse is operationally independent, it will function under the oversight and policy guidance of ICANN in compliance with ICANN policy. ICANN may coordinate or specify interfaces to be used by registries and registrars, and provide oversight or quality assurance to ensure rights protection goals are appropriately met.

Costs should be completely borne by the parties utilizing the services. Rights holders will pay to record text marks in the Clearinghouse, and registries will pay for trademark claims and sunrise services. Registrars and others who avail themselves of Clearinghouse services will pay the Clearinghouse service provider(s) directly.

1.4. Community Involvement

1.4.1. Implementation Recommendation Team (IRT)

In the course of implementation work toward expansion of the gTLD namespace, the ICANN's Board passed a resolution on 6 March 2009 to form an Implementation Recommendation Team (IRT) to seek enhanced solutions

supporting trademark protection in connection with the introduction of new gTLDs. The IRT, consisting of 18 geographically diverse subject matter experts from the intellectual property arena, made recommendations to enhance trademark protection. One such recommendation was the establishment of a Trademark Clearinghouse to provide certain services. See http://archive.icann.org/en/topics/new-gtlds/irt-final-report-trademark-protection-29may09-en.pdf.

1.4.2. Special Trademark Issues Review Team (STI)

Following the report of the IRT and during the development of the gTLD Applicant Guidebook, the ICANN Board of Directors requested a review from the Generic Names Supporting Organization (GNSO) of the policy implications of certain trademark protection mechanisms proposed for the new gTLD program. The GNSO adopted a resolution creating the Special Trademarks Issues review team to analyze rights protection mechanisms and provide additional recommendations. The STI report made additional recommendations concerning the establishment of a Trademark Clearinghouse. See http://www.icann.org/en/news/public-comment/sti-17dec09-en.htm.

1.4.3. Implementation Assistance Group (IAG)

At ICANN's Dakar meeting in October 2011, ICANN invited interested stakeholder participants to take part in an Implementation Assistance Group (IAG). The IAG worked with ICANN to refine the processes to be supported by the Clearinghouse. That input contributed to the development of this set of requirements. See

https://community.icann.org/download/attachments/31176258/Clearinghouse+IAG+Report30-3-12.pdf.

1.5. Clearinghouse Customer Profiles

1.5.1. Rights holders

Rights holders are the individuals, organizations and their designees (such as licensees or assignees) that have or desire to have their eligible trademark rights listed in the Clearinghouse.

1.5.2. Rights holders' agents

Rights holders' agents are entities or individuals that interface with the rights holders in order to maintain Clearinghouse records on behalf of the right holders

and who may receive notifications in relation to the sunrise process or trademark claims service on behalf of the trademark holder.

1.5.3. Registrars

Registrars are entities that interface with a domain name registrant to register or maintain the registration of domain names in a top-level domain (TLD). In existing TLDs, domain registrants use any of the approximately 1,000 accredited registrars to register and maintain their registrations of domain names.

1.5.4. Registries

Registries are the contracted parties that manage TLDs through authority delegated to them by ICANN. Registries selected in the new gTLD program are mandated to use Clearinghouse services to ensure a minimum level of protection for trademark rights.

1.5.5. Domain Name Registrants

Domain name registrants are individuals or organizations that want to apply for one or more domain names with a registry. Some domain name registrants are may be rights holders.

1.6. Schedule

The Clearinghouse must be fully functional so that full-scale operations do not disrupt or interfere with the launch of new gTLDs. The Clearinghouse must be fully integrated and tested so that it can accept new trademark record submissions no less than 90 days prior to the first new gTLD launch.

A project plan must be prepared and executed by the Clearinghouse operator to meet these scheduling requirements, in the context of the larger new gTLD program schedule as updated from time to time by ICANN. ICANN may extend deadlines without the consent of the Clearinghouse operator, but may not shorten them without the Clearinghouse's consent.

Barring other information from ICANN, the Clearinghouse should expect new gTLD launches to begin in in the first half of 2013 and will be positioned to accept new trademark record submissions in Q4 2012.

2. Trademark Clearinghouse Services

2.1. Overview

All new gTLD registries will be required to use the Clearinghouse to support their pre-launch or initial launch period rights protection mechanisms (RPMs). These RPMs must include a sunrise process and trademark claims service.

The minimum set of services that will be offered by the Clearinghouse service provider(s) is listed below:

Trademark Listing Request

Sunrise Support

Trademark Claims

Rights Holder Customer Service

Registry Support Services

Dispute Resolution

Figure 4. Trademark Clearinghouse Services

2.2. Trademark Record Submission

2.2.1. Description

The Trademark Listing Request service will collect trademark record submissions from rights holders or their agents and store that data in the Clearinghouse.

The new gTLD program's mandatory rights protection mechanisms are predicated upon building a repository of verified trademark data. Information

sufficient to confirm the assertions of rights holders and to guarantee communication with those rights holders must also be collected for confirmation prior to being included as a Clearinghouse record.

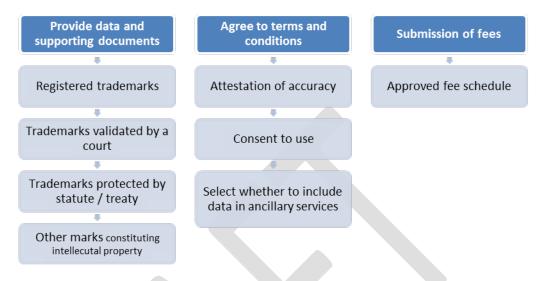


Figure 5. Trademark Registration Service

2.2.2. Target Customers

Rights holders and/or their agents will be the primary customers of this service.

2.3. Sunrise Support

2.3.1. Description

Sunrise Support is a set of services that enable eligible rights holders to secure domain names matching their Clearinghouse-listed marks prior to general registration within a top level domain. Clearinghouse criteria for an "exact match" are described in section 4.6.

A sunrise period begins when a registry opens and ends with general registration of a TLD. Sunrise registration must be offered for a minimum of 30 days to any eligible rights holder that records trademark data in the Clearinghouse. A registry may offer multiple sunrise periods or sunrise periods for longer periods of time.

Sunrise Support services make available four essential elements:

Generation of sunrise codes

Any domain name being registered during the mandatory sunrise period must, beyond any registry-specific requirements, meet at minimum ICANN's sunrise eligibility requirements, which is determined from

Clearinghouse-verified data. Each possible domain name derived from sunrise-eligible trademarks will be assigned a sunrise code to facilitate the speed and efficiency of the registration process. Sunrise codes must be able to confirm without ambiguity whether or not a requested domain name is sunrise-eligible per ICANN policy. Note that possession of a sunrise code is necessary, but may not be not sufficient, for sunrise eligibility within a given TLD.

Provision of Sunrise codes to Rights Holders or Agents

In order to register a domain name during a mandatory sunrise period, the domain name registrant must provide a valid sunrise code. To do so, these codes must be made available by the Clearinghouse to rights holders or their agents.

• Provision of Sunrise Data to Registries

Sunrise Data refers to the corresponding cryptographic data that must be matched to a rights holder's Sunrise Code and requested domain name to confirm a Sunrise code is authentic and reflects rights verified by the Clearinghouse, as described in the June 28 Clearinghouse model document. Any domain name being registered during the mandatory sunrise period of 30 days must meet ICANN's sunrise eligibility requirements, verified with Clearinghouse-verified data. To prevent fraud and abuse, that verification will be demonstrated by the rights holder providing the appropriate valid sunrise code to the registry during the domain registration process. Thus, the Sunrise Support must provide the processes necessary to provide that Sunrise data to the registry from the Clearinghouse in asynchronous batches.

Receipt of Sunrise Domain Name Registration Information from Registries

Every successful domain name registration during the mandatory sunrise period must be linked to a valid sunrise code. In turn, each successful domain name registration with a registry must be communicated to the Clearinghouse in asynchronous batches so that notifications to Rights Holders (see below) can be sent. Thus, the Clearinghouse must provide the processes necessary to receive that data from the registry in asynchronous batches.

Notifications to Rights Holders and Agents

In addition, any and all rights holders having records listed in the Clearinghouse that match any domain name registered during the mandatory sunrise period must be promptly notified. Notifications are expected to be provided in an automated, electronic form. Note that there may be a compelling case to expand beyond e-mail, to include other automated communication methods (such as SMS) in the future, though that is not currently required. During the sunrise period, each successful domain name registration must promptly generate notifications to the applicable rights holders that a domain name has been registered matching a verified Clearinghouse record.

2.3.2. Target Customers

Registries will retrieve information for integration into their registration systems and will transmit results back to the Clearinghouse. Rights holders or their agents receive notifications from the Clearinghouse but are not required to take any actions.

2.4. Trademark Claims

2.4.1. Description

Trademark Claims is a set of services that creates awareness of possible trademark encumbrances for proposed or actual domain name registrations, as well as providing notification to rights holders that their Clearinghouse record matches a recently registered domain name. Occurring during a period of at least the first sixty (60) days of general registration in a participating TLD, the Trademark Claims service requires that every requested domain name is checked by the registry/registrar for trademark claims. Every matching claim selected by the rights holder from the possible matches defined by the matching rules must be displayed to the prospective domain name registrant prior to domain name registration, and every domain name registration must include acknowledgement of all displayed claims. Every domain name registered which matches one or more Clearinghouse records must generate appropriate notices to rights holders or their agents.

A registry may offer trademark claims services for longer periods of time.

Trademark claims services include the following:

• Provision of Trademark Claims Data to Registries

During the mandatory trademark claims period, every domain name registration attempt must be checked by the registry prior to the domain name registration against Clearinghouse-provided trademark data for trademark claims. The Clearinghouse will provide encrypted, automation-friendly data to registries, so that registries can perform this task. In addition, registries will be required to provide an auditable trail of access to encrypted data, which must be accepted by the Clearinghouse in the format and form described later in this document.

Receipt of Claims Acknowledgement Information from Registries

Any registration that has associated trademark claims must include an acknowledgement of those claims by the domain name registrant. The intent is to ensure that the domain name registrant has seen and acknowledged any and all trademark claims listed with the Clearinghouse that are associated with the requested domain name. The acknowledgement should only be transmitted by the registry to the Clearinghouse when the domain name is actually registered. That acknowledgement must be recorded with the Clearinghouse, meaning that it must be properly formatted by the registrar, transmitted to the registry, and then finally transmitted to the Clearinghouse. Thus, the service must provide the processes necessary to receive acknowledgement data from the registry in asynchronous batches.

Potential domain name registrants who decide not to proceed when presented with the appropriate trademark claims from the Clearinghouse are not expected to acknowledge the claims, and thus no acknowledgement is generated or transmitted.

Notifications to Rights Holders/Agents

The Clearinghouse must generate and transmit notifications to rights holders or their agents when domain names are registered during the claims period matching their Clearinghouse records. Rights holders or agents will be notified by the Clearinghouse of the date, time and domain name and extension associated with the domain name registration.

2.4.2. Target Customers

Registries will retrieve trademark claims data from the Clearinghouse to facilitate lookups on requested domain names. Domain name registrants (also referred to as potential domain name registrants) are the target customers for receiving trademark claims notices. Rights holders and their agents are passive recipients of notification about domain name registrations affecting their rights recorded in the clearinghouse. Registrars are target customers for administrating the receipt of trademark claims acknowledgments.

2.5. Rights Holder Assistance

2.5.1. Description

The Rights Holder Assistance service provides assistance, clarification, and other services to users of the Clearinghouse and its portfolio of records, as well as associated dispute resolution services. These assistance services must be available in multiple languages.

2.5.2. Target Customers

Any user (such as rights holders and agents) of the Clearinghouse may seek assistance.

2.6. Registry Support

2.6.1. Description

The Registry Support service provides assistance, clarification, and other services to registries seeking to integrate or currently using the Clearinghouse and its portfolio of services. This expressly includes the capability to perform integration testing and the provision of reasonable training and/or consulting services to new gTLD registry operators as part of the base fee structure. This support must also include a registry-initiated process to check individual, specific records to ensure the accuracy and availability of its repository. All registry support services must be available in English or another language agreed upon by a Registry and the Clearinghouse.

2.6.2. Target Customers

Registries seeking to use the Clearinghouse or its portfolio of services to support their launches or operations must be able to seek technical assistance.

2.7. Dispute Resolution

2.7.1. Description

The Dispute Resolution service provides mechanisms to address disputes encountered in the operation of the Clearinghouse. The scope of Clearinghouse challenges is limited by the narrow role of the Clearinghouse.

Most issues about matters of fact should be resolvable through the provision of documentation and Clearinghouse-provided review mechanisms. The service provider(s) must address disputes and their possible outcomes (e.g., by in-house processes, use of third-party reviews, or other mechanisms).

Pricing for dispute resolution services must be determined and set by the Clearinghouse operator; however, there must not be fees assessed against any claimant in the event that the challenge is the result of an error by the Clearinghouse: that is, Clearinghouse may not charge fees to correct its own mistakes.

a. External Challenges

The Clearinghouse is expected to find itself in the position of being asked to provide documentation and/or information associated with other dispute resolution processes to which the Clearinghouse itself is not a party but involves information provided to the Clearinghouse. The Clearinghouse is expected to be able to provide mechanisms for retrieval and certification of Clearinghouse records as requested by rights holders and their agents. In no event may the Clearinghouse provide any legal opinion or advice. Such informational reports are expected to relate to the outcomes of Clearinghouse data verification processes for specific marks, and to reflect the mark, date, time, and external references most recently used to verify the claim in question.

b. Acceptance of Data into the Clearinghouse Challenges

Re-examination of a Clearinghouse decision could occur when requested by:

1. Any third party

A third party may seek to dispute the acceptance of a Clearinghouse record through a Clearinghouse dispute process. Such cases could arise due to faulty data verification or other procedural error. This dispute process should not involve data re-verification, in keeping with the Clearinghouse's role as a verification service: instead, it must include a records check of how

the data was verified, the appropriateness of the sources used, and whether the recorded data properly justifies the verification that the data is truthful and accurate. The response to such a dispute is expected to show an internal procedural audit trail showing the jurisdiction, what external sources were referred to (e.g.: jurisdiction's primary register, court decision), whether appropriate documentation was received, an assessment of whether or not internal procedures were properly followed, and what the verification result was in reference to a specific mark. The actual specimen and specific mark data is not required to be provided under this dispute.

2. Right Holders

In cases where a record may have been rejected in error, the rights holder or its agent can seek reconsideration through a Clearinghouse appeal process.

3. Dispute Resolution and Adjudication

There may be cases where a party will allege that information used in the establishment of a record has changed or was fraudulently provided, potentially requiring data re-verification based on new evidence. The Clearinghouse must take appropriate action when presented with a (verified) adjudication result from a dispute resolution provider or judicial decision should that decision affect the status of any recorded listing in the Clearinghouse.

c. Data Distribution Based Challenges

A registry may, through the course of handling its own sunrise and trademark claims period challenges, allege that the information provided to it by the Clearinghouse is erroneous. A registry is dependent upon its confidence that the data being provided accurately reflects the policies that the Clearinghouse implements. Incorrect sunrise codes or incorrect trademark claims data could occur due to technical errors within the Clearinghouse or failures in the registry's implementation of retrieval and lookup functions. It is expected that registry support services will resolve this class of issues prior to the start of a sunrise or claims period. However, in the event something goes wrong and harm is inflicted or liability is assumed, contractual arrangements between the registry and Clearinghouse must address the possibility of data distribution-based issues.

d. Sunrise-Related Clearinghouse Challenges

If a rights holder or its agent fails to receive a mandatory sunrise registration notice, the Clearinghouse will be required to demonstrate that the notice was sent, and to provide the text and record of transmission to the rights holder or its agent through a Clearinghouse review process.

e. Trademark Claims-Related Clearinghouse Challenges

If a rights holder or its agents fail to receive a trademark claims period registration notice, the Clearinghouse will be required to demonstrate that the notice was sent, and to provide the text and record of transmission to the rights holder through a Clearinghouse review process.

2.7.2. Target Customers

Rights holders, rights holders' agents and domain name registrants are the primary customers, with the dispute resolution outcome being communicated to all parties to a dispute. Under a limited set of circumstances, the registry may be a party to a dispute with the Clearinghouse.

2.8. Ancillary Services

2.8.1. Description

Ancillary Services are additional, optional services that may be provided by a Clearinghouse service provider; those services and any data used for those services must be kept separate from the Clearinghouse database. Any ancillary services are to be provided on a non-exclusive basis and may be offered by competitors under a license of Clearinghouse data on an equal and non-discriminatory basis.

Ancillary services based on Clearinghouse data must as a contractual matter be reviewed by ICANN, and Clearinghouse data used in the development of those ancillary services must be able to be made available to third party licensees. The standard terms and conditions of any such license must be reviewed by ICANN.

In all cases, rights holders must be offered the right to "opt out" of any of these services. Any services not described or anticipated in the requirements must be reviewed by ICANN using the process described in the contract. Note that any licensing terms for Clearinghouse data must include mandatory data security controls providing comparable assurance of confidentiality to the mandatory access control model described in section 4.

3. Business Processes

3.1. Overview of Business Processes

The list of business processes needed to support services is shown below:

Contact Registration

Trademark Submission

Verification of Trademark Data

Verification of Proof of Use

Data Maintenance

Sunrise Process

Trademark Claims Process

Rights Holder Customer Service Process

Registry Support

Dispute Resolution Process

Figure 6. Business Processes

3.2. Relationship of Business Processes to Trademark Services

The relationship of business processes to trademark services is shown below:

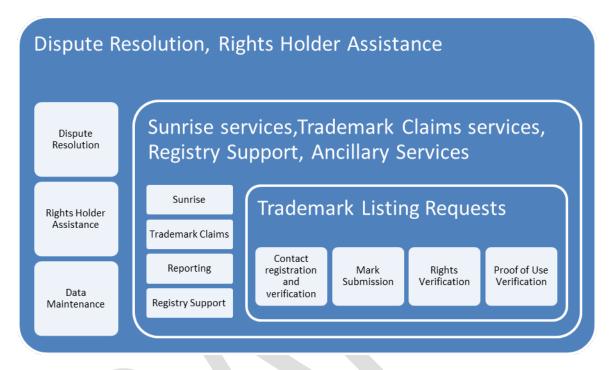


Figure 7. Relationship of Business Processes to Trademark Services

3.3. Contact Registration and Verification Process

3.3.1. Overview

An application user is an individual (or, potentially, a role performed by one or more individuals within an organization or entity) that can interact with trademark records within the Clearinghouse. An application contact has a proven reliable method to receive critical communications from the Clearinghouse. The Clearinghouse will confirm that the application user has been authorized by the rights holder to act on behalf of the rights holder. In some cases, this may require the Clearinghouse to collect and confirm multiple contacts to ensure that application user acting as the agent of a rights holder indeed has appropriate authorization. Appropriately authorized agents may receive trademark claims and sunrise registration notices on behalf of a rights holder.

3.3.2. Process Flow

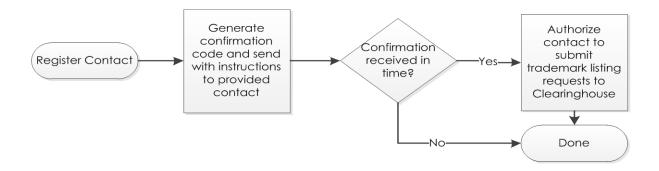


Figure 8. Contact Registration and Verification Process

- a. Individual seeks to register as an application user with the Clearinghouse, providing appropriate information (such as name) and contact methods (primarily e-mail, but exceptional circumstances may prompt the Clearinghouse to use other contact mechanisms). Submissions must be structured to support fully automated confirmation.
- b. The Clearinghouse generates a new, contact-specific confirmation code and a deadline by which to receive that code. That information must in turn be transmitted via the provided, non-postal contact mechanism. In the event that the application user is acting as the agent of the rights holder, a contact-specific confirmation code and deadline by which to receive that code will also be sent to the rights holder.
- c. If the confirmation is received before the code expires, the contact is authenticated. If the confirmation is not received before the code expires, then the contact is not authenticated.

3.3.3. Business Requirements to Support Process

The business requirements to support the Contact Registration and Verification process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.3A	An application user's contact information must be	
	specifiable and modifiable by the application user.	
	The application user must be able to modify its own	
	contact information and must not be able to	
	modify contact information for any other party. All	
	edited contact information will be authenticated.	

ID	Requirement	Additional Clarification
3.3.B	All contact information must be re-verified	That schedule is currently
	periodically so as to ensure its usefulness. A	expected to require
	specific schedule of verification must be published	confirmation at least once a
	by the Clearinghouse.	year after the date of
		submission.
3.3.C	Updated application user contact information must	
	be verified prior to committing updates to an	
	existing, authenticated contact record.	
3.3.D	New application user contact information must be	
	verified prior to considering the contact record as	
	authenticated.	
3.3.E	The amount of time available to receive and return	Not all mechanisms should
	a confirmation code must be appropriate to the	necessarily use the same
	communication mechanism.	timeframe. Communication
		by postal service takes days or
		weeks; online methods may
		take only minutes or hours
		and can be subject to speed
		disruptions due to widely
		deployed filtering.
3.3.F	The Clearinghouse may suspend or revoke access	Records may be deactivated as
	for any application user (and potentially	a penalty to deliberately
	discontinue providing trademark claims, sunrise	fraudulent users of
	and ancillary services for any marks associated with	Clearinghouse services. In
	that contact) in response to violations of terms of	addition, the capability to
	use (including non-payment).	submit new records to the
		Clearinghouse may be
		suspended for some period of
		time at the discretion of the
		Clearinghouse.

3.4. Trademark Submission Process

3.4.1. Overview

An application user can request that one or more trademarks be recorded with the Clearinghouse. Each mark must be submitted to the Clearinghouse, providing sufficient information to identify the trademark and confirm that the submission meets the criteria for Clearinghouse inclusion. That information might, for example, include the words making up the trademark, its international class or equivalent, the jurisdiction in which it is protected, information about the owner, and/or the authority under which the mark is protected (for example, by judicial ruling, treaty, statute or registration in a trademark office). All trademarks submitted to the Clearinghouse will undergo

verification of the provided trademark data. In addition, when requested by the rights holder or agent, a submitted sample intended to demonstrate proof of use will also be verified to establish sunrise eligibility.

3.4.2. Process Flow

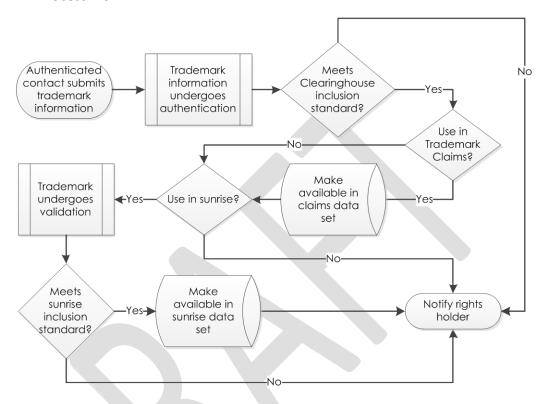


Figure 9. Trademark Submission Process

- a. An application user submits appropriate trademark information to the Clearinghouse. Such submissions must include the necessary information to correctly identify the mark and rights in question. Functionally, the Clearinghouse must provide the technical capability for a rights holder or its agent to specify, for each record, what set of services (trademark claims, sunrise, and ancillary services) they wish to participate in. This functionality is required so that a rights holder can choose whether to participate in sunrise, claims, or ancillary services independently of the other services of the Clearinghouse.
- b. The Clearinghouse verifies the provided rights data, as described in section 3.5.
 If the Clearinghouse is unable to verify the rights using the process in section 3.5, it must notify the rights holder or its agent of what part(s) of the verification failed or if additional documents are needed, so that the rights

holder or agent can attempt to resubmit the mark data without prejudice. Successfully verified rights must be included in trademark claims data sets if so directed by the rights holder or agent.

- c. For rights holders or agents seeking to enjoy sunrise period priority registrations, the Clearinghouse must verify both the provided rights data and the provided proof of use to ensure they meet sunrise eligibility requirements as described in section 3.6. If the Clearinghouse is unable to verify this information using the process in section 3.6, it must notify the rights holder or its agent of what part(s) of the verification failed, so that the rights holder can attempt to resubmit the mark data without prejudice. Successfully verified rights must be included in sunrise data sets as directed by the rights holder and as permitted by ICANN policy.
- d. The process concludes by notifying the rights holder/agent of the current status of the requested data verification, including any deficiencies in the submission that prevented successful completion.

3.4.3. Business Requirements to Support Process

The business requirements to support the Trademark Submission process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.4A	The trademark record submission process is	Not all rights holders can be
	expected to be operated online; however,	expected to provide rights
	submission of documentation and specimen of use	data via a web or other
	must be able to be submitted using alternative	electronic form due to
	mechanisms. Exceptional circumstances may	restrictions in connectivity. As
	(potentially at additional cost to the rights holder	such, a courier (postal
	or agent) prompt acceptance of offline rights	service/delivery service)
	submissions.	method is still desirable
		(though this may follow a
		different pricing structure and
		processing SLA than electronic
		submissions).
3.4B	Processes should establish interfaces to support	
	submissions via API of trademark data from a	
	registered contact.	

ID	Requirement	Additional Clarification
3.4C	Rights holder or its agent must be able to control	Changes should take effect
	whether a record will be included in data	promptly.
	supporting the trademark claims service, sunrise	
	registrations, ancillary services, or any combination	
	thereof. This must be able to be changed by the	
	rights holder or agent while their records are	
	active. The Clearinghouse is required to provide	
	global controls so that participation preferences	
	can be selected which will apply to all TLDs.	
	However, nothing in this requirement would	
	prohibit the Clearinghouse from implementing	
	more granular controls in response to market	
	demand in its own discretion.	
3.4D	Terms of use must obligate rights holders or agents	
	to promptly provide updates to the clearinghouse	
	as part of the registration process, for changes that	
	modify the rights (assignment, abandonment, etc.).	
3.4E	Rights holders and their agents must be able to	
	provide updates to their records to reflect	
	appropriate changes. Updates that affect the data	
	verification status (requiring that the verification	
	process be repeated) may carry additional fees.	
3.4F	Rights information collection must support multiple	A given domain name label
	occurrences of the same trademark string in	must be capable of being
	different jurisdictions and classes.	associated to as many
		different trademark rights as
		are recorded.

3.5. Verification of Trademark Rights Data Process

3.5.1. Overview

The Clearinghouse exists to facilitate mandatory rights protection mechanisms by providing accurate and verified trademark information. Trademark record submissions may be included in the Clearinghouse based upon meeting specific requirements described in the Applicant Guidebook Module 5, Section 3, Trademark Clearinghouse.

The guiding principle of the trademark verification process is equitable treatment: steps required of similarly situated rights holders should be essentially the same.



participate in trademark claims

Figure 10. Eligibility Conferred through Rights Verification

3.5.2. Process Flow

The process for verification of trademark data is a business process that must be provided by the Clearinghouse operator.

3.5.3. Business Requirements to Support Process

The business requirements to support the Verification of Trademark Data process are enumerated in the chart below.

ID	Requirement	Additional
		Clarification
3.5A	The Clearinghouse must list all and only those rights which are submitted to the Clearinghouse for listing.	
3.5B	The word mark must be at least one of the following: a nationally or regionally (e.g. multi-nationally) registered word mark on the principal or primary register in the mark's jurisdiction; a word mark that has been validated by a court of law or other judicial proceeding; a word mark protected by statute or treaty in effect at the time the mark was submitted to the Clearinghouse for inclusion; or some other mark that constitutes intellectual property which can be represented within and verified the Clearinghouse.	
3.5C	All of the following must be marked as invalid: pending applications for registration; marks within any opposition period; registered marks that were subject to successful invalidation, cancellation or rectification proceedings.	Upon verification, such trademark record submissions will be marked as invalid.
3.5D	The trademark record submission should be submitted by an application user that either is the rights holder or its agent.	

ID	Requirement	Additional Clarification
3.5E	The application user and/or the contracting contact submitting information to the Clearinghouse must be authenticated, and the access to the Clearinghouse must not currently be revoked or suspended. The application user and/or the contracting contact must be able to verifiably be shown to be authorized to act with the mark.	
3.5F	An application user acting on behalf of the contracting party must provide a sworn statement that the information submitted is true, accurate and complete to the best knowledge and belief of the application user, that due care has been exercised, and that the information has not been provided for any improper purpose. This will be included in the terms of use.	
3.5G	Suitable documentation must be verified for any trademark records in the Clearinghouse. a. In the case of a registered trademark, relevant registration numbers and owners of record must match the documentation available from the issuing jurisdiction. b. In the case of a mark protected by treaty or statute, the specified rights must be conferred on the face of the authority (without requiring legal interpretation). c. In the case of a mark protected by judicial proceedings, the judicial authority must have existed as a competent jurisdiction as of the date of the order or judgment. Any referenced authority must have the indicia of authenticity and must on its face confer the specified rights. d. In the case of some other mark constituting intellectual property, in cases where a registry wishes to offer protection to other indicia which are capable of being verified by the Clearinghouse and the Clearinghouse accepts to undertake this extended service, it should be readily apparent from the provided documentation that the rights claimed are conferred on the basis of the information submitted.	
3.5H	Verification must be supported by documentation, and copies of documentation relied upon in that determination must be recorded in the Clearinghouse for future review and audit.	
3.51	Verification must be replicable, such that the same mark and documentation inputs must result in the same determination. If a mark is verified on a given date and time, then for as long as the Clearinghouse maintains records, another reviewer must be able to review copies of the same information (which thus must be included in the verification record) and conclude that verification should have occurred at that date and time.	

ID	Requirement	Additional
		Clarification
3.5J	Registrations that include top level extensions such as	This will be
	"icann.org" or ".icann" as the word mark will not be permitted in	implemented
	the Clearinghouse regardless of whether that mark has been	with a "no dots"
	registered or it has been otherwise validated or protected (e.g., if	rule.
	a mark existed for icann.org or .icann, neither will be permitted	Trademarks
	in the Clearinghouse).	containing one
		or more dots
		(reserved DNS
		character) as the
		first character in
		the trademark
		string or
		including one or
		more dots within
		the trademark
		string will not be
		permitted in the
		Clearinghouse.

3.6. Verification of Proof of Use Process

3.6.1. Overview

The Verification of Proof of Use process establishes that Clearinghouse-recorded rights meet the minimum eligibility requirements to obtain sunrise domain name registrations. Rights with verified proof of use are necessary, but may not be sufficient, to participate in sunrise registration for a particular TLD (some registries may have additional requirements). Verification of proof of use is only required to enable a rights holder or agent to seek sunrise domain name registrations. It occurs "above and beyond" the standard verification of rights data described in section 3.5.

Minimum eligibility is met for verified rights validated by court decision or specifically protected by statute or treaty currently in effect and that was in effect on or before 26 June 2008, without an additional verification of proof of use.

For verified marks based on registered trademark rights, verification of "proof of use" is required.

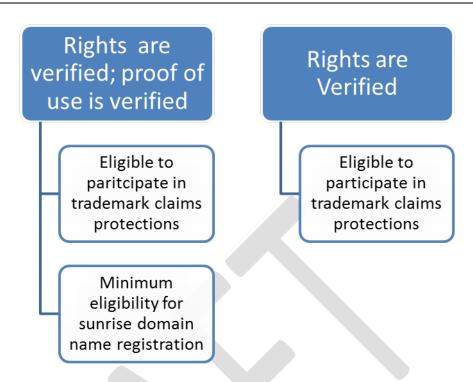


Figure 11. Eligibility Conferred to Verified Rights and Verified Proof of Use

3.6.2. Process Flow

The process for verification of proof of use is a business process that must be provided by the Clearinghouse operator.

3.6.3. Business Requirements to Support Process

The business requirements to support the verification of proof of use process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.6A	Verification of proof of use must follow a single,	This provides for the
	uniform and global standard.	consistent treatment of rights
		holders regardless of
		jurisdiction of rights.
3.6B	Each mark to be verified for proof of use must first	
	meet all requirements for trademark rights	
	verification (see section 3.5).	
3.6C	The mark must be owned by the rights holder, or	
	held by an assignee or licensee.	
3.6D	All verified proof of use for rights must be	
	accompanied with an ICANN-approved declaration	
	from the contact concerning the proof of use	
	declaration.	

ID	Requirement	Additional Clarification
3.6E	The Clearinghouse must recognize and honor text marks that have been or are (i) nationally or regionally registered and for which proof of use – in the form of a declaration and single sample of current use—was submitted and verified by the Clearinghouse; (ii) court-validated; or (iii) specifically protected by statute or treaty currently in effect and that was in effect on or before 26 June 2008.	Proof of use is only required for registered trademarks; court-validated and statute/treaty protected marks are not required to demonstrate use to meet minimum sunrise eligibility.
3.6F	A sample should evidence an effort on the part of the rights holder to communicate to a consumer so that the consumer can distinguish the products or services of the rights holder from any others.	The baseline standard is intended to accommodate practices in multiple jurisdictions.
3.6G	Examples of use must plainly and clearly show the trademark being used.	The Clearinghouse should not assume the role of making determinations as to the scope of rights associated with a recorded trademark or the labels it can generate.
3.6H	Appropriate examples of use should include: labels, tags, containers for a product, and advertising and marketing materials, advertising.	Inclusion of a trademark in a domain name, e-mail message, or blog posting should not be sufficient to constitute use.
3.61	Determinations of sunrise eligibility must be supported by documentation, and copies of documentation relied upon in that determination must be recorded in the Clearinghouse for future review and audit.	
3.6J	The determination of minimum sunrise eligibility must be replicable, such that the same mark and documentation inputs must result in the same determination. If the proof of use for a mark is verified on a given date and time, then for as long as the Clearinghouse maintains records, another reviewer must be able to review copies of the same information (which thus must be included in the verification record) and conclude that the verification was correct and should have occurred at that date and time.	

3.7. Data Maintenance Process

3.7.1. Overview

Trademark information is dynamic. Rights are time-delimited and should be expected to change, sometimes without (required) notification to the Clearinghouse. Furthermore, records in the Clearinghouse are intended to be established for a period of one calendar year, after which information should be successfully reverified or should no longer be distributed and relied upon. As a result, the Data Maintenance process must ensure that data receives necessary maintenance (updates or deactivation) based on the requisite activity on the data. Data maintenance must be based on a schedule that defines how long records may remain active without updates or some form of re-verification to ensure that data remains accurate and correct.

3.7.2. Business Requirements to Support Process

The business requirements to support the Data Maintenance process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.7A	All Contacts must be confirmed through successful	If an agent has been listed as
	use at least once per year.	the contact, both the agent
		and the rights holder contact
		information must be
		confirmed at least once per
		year. In the event that the
		rights holder does not
		confirm, the record will be de-
		activated.
3.7B	Trademark data verification must be performed at	Re-verification should not
	least once per year, to ensure that rights have not	require additional information
	undergone a change in status or ownership.	from the rights holder or
		agent except in cases where
		an assignment has occurred.
3.7C	Verification of proof of use must be performed in	An updated sample of use will
	the event that trademark data has changed at least	be required once every five (5)
	once per year, to ensure that rights have not	years.
	undergone a change in status or ownership.	

ID	Requirement	Additional Clarification
3.7D	A record may be deactivated for any of the following reasons: The rights holder or agent requests deactivation; As the result of a successful dispute resolution process concerning the record; The Clearinghouse record has expired without renewal of contact or trademark verification; Upon confirmation that a trademark has been abandoned or expired.	A mechanism must be defined by the Clearinghouse to reactivate a deactivated record.
3.7E	The Clearinghouse must transmit at least one notice of pending Clearinghouse record expiration using the known contact information associated with the record, prior to de-activation of a record.	The Clearinghouse will send out two notifications – the first will be sent 60 days prior to expiration of a record and the second will be sent 30 days prior to expiration of the record. A grace period of 10 calendar days should be implemented.

3.8. Sunrise Process

3.8.1. Overview

The sunrise process is implemented by many interacting parties, as described in the technical model. Rights holders may obtain domain name registrations matching their eligible trademarks before such domain names are available for general registration. New gTLDs are required to offer a minimum sunrise period of 30 days. New gTLDs may elect to offer multiple sunrise rounds or may extend the sunrise period in cooperation with the Clearinghouse.

3.8.2. Process Flow

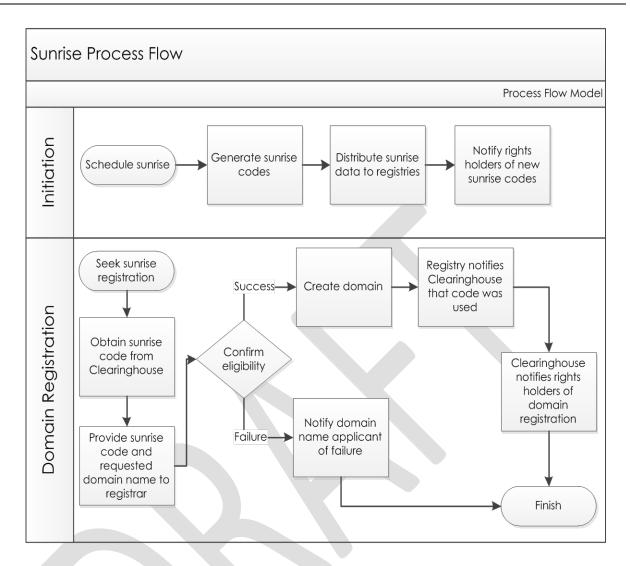


Figure 12. Sunrise Process Flow

This process is divided into two sub-processes: sunrise initiation and sunrise domain registration. Each step in the process is explained below; see also Appendix: Cross-Functional Responsibility Charts for further clarification.

Sunrise Initiation

- a. Registry schedules sunrise period(s) with Clearinghouse.
- b. Clearinghouse generates sunrise codes and corresponding sunrise code confirmation data for all verified records with verified proof of use.
- c. Clearinghouse distributes sunrise code confirmation data to registry.

d. Clearinghouse notifies rights holders/agents of new sunrise codes applicable to their verified records with verified proof of use.

Sunrise Domain Registration

- a. Rights holder or its agent obtains an appropriate sunrise code for the intended domain name.
- b. Rights holder or its agent applies for a domain name, providing sunrise code to registrar.
- c. Registrar attempts to create domain, offering sunrise code as proof of verified trademark rights in requested domain.
- d. Registry confirms eligibility of domain registration request, including confirming that the provided sunrise code is valid. On failure, the Registry will notify the Registrar and the Registrar will notify the domain name applicant as to why.
- e. Registry creates domain.
- f. Registry notifies Clearinghouse that sunrise code was used.
- g. Clearinghouse notifies all applicable rights holders or agents of the sunrise domain registration (including the successful rights holder applicant and any other rights holders/agents with records in the Clearinghouse that match the domain string registered during the sunrise period).

3.8.3. Business Requirements to Support Process

The business requirements to support the Sunrise process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.8A	Sunrise must be offered for a minimum of 30 days	
	during the pre-launch phase.	
3.8B	During the mandatory sunrise period, any domain	A registry may elect to have
	registered must be based on a record that has been	additional requirements, but
	verified by the Clearinghouse as meeting the	all domain names registered
	sunrise eligibility requirements (as described in	during the mandatory sunrise
	3.7).	period must be based on
		Clearinghouse-verified rights.

ID	Requirement	Additional Clarification
3.8C	For any domain name registered during the mandatory sunrise period, a notice must be sent to all eligible rights holders or agents, to ensure that they are notified of the sunrise registration.	
3.8D	Sunrise codes must not confer any authorization for events occurring outside of the given top-level domain's sunrise period.	

3.9. Trademark Claims Process

3.9.1. Overview

Rights holders and their agents have the option to participate in the Trademark Claims process. The Trademark Claims process provides two kinds of notifications about trademark-related domain name activities within any new gTLD registry:

- Notification to a prospective domain name registrant that a domain name has one or more trademark claims associated with it, provide the information necessary to research the claim, and allow the prospective registrant to make an informed decision about the registration, prior to the completion of the registration; and
- 2. Notify the trademark claimant(s) that a domain name has been registered.

The Trademark claims process must be offered for a period of at least 60 days.

3.9.2. Process Flow

The diagram below illustrates the Trademark Claims process flow.

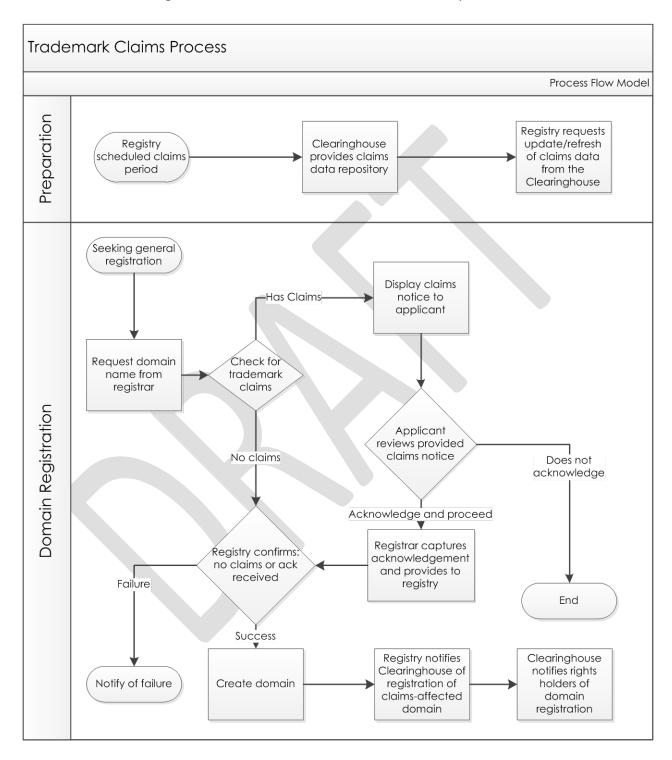


Figure 13. Trademark Claims Process Flow

This process is divided into two sub-processes: Trademark Claims initiation and domain name registration. Each step is the process is explained below; see also Appendix: Cross-Functional Responsibility Charts for further clarification.

Trademark Claims Initiation

- a. Registry notifies Clearinghouse of the start and expected enddates for its trademark claims period.
- b. Clearinghouse creates and maintains a claims data repository.
 Note that this recurs periodically (and automatically) for as long as the claims period is active.
- c. Registry requests updates/refresh of claims data from the Clearinghouse. Note that this recurs periodically for as long as the claims period is active.

Trademark Claims Domain registration

- a. Domain Name Applicant requests domain name from a participating registrar.
- b. Registrar checks for trademark claims to the requested domain as part of the check for domain availability. Note that only identical matches are subject to trademark claims notifications.
- c. If presented with a trademark claims notice, the domain name applicant must acknowledge the claims through some active step (checking a checkbox or other affirmative step) to continue. That acknowledgement must be captured by the registrar, along with identifying information about the acknowledgement so that an auditable trail can exist for the event.
- d. Registrar requests that the domain be created by the registry, providing a copy of the acknowledgement to the registry.
- e. The registry confirms that either (1) no trademark claims exist for the domain name, or (2) the acknowledgement provided by the registrar matches the claims. If claims exist and either no acknowledgement was provided or the acknowledgement does not match the claims, then the registry must not create the domain. The registry must create only domains with no

trademark claims or where acknowledgement is received for all claims associated with the name at the time of registration.

- f. The registry creates the domain.
- g. If any claims applied to the domain, the registry notifies the Clearinghouse with a copy of the acknowledgement.
- h. The Clearinghouse provides the domain registration notice to any rights holder participating in the trademark claims period that has rights which match the newly created domain.

The trademark claims process is dependent upon the submission and verification of rights data. The Clearinghouse will generate a list of all fully qualified domain names that are protected within a registry, based on a set of matching rules and using IDNA encoding of Unicode marks. That list, in a properly protected format, will be made available to each registry, along with the necessary claims notice data, in a known format.

Registries will be responsible for the retrieval, import and use of that information, relying on prescribed data transmission protocols. Furthermore, should a registry use variant character set mappings, it will need to perform multiple checks against the provided data to ensure that the rights protection mechanism is properly applied.

3.9.3. Business Requirements to Support Process

The business requirements to support the Trademark Claims process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.9A	New gTLD registry operators must provide	
	trademark claims services during an initial launch	
	period for marks in the Clearinghouse. This launch	
	period must occur for at least the first 60 days that	
	registration is open for general registration.	

ID	Requirement	Additional Clarification
3.9B	A trademark claims service is intended to provide	It is expected that the notice
	clear notice to the prospective registrant of the	will include introductory text
	scope of recorded rights associated with	in English and the language of
	trademarks potentially affecting the requested	the registration agreement,
	domain name, in order to minimize the chilling	and that the actual trademark
	effect on registrants (trademark claims notice).	claims data will be presented
	The trademark claims notice must include an	in the language and character
	ICANN-approved introductory statement about the	set in which it was provided to
	notice and then, for each set of rights that applies	the Clearinghouse.
	to the requested domain name:	
	■ The mark being protected;	
	The jurisdiction of the mark;	
	 The international class of goods and 	
	services (or equivalent if applicable);	
	The owner of the mark;	
	■ The contact for the mark.	
	The specific, ICANN-approved statement that is to	
	be acknowledged by prospective registrant	
	warrants that:	
	 The prospective registrant has received 	
	notification that the mark(s) is/are	
	included in the Clearinghouse;	
	 The prospective registrant has received 	
	and understood the notice; and	
	 To the best of the prospective 	
	registrant's knowledge, the registration	
	and use of the requested domain name	
	will not infringe on the rights that are	
	listed in the notice.	

3.10. Rights Holder Customer Service Process

3.10.1. Overview

The processes by which the Clearinghouse provides customer service to rights holders may be specified by the Clearinghouse service provider.

3.10.2. Business Requirements to Support Process

The business requirements to support the Rights Holder Customer Service process are enumerated in the chart below.

ID Requirement	Additional Clarification
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3.10A	The contract shall include service level requirements, customer service availability (with the goal of seven days per week, 24 hours per day, 365 days per year) and equivalent access requirements for all persons and entities required to access Clearinghouse data and services.	Response times reflecting the global nature of the Clearinghouse service are expected. During the start-up period, this may warrant a substantial support infrastructure that can be scaled back as volumes become more predictable and manageable.
3.10B	Customer service must be offered by e-mail, web,	
	and telephone. Other service capabilities may be	
	offered at the discretion of the Clearinghouse.	

3.11. Registry Support

3.11.1. Overview

The processes by which the Clearinghouse provides registry support services may be specified by the Clearinghouse service provider.

3.11.2. Business Requirements to Support Process

The business requirements to provide Registry Support processes are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.11A	During an active sunrise or trademark claims	
	period, the Clearinghouse must respond to	
	technical inquiries from a registry within 30	
	minutes.	

3.12. Dispute Resolution Process

3.12.1. Overview

The Clearinghouse must develop processes and procedures to handle disputes of the types described in section 2.7. Appropriate remedies for issues raised by individuals raising issues to or with the Clearinghouse must be within parameters established by that process. Appropriate standards must be published by the Clearinghouse to maintain its role as a fact checking repository, rather than an arbitrator of legal rights.

3.12.2. Business Requirements to Support Process

The business requirements to support the Dispute Resolution process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.12A	Dispute resolution processes must be approved in	
	advance by ICANN, and should be designed to be	
	replicable, open, transparent and fair.	

3.13. Reporting

3.13.1. Overview

The Clearinghouse will provide a regular accounting of its activity to ICANN. The intent of reporting is to show how well the Clearinghouse is performing in its obligation to facilitate the protection of trademark rights in new gTLD domain name registrations. Reporting requirements will be included as a specification in the Clearinghouse provider's contract with ICANN.

3.13.2. Business Requirements to Support Process

The business requirements to support the Reporting process are enumerated in the chart below.

ID	Requirement	Additional Clarification
3.13A	The Clearinghouse must delay the publication of	The Clearinghouse must not
	any report on Clearinghouse activity which would	become a "back door" to
	expose registry statistics for a minimum of 90	access time-sensitive
	days, to be consistent with ICANN protections of	information about registry
	registry business intelligence data. However,	operation that is otherwise
	nothing in this requirement should delay	protected.
	distribution of reports to ICANN in a prompt	
	manner.	
3.13B	Best practices and statutes for audit and	
	compliance may require trademark data to be	
	retained or other audit and reporting	
	mechanisms to be implemented by the	
	Clearinghouse.	

4. Technical Requirements

4.1. Overview of Technical Requirements

The technical requirements of the Clearinghouse are intended to provide additional information, considering the operationalization of business requirements. In some cases, detailed and extensive descriptions are included to provide guidance as to the design and implementation phases of system integration.

4.2. Technical Requirements

The technical requirements are enumerated in the chart below.

ID	Requirement	Additional Clarification
4.2A	All rights holders or agents seeking to have their	A second, express consent
	marks included in the Clearinghouse must consent	must be obtained from the
	to the use of their information by the	rights holder or agent prior to
	Clearinghouse. However, such consent will extend	participation in the ancillary
	only for use in connection with the stated purpose	services.
	of the Clearinghouse database for sunrise or	
	trademark claims services. The reason for such a	
	provision is to prevent the Clearinghouse from	
	using the data in other ways without permission.	
	There is no prohibition on the Clearinghouse	
	service provider(s) or other third party service	
	providers providing ancillary services on a non-	
	exclusive basis, subject to the terms of the	
	provider's contract with ICANN.	

ID	Requirement	Additional Clarification
4.2B	In order not to create a competitive advantage, the	The specific implementation
	data in the Clearinghouse should be licensed to	details will be determined,
	competitors interested in providing ancillary	and all terms and conditions
	services on equal and non-discriminatory terms	related to the provision of
	and on commercially reasonable terms if the rights	such services shall be included
	holders or agents agree. Accordingly, two licensing	in the Clearinghouse service
	options will be offered to the rights holder:	providers' contract with
	 License to use its data for all required 	ICANN and subject to ICANN
	features of the Clearinghouse, with no	review.
	permitted use of such data for ancillary	
	services either by the Clearinghouse Service	
	Provider(s) or any other entity; or	
	 License to use its data for the mandatory 	
	features of the Clearinghouse and for any	
	ancillary uses reasonably related to the	
	protection of marks in new gTLDs, which	
	would include a license to allow the	
	Clearinghouse to license the use and data in	
	the Clearinghouse to competitors that also	
	provide those ancillary services	

4.3. Data Classification, Access and Mandatory Protections

The Clearinghouse has been designed with the specific goal of limiting the introduction of external, network-based dependencies that could disrupt technical operations within registries and registrars. To make that possible while achieving the structural goals of the trademark claims and sunrise services, certain information will be distributed directly to registries for use in the registration process, to facilitate the registry's enforcement of mandatory rights protection mechanisms.

All information which is to be distributed from the Clearinghouse must meet mandatory access control requirements to protect the privacy of rights holders. Any distributed data must be classified in accordance with the descriptions and security policy described below. No part of these requirements should be construed to prevent the disclosure of Clearinghouse data as required by law or as reasonably needed to resolve disputes associated with the mandatory rights protection mechanisms of the new gTLD program. However, absent such an exceptional circumstance, the Clearinghouse is expected to comply with the mandatory controls described below. Information provided to third-parties should be as limited as reasonably possible.

4.3.1. Data Classification

Internal data represents data required for the Clearinghouse to perform its functions which is not intended to be shared with any outside party.

Unprotected data can be shared by the Clearinghouse without mandatory access controls. This does not prohibit normal resource usage control as decided by the Clearinghouse, such as reasonable rate limiting so as to control the cost of providing the data, but does create a "public" grade of information suitable for sharing on public websites. Policies governing Clearinghouse activity, boilerplate language for notices, and public reports of clearinghouse activity are examples of unprotected data.

Billing data represents information used for financial purposes. To the extent that billing data is collected, such data may only be shared with financial institutions, the customer or law enforcement as required to facilitate payment and refunds for services from the Clearinghouse, to investigate fraud and as needed for customer service inquiries. Protections for billing data should follow best industry practices, and must be suitable for the sensitivity and value of the data (for example, credit card data would be subject to Payment Card Industry (PCI) data security).

Customer communication represents correspondence or notifications provided to customers (rights holders, registries, etc.). No special security measures are required for correspondence outside of standard practices (e.g. communication intended for a particular recipient should be sent to only that recipient and should not be made generally available to others).

Trademark activity data represents the records used to verify trademark data and proof of use, the history of verification, and the record of Clearinghouse acknowledgements and sunrise code usage. Such data is expected to be needed in a variety of dispute resolution processes and may also be required during legal adjudication of conflicts.

Restricted data can be shared between the Clearinghouse and appropriate partner entities. Restricted secret data includes codes such as encryption keys and authentication credentials. Sunrise codes provided to rights holders or agents are also considered shared secret data.

Service support data can be distributed from the Clearinghouse to registries, in support of the operation of trademark claims and sunrise periods. Service support data includes sunrise code matching data, trademark claims matching data, and trademark claims notice data. Service support data has special handling requirements as described below.

4.3.2. Cryptographic Considerations

All lookups and encryption are intended to ensure that a lookup can only reasonably be performed when the individual accessing the data knows the shared secret, the label and possibly the top-level domain it applies to. The intent is to provide ten years or more of cryptographic protection on any label against brute force attacks against technology as it currently exists and is expected to change based on computational power doubling every 18 months, assuming that holders of shared secrets are contractually obligated not to perform brute force attacks against the data and to manage the data in keeping with mandatory handling requirements and limitations on decrypted caching. Specific algorithms are specified as recommended (i.e. "should") rather than mandatory (i.e. "must"), recognizing that technological developments may require changes to the cryptographic and compression approach to assure the desired levels of protection and performance. Weaknesses that significantly reduce the protection afforded by the encryption must warrant reevaluation of which algorithms are to be used.

All matching data (for sunrise codes and for trademark claims) must be distributed as a cryptographic hash-based message authentication code or other one-way encryption algorithm. Clearinghouse matching data should use the HMAC-SHA1 algorithm. It should rely on a shared secret, and the string to be hashed should always be encoded to be only in lower case DNS-permissible characters (e.g. Unicode labels must use IDNA-2008 a labels). Cryptographic hashes, when used as filenames on a Clearinghouse file system, must be encoded to be compatible with the registry storage system. Registries must support RFC 4648 compatible encoding using BASE16, BASE32 and BASE64. Generally speaking, file and directory names must fall within the printable 7-bit ASCII character range, assuming no case sensitivity.

The encrypted trademark claims notice data must be constructed using a cryptographically sound methodology. Claims notice data is represented as an XML object, which may be compressed using the compression algorithm agreed upon by the registry and Clearinghouse (such as LZW (compress), Deflate (zip), LZMA (7zip) or Burrows-Wheeler (bzip2)). That compressed object must then be AES128 encrypted using a key derived from the shared secret and the label the trademark claims apply to. Some possible encryption key construction methods are to use the HMAC-SHA1 hash of a cryptographically salted shared secret and the label that the trademark claims apply to or the fully qualified domain name (label.tld) that the claims apply to. Note that the encryption key must not be the same (or an encoded version of

the same) as the matching data used to identify it to avoid disclosing the decryption key within the repository.

Data that is received in an encrypted form (after decryption of a protocol-based encrypted transport) should, in general, not be stored in decrypted form by the registry. For performance reasons, the registry may decrypt objects for maintaining in cache for a reasonable period for the purpose of facilitating an existing request to register a domain name, because encrypted objects are accessed twice in the registration process. A reasonable period is expected to be less than two hours. Decrypted data that is received as part of an acknowledgement is not subject to this restriction. This specific protection must be included registry-Clearinghouse service agreements and terms of use.

Registrars may not cache claims data beyond the registration transaction, which is generally expected to apply to periods of no more than six hours, but for non-interactive registration processes may be longer. Claims data which is transmitted to the registry as part of the mandatory acknowledgement of claims may be retained as part of the transactional record at the registrar.

Trademark claims notice data must not be transmitted to registrars outside of an active trademark claims period. The existence of trademark claims may be confirmed to registrars outside of an active trademark claims period in the discretion of the registry. However, following the conclusion of the trademark claims period, all Clearinghouse data repositories must be appropriately disposed of and may not be used.

4.3.3. Key Management and Rotation Considerations

The cryptographic controls and the assurances against potential abuse are largely controlled by a shared secret between the registry operator and the Clearinghouse. The risk profile for using a shared secret for a short period, like 6 months, is different from the risk profile for using a shared secret for a long period, like 3 years. It would limit the security of the clearinghouse data to allow a long-lived shared secret. Thus, the shared secret needs to be periodically changed in any long-lived Sunrise or Trademark Claims service period.

To address this concern, the Clearinghouse will issue some number of shared secrets (2 is proposed, each being valid for a period of 6 months) to each Registry that will be transmitted to the registry out-of-band in a reasonably secure manner. Keys will be automatically rotated at the Clearinghouse on 00:00:00 UTC on the first day of each semester and will be valid through 23:59:59 UTC on the last day of that period,

so that any new sunrise data or claims data will be created using a new key. Any existing data will be encrypted using the new key in the full dump, and added in batches to subsequent incremental updates to minimize the processing required.

Emergency procedures to respond to a key compromise will be established reflecting a compressed timeline of the process above. Issuing new keys will occur with sufficient lead time to ensure that even an emergency key rotation can occur smoothly and cleanly.

ID	Requirement	Mandatory Control
4.3A	All data in the Clearinghouse must be classified into	Any information which has not
	a category of data, to identify mandatory	been classified in the
	protections for that data class.	Clearinghouse must be treated
		as "internal data."
4.3B	Internal data	Internal data is not shared
		outside the Clearinghouse
		except when compelled by law
		enforcement or judicial action.
4.3C	Unprotected data	This information may be
		disclosed at the discretion of
		the Clearinghouse.
4.3D	Billing data	Must follow industry practices
		suitable to the sensitivity and
		value of the data (e.g. PCI DSS
		for credit card data).
		Must be used only for billing
		(payable and receivable)
		purposes, customer service
		inquiries and as necessary to
		investigate fraud and abuse.
4.3E	Customer communication	No special security measures
		are mandatory. However,
		automated communications
		should be structured to make
		any unauthorized or
		fraudulent use of the
		Clearinghouse name more
		evident.
4.3F	Trademark activity data	May be shared as required by
		law or as reasonably needed
		to inform the resolution of
		disputes associated with the
		mandatory rights protection
		mechanisms of the new gTLD
		program.

ID	Requirement	Mandatory Control
4.3G	Restricted data	May be shared only with specific parties who have a need-to-know the data for legitimate purposes. Restricted data should be transmitted to recipients over encrypted transport when online, and may appropriately be transmitted via out-of-band means such as couriers.
4.3H	Service support data: Sunrise code matching data, or data used to match a sunrise code to a rights holder's specific rights in a given domain name. Sunrise codes must be unique for any given fully qualified domain name and rights holder. (Any two contacts having verified rights in the same label "example" must have different sunrise codes for example.tld). The rights holder components of sunrise codes may be generated from a data source that is at least pseudo-random; the code may be generated from a random source. The Clearinghouse must not re-use sunrise codes for any purpose outside of sunrise registration authorizations for the intended top level domain.	Sunrise code matching data must be distributed to only that registry it applies to. Sunrise code matching data must be distributed as a cryptographic hash-based message authentication code or other one-way encryption algorithm. Matching data should use HMAC-SHA1 based on a shared secret key and a unique name constructed as "sunrisecode.label.tld" encoded into DNS-permissible characters. Matching data must be encoded in RFC4648 compatible BASE64.
4.31	Service support data: Trademark claims matching data, or data used to determine whether a second-level label has one or more trademark claims listed with the Clearinghouse. Will only match one encoding; for variant IDN encodings, the registry must perform multiple checks. The strings "café" (ending in U+00E9) and "cafe" (ending in U+0065) do not match by default: a registry would need to establish character mappings and try each of those mappings against Clearinghouse data. Registries may offer lookup for whether trademark claims exist in the "lightweight" lookup to registrars outside of a trademark claims period if the claims data is undergoing updates.	Trademark claims matching data must be distributed to only that registry it applies to. Trademark claims matching data must be distributed as a cryptographic hash-based message authentication code or other one-way encryption algorithm. Matching data should use HMAC-SHA1 based on a shared secret key and the fully qualified domain name requested. Matching data must be encoded in RFC4648 BASE64.

ID	Requirement	Mandatory Control
4.3J	Service support data: Date of most recent sunrise	May be distributed in plain
	eligibility verification for a given sunrise code.	text. This information is only
		required to support Sunrise
		models that have a "cutoff
		date" for sunrise eligibility.
4.3K	 Service support data: Trademark claims notice data Because each encrypted object can be used at least twice in an attempted domain name registration, decrypted trademark claims notice data may be cached by the registry for a period of up to six hours to improve performance. Each decryption of a trademark claims notice must be logged, identifying the requested claims notice, the party making the request (registry personnel or registrar name), and the date and time of request. The log of trademark claims access must be provided to the Clearinghouse on the same schedule as transmission of trademark 	Must only be distributed as an encrypted object. Notice data must be constructed using a cryptographically sound methodology. Claims notice data may (with agreement between the registry and Clearinghouse) be compressed prior to encryption. Claims notice should be encrypted using AES128 and an appropriately sized encryption key derived from the shared secret and label
	claims notice acknowledgements. Trademark claims notice data must only be provided to a registrar during an active period of trademark claims.	that the trademark claims apply to. Encryption keys must not be the same as trademark claims matching data. Registries must not decrypt trademark claims notice records except in legitimate support of the trademark claims service, in response to a specific, registrar-initiated request.

4.4. Trademark Clearinghouse Data Structures

4.4.1. Overview

This section describes the specific required data and applies some structural elements to that data for illustration purposes. The Clearinghouse, in cooperation with ICANN, must provide formal data structure specifications to registries and registrars so that such entities can begin to implement the required enhancements to systems to perform Clearinghouse functions.

4.4.2. Trademark Claims Notice Data

Trademark claims notice data must be transferred from the Clearinghouse to the registry, from registry to registrar, and presented by the registrar to the domain applicant. In addition, the data presented to the domain applicant must be transmitted back to the registry and Clearinghouse as part of the acknowledgement, which provides some assurance that the registrant knows of the trademark claims.

Because of this high degree of transfer, the claims must be able to be structured in XML for inclusion within EPP transactions. The XML payload elements will be provided (in encrypted form) by the Clearinghouse to registries through its data synchronization service, to ensure that registries have access to the necessary data to facilitate trademark claims services.

The pseudo-code description for trademark claims notices is as follows:

4.4.3. Acknowledgements

Sunrise registrations and trademark claims period registrations where the requested domain name has associated trademark claims require some additional information from the domain name applicant/registrant to proceed to successful registration. That additional information is collectively known as an acknowledgement. Acknowledgements must fit into an XML structure for inclusion in an EPP transaction.

The pseudo-code description for an acknowledgement (or "ack") is as follows:

```
// an ack must contain only one authcode
// or notice
```

4.4.4. Auditing trail events

Access to trademark claims notice data requires decryption, which is always under the control of the registry. Because the registry is the only point of access to this data in decrypted form, the registry must maintain records of each time that Clearinghouse data is decrypted, to identify attempted data mining.

A minimal amount of information is required, described as follows:

4.4.5. Repository Directories

The repository will have a directory structure such as:

```
/<TLD>/sunrise/full/
/<TLD>/sunrise/incremental/
/<TLD>/ipclaims/full/
/<TLD>/ipclaims/incremental/
```

Sunrise code data will be located in the .../sunrise/ directory tree, and trademark claims data will be located in the .../ipclaims/ directory tree.

Furthermore, there is no assurance that file systems used by registries will be feature-rich; as such, filenames and directory names in the synchronized repository should be limited to 7-bit ASCII and should not rely on case sensitivity.

The structure of directories synchronized to the Clearinghouse may be specified by the registry, but must not permit any directory from containing 65535 or more files or directories. Unnecessary subdirectories (directories without at least one file entry) must not be created and should be removed. Upon successful synchronization to the Clearinghouse, files should be removed from the registry's synchronized directory structure to improve performance. Copies of any data transmitted to the Clearinghouse may be kept by the registry.

4.4.6. Sunrise and Trademark Claims Repositories

Data stored in the claims and sunrise repositories must be structured within the repository to take advantage of existing synchronization tools. Sunrise code data and trademark claims data will be re-generated periodically. Filenames will be standardized to identify the contents, whether the contents are full or incremental, and the date/time of creation. For example, a full dump of sunrise codes from June 25 would be "sunrise-full-1340582400" – where 1340582400 is the UNIX time representation of 00:00:00 UTC on 25 June 2012. Full dumps for both the Sunrise code matching data ("Sunrise data") and Trademark Claims data (as the case may be) will be generated each day starting at 00:00 UTC. Incremental dumps of both data sets will be generated periodically (the current expected window is once every 15 minutes).

The incremental and full dumps generated at 00:00 UTC consider the same date and time for TMCH data selection allowing a registry to update its local cache using only incremental files and the full dump when a key rollover (or an extended outage) occurs.

Upon completion of generating a new full dump, all previous full and any incremental dumps more than 48 hours old will be removed. This will guarantee moderately small synchronization runs being required and a robust recovery approach should synchronization fail multiple times in a row.

Dump files for Sunrise data will be formatted for easy automated processing, and will be designed to promote and facilitate the automation of importing the data into registry database systems and are described in the file format section.

The lookup hashes for both Sunrise and Trademark Claims records should not be ordered based on the labels used to generate the lookup hashes.

4.4.7. Synchronized Data File Structures

Periodically generated full dump and incremental update files will follow a simple file format that permits the integration of multiple records into the same file to minimize the volume of data being synchronized. Files have a minimal header (three lines) to communicate the periods covered by the data and provide a consistency check to ensure that the file is usable by the registry.

a. Sunrise code data file format:

previous=current=<currentdbtimestamp>

test=<ErrorIdentificationCode>
+<SunriseVerificationCode>
-<SunriseVerificationCode>
[more codes]

b. Trademark Claims data file format

previous=currentdotimestamp>
current=<currentdotimestamp>
test=<IdentificationCode>
+<ClaimsLookupCode1>,<salt1>,<ClaimsObject1>
-<ClaimsLookupCode2>
[more codes]

A leading "+" signifies a new or updated code; a leading "-"signifies a code that is to be removed. Note that full dumps should not have any leading "-" lines. When processing these files, instruction to remove a non-existent entry must be handled gracefully, so that a data synchronization error condition does not prevent other updates from occurring.

he number of
presenting when
When this value is
en the value is
tabase dump.
he number of
presenting when
HMAC-SHA1 of the
in the file and the
anticipates
ght of the
d registry
e shared secret
ons in the
nd data integrity
constructed from
l Registry-known
ınrise code, label
rificationCodes
constructed from
n name label.
Base64.
s a cryptographic

	salt when generating a ClaimsObject.		
ClaimsObject	The claims object is a base64 encoded encrypted XML object.		
	The XML must meet the requirements described in section		
	4.4.2; then that object will be encrypted using AES128. The		
	key used for that encryption will be constructed using an		
	HMAC-SHA1 of the label and a salted hash using the unique		
	salt provided with the ClaimsObject and ClaimsLookupCode		
	and the registry's shared secret, such that base64		
	(aes(hmac(salt secret,label),xml)). Note that salt secret is a		
	concatenation.		

4.5. Protocol Enhancements

4.5.1. Overview

The current design of the Clearinghouse requires updates to the Extensible Provisioning Protocol (EPP). To limit communication dependencies with the Clearinghouse (thereby decreasing the chances of a Clearinghouse technical failure impairing the ongoing business efforts of registries and registrars), Clearinghouse data will be transferred in a protected form to registries. The data will be queried by registries using extensions to EPP transactions occurring in certain circumstances.

4.5.2. Expansion of EPP domain <create> to support the sunrise codes <ack>

During the mandatory sunrise period, domain name applicants must include a sunrise code to show that they've met the minimum sunrise eligibility requirements from the Clearinghouse. Registries are obligated to ensure that rights protection mechanisms are observed and are empowered to do so by having a means to verify that a code was issued specifically for the requested domain, showing that appropriate rights have been verified by the Clearinghouse.

EPP's domain <create> command does not currently contain a mechanism to include such information. The inclusion of an <ack> containing an <authcode> (as described in 4.4.3) should be adequate to communicate the necessary information required for rights protection.

4.5.3. Expansion of EPP domain <check> to support retrieval of <notice> data

During the trademark claims period, registrars are required to check for and display trademark claims notices. This seems to logically fall within the

functionality described in the <check> command, but the structure of EPP requires an extension to include the full detail of a trademark claim.

There are two classes of checks which might occur. One might simply check to see whether or not trademark claims exist at all. This check would be faster (no decryption of claims data required); such a check would be suitable for bulk domain name checking. The second, more detailed check would return the full trademark claims <notice> object.

EPP's domain <check> does not currently contain a mechanism to support receiving trademark claims notice data, nor does it contain a response code that would suggest that claims exist on an otherwise available domain name. The ability to include a <notice> as described in 4.4.2 would address the payload issues, and additional enhancements to the protocol are required to ensure that the required extensions to the behavior of the system are backward compatible for EPP clients that do not recognize the extension.

4.5.4. Expansion of EPP domain <create> to support trademark claims <ack>

During the trademark claims period, registrars are required to capture an acknowledgement of trademark claims and transmit it to the registry, as part of the trademark claims rights protection mechanism. Registries are, in turn, obligated to ensure that appropriate rights protection actions occur.

EPP's domain <create> command does not currently contain a mechanism to include such information. The inclusion of an <ack> containing a <notice> (as described in 4.4.3 and 4.4.2 respectively) should be adequate to communicate the necessary information required for rights protection.

4.6. Matching Rules

The Clearinghouse must automatically generate the identical domain name that is linked with a record trademark. However, some trademarks include spaces or other special characters—that cannot be represented in a domain name. Consequently, ICANN based on the input from its stakeholders has defined a set of rules that defines what constitutes as an identical match.

4.6.1. Identical Matches of Domain Name labels

The label (the second level element of a fully qualified domain name) is the complete and identical textual elements of the mark. There are four specific

transformation rules which can be applied to labels and still maintain an identical match.

- a. Spaces can be replaced by hyphens (or vice versa) or omitted;
- b. Certain special characters in a trademark will be spelled out with appropriate words (@ and &);
- c. Characters in a mark that are unable to be used in a domain name may (i) be omitted or (ii) replaced by hyphens and still be considered identical matches.

Where a registry may wish to institute additional matching rules, i.e., to add more characters, including IDN variant characters, this implementation will be the responsibility of the registry operator. Registries currently adopt IDN tables for a TLD which may include the identification of characters considered to be variants of one another; however, there is no authoritative IDN table per script that is broadly accepted.

4.6.2. "Rule B" Translations

All "Rule B" translations are language specific. A canonical listing of translations must be established, using the following chart format, which must be extended and completed prior to operational deployment. The following table is an example to demonstrate the Rule B translation requirement, based on a cursory review of the six UN sponsored language.

Special Character	Arabic	Chinese	English	French	Russian	Spanish
& (Ampersand)	و	和	And	et	И	Υ
@ (Ampersat)	في	在	At	à	В	en

Every mark containing a recognized special character (& or @) is entitled to use the canonical mappings into each of the national language(s) of the jurisdiction in which the trademark rights were recognized Consistent with Rule "C", dropping the special character or replacing it with a hyphen (like any other DNS-impermissible character) is also acceptable. This approach is expandable to support the integration of new "Rule B" translations should ICANN policy developments require such a functional expansion.

For example, in Canada (national languages French and English with the translations listed above), the mark A&B would have four valid permutations which would still be considered an exact match: ab, a-b, aandb, and aetb.

4.6.3. Implementation Constraints

The above rules can be implemented in straightforward cases such as the following examples:

a. Rule A: A trademark holder would like to record his trademark "A B" in the trademark clearinghouse. The trademark is protected in the United States where English is the national language. The following domain names would be automatically generated:

Trademark	Domain Name
АВ	AB
	A-B

b. Rule B: A trademark holder records the trademark "A&B" in the trademark clearinghouse. The trademark is protected in the United States where English is the national language. The following domain names will be automatically generated:

Trademark	Domain Name
A&B	АВ
	A-B
	AandB

c. Rule C: A trademark holder records his trademark "A!B" in the trademark clearinghouse. The trademark is protected in the United States where English is the national language. The following domain names will be automatically generated:

Trademark	Domain Name
A!B	AB
	A-B

Trademarks are most likely to be constituted of a mixture of spaces, letters, and special characters. In the event that a trademark holder records the trademark "AB & CD Y!" in the Trademark Clearinghouse and the trademark is protected in the United States where English is the national language, the following domain names will be automatically generated:

Trademark	Domain Names	Domain Names	Domain Names	Domain
				Names
"AB & CD Y!"	ABCDY	ABandCD-Y	ABandCDY	AB-CDY
	ABCD-Y	ABCDY	ABCD-Y	ABCDY
	AB—CD-Y	AB—CDY	ABCDY	AB—CD-Y
	AB-CD-Y	AB-CDY	AB—CDY	ABandCDY

In addition, this set of rules will generate more matching domain names when a trademark holder records regionally protected trademark. For example, a trademark registered within the European Community where more than 33 official languages are applicable, could lead to more than 100 matching domain names.

The latter has an impact on the clearinghouse itself thus the costs and on the user experience. Furthermore, trademark holders may not want all these variations.

4.6.4. Implementation Approach

The purpose of the Trademark Clearinghouse is to provide rights holders with a mechanism to protect their trademarks in the DNS in a cost-efficient manner. The Clearinghouse is only required to use those exact matches which are affirmatively selected by the rights holder for the mandatory rights protection mechanisms.

Pricing for multiple matches is within the discretion of the Clearinghouse.

4.6.5. Rule "B" translations

In accordance to ICANN's "Rule B", translations are language specific. Consequently, a canonical listing of translations needs to be established. The provider will provide a list of the official languages and the translations of the "&" and "@" and that list will be published prior to operational deployment.

4.7. Database Requirements Area

The technical requirements to support the database are enumerated in the chart below.

ID	Sub-Topic	Requirement	Additional Clarification
4.7A	Availability	The Clearinghouse database administrator shall provide 24-hour accessibility seven days a week.	
4.7B	Reliability	The Clearinghouse database administrator shall employ systems that are technically reliable and secure. While communication protocols are reasonably fault-tolerant and with only a limited amount of timesensitivity, the systems must implement a high degree of resilience and survivability against technical faults and failures.	
4.7C	Scalability	The Clearinghouse database administrator and validator shall use globally accessible and scalable systems so that multiple marks from multiple sources in multiple languages can be accommodated and sufficiently cataloged.	

4.8. User Interfaces Requirements Area

The technical requirements to support user interfaces are enumerated in the chart below.

ID	Sub-Topic	Requirement	Additional
			Clarification

4.8.A	Contact Registration	Interface must accept Unicode	
		inputs.	
4.8.B	Trademark Registration	Trademarks must be received in	
		Unicode and must be available	
		for Clearinghouse operations in	
		an IDNA2008-compliant	
		manner.	

4.9. System Interfaces Requirements Area

The technical requirements to support system interfaces are enumerated in the chart below.

ID	Sub-Topic	Requirement	Additional
			Clarification
4.9A	Data Synchronization	Implement using rsync over ssh	
		to synchronize sunrise and	
		claims data between the	
		Clearinghouse and registry, and	
		to transmit <ack> and <audit></audit></ack>	
		records to the Clearinghouse in	
		timed batches.	

4.10. Operational Requirements Area

The technical requirements to support operational requirements are enumerated in the chart below.

ID	Sub-Topic	Requirement	Additional Clarification
4.10A	Status Monitoring and	Staffing must be modeled	
	Reporting	around 24x7x365 on-call	
		support.	
4.10B	Multi-currency	Allow for multiple currencies,	
		with exact implementation	
		details to be determined.	
4.10C	Multi-language	Allow for multiple languages,	
		with exact implementation	
		details to be determined.	

4.11. Technical Standards Requirements Area

The technical requirements to support operational requirements are enumerated in the chart below.

ID	Sub-Topic	Requirement	Additional Clarification
4.11A	Communication	Communications that transfer	
	Protocols	data from the Clearinghouse to	
		a registry will be initiated by the	
		registry, using Rsync over an	
		SSH transport. The	
		Clearinghouse and registry will	
		agree on an appropriate	
		method to obtain SSH keys for	
4.11B	Communication	purposes of authentication. Communication that transfers	
4.118	Protocols		
	Protocois	data from a registry to the	
		Clearinghouse will also be initiated by the registry, using	
		Rsync over an SSH transport.	
		The Clearinghouse and registry	
		will agree on an appropriate	
		method to obtain SSH keys for	
		purposes of authentication.	
4.11C	Data Location	The registry shall only need to	
		connect with one centralized	
		database to obtain the	
		information it needs to conduct	
		its sunrise or trademark claims	
		services regardless of the	
		details of the Clearinghouse	
		service provider's contract(s)	
		with ICANN.	
		The necessary subset of	
		centralized database	
		information (sunrise data and	
		claims data) must be available	
		for synchronization to each	
		participating registry.	

4.12. Billing Requirements Area

The technical requirements to support billing are enumerated in the chart below.

ID Requirement	Additional
----------------	------------

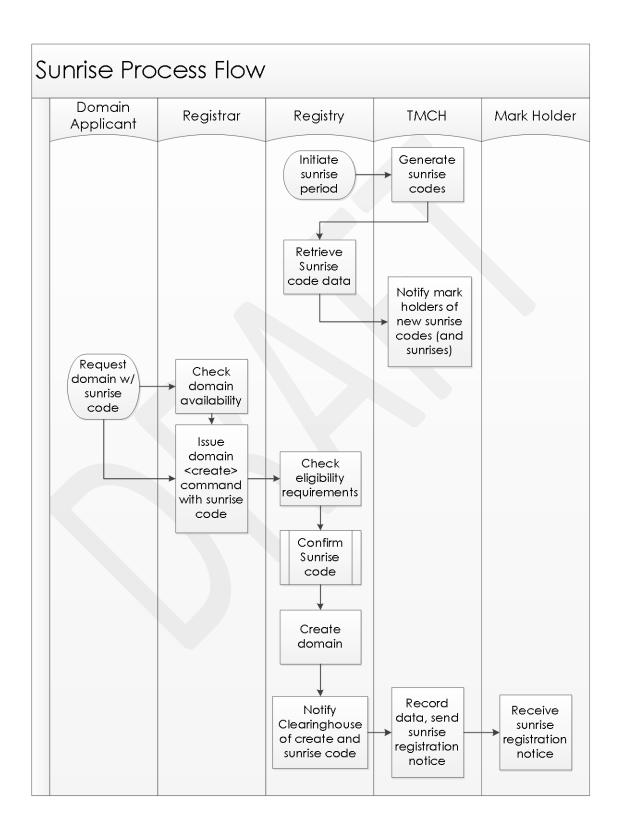
		Clarification
4.12A	The system must accept transactions sourced in a wide variety of currencies. It should accept transactions in any currency accepted by any accredited ICANN registrar.	There are ICANN-accredited registrars in approximately 60 countries.
4.12B	Billing disputes must be able to be handled by a customer service function.	

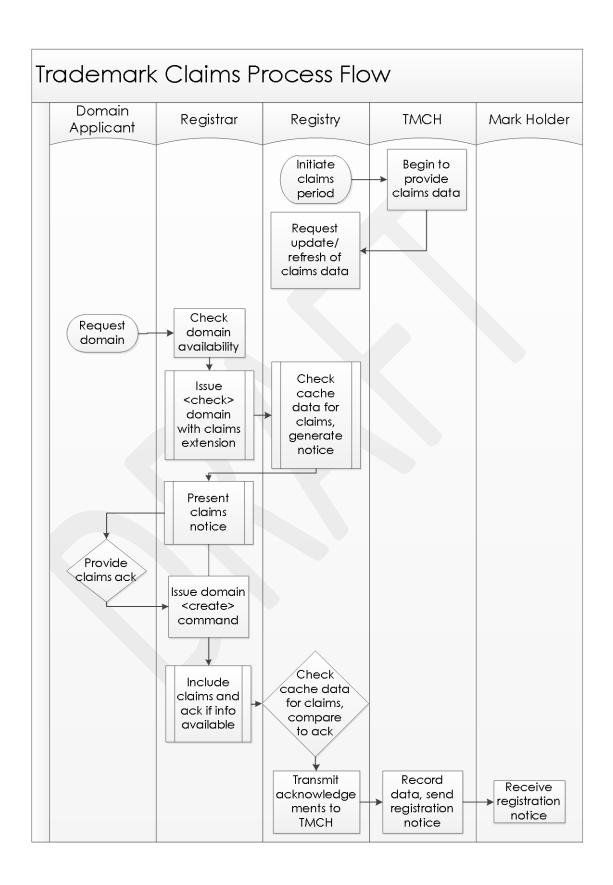
4.13. Data Escrow Requirements Area

The purpose of data escrow is to permit quick resumption of Clearinghouse services by another technical operator following a catastrophic failure that prevents the Clearinghouse from meeting its service level commitments. Due to the unique characteristics of the Clearinghouse, escrow requirements may mature as implementation progresses. The form of the escrow agreements and the escrow provider must be approved by ICANN.

ID	Requirement	Additional Clarification
4.13A	All software used in the Clearinghouse, regardless of its classification, must be deposited into escrow before being put into production use.	
4.13B	All custom modifications to any software, including configurations, must be deposited into escrow before being cut into production use.	
4.13C	Any data that received or generated by the Clearinghouse and is used for Clearinghouse services must be escrowed. This data escrow must occur within 24 hours of receipt or generation of the data.	Customer service records may be excluded from escrow requirements.

5. Appendix: Cross-Functional Responsibility Charts





6. ICANN-approved Declaration of Use (English)

The [Trademark Holder/Licensee/Agent] hereby certifies that the information submitted to the Clearinghouse, is, to the best of [Trademark Holder/Licensee/Agent's] knowledge complete and accurate, that the trademarks set forth in this submission are currently in use in the manner set forth in the accompanying specimen, in connection with the class of goods or services specified when this submission was made to the Trademark Clearinghouse; that this information is not being presented for any improper purpose; and that if, at any time, the information contained in this submission is no longer accurate, the [Trademark Holder/Licensee/Agent] will notify the Clearinghouse within a reasonable time of that information which is no longer accurate, and to the extent necessary, provide that additional information necessary for the submission to be accurate. Furthermore, if any Clearinghouse-verified mark subsequently becomes abandoned by the holder, the holder will notify the Clearinghouse within a reasonable time that the mark has been abandoned.

Note that this language will be provided in English and (as translated by the Clearinghouse provider) the language of the registration agreements.

7. ICANN-Approved Trademark Claims Notice (English)

TRADEMARK NOTICE

You have received this Trademark Notice because you have applied for a domain name which matches at least one trademark record submitted to the Trademark Clearinghouse. You may or may not be entitled to register the domain name depending on your intended use and whether it is the same or significantly overlaps with the trademarks listed below.

Your rights to register this domain name may or may not be protected as noncommercial use or "fair use" by the laws of your country.

Please read the trademark information below carefully, including the trademarks, jurisdictions, and goods and service for which the trademarks are registered. Please be aware that not all jurisdictions review trademark applications closely, so some of the trademark information below may exist in a national or regional registry which does not conduct a thorough or substantive review of trademark rights prior to registration.

If you have questions, you may want to consult an attorney or legal expert on trademarks and intellectual property for guidance.

If you continue with this registration, you represent that, you have received and you understand this notice and to the best of your knowledge, your registration and use of the requested domain name will not infringe on the trademark rights listed below.

The following [number] Trademarks are listed in the Trademark Clearinghouse:

Note that this language will be provided in English and (as translated by the Clearinghouse provider) the language of the registration agreements.

8. Appendix: References

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