Answers for this question (#27) are provided by Afilias, the back-end provider of registry services for this TLD.

Afilias has been managing registrations for over a decade. Afilias has had experience managing registrations for over a decade and supports comprehensive registration lifecycle services including the registration states, all standard grace periods, and can address any modifications required with the introduction of any new ICANN policies.

This TLD will follow the ICANN standard domain lifecycle, as is currently implemented in TLDs such as .ORG and .INFO. As demonstrated in the below description and attached diagram, the main parts in a domain lifecycle are: (i) Registration Period; (ii) the Auto-Renew Grace Period; (iii) Redemption Grace Period; and (iv) Pending Delete. As a special requirement to meet the .SECURITY mission and policies Defender Security will (as established in response to question #18) in the Registration phase conduct certain data validations for all registrations and additional verifications of eligibility for registrations conducted in the Sunrise Period.

The below response includes: a diagram and description of the lifecycle of a domain name in this TLD, including domain creation, transfer protocols, grace period implementation and the respective time frames for each; and the existing resources to support the complete lifecycle of a domain.

As depicted in Figure 27-a, prior to the beginning of the Trademark Claims Service or Sunrise IP protection program, Afilias will support the reservation of names in accordance with the new gTLD Registry Agreement, Specification 5, as described in response to question #22.

Registration period
After the IP protection programs and the general launch, eligible registrants may choose an accredited registrar to register a domain name. The registrar will check availability on the requested domain name and if available, will collect specific objects such as, the required contact and host information from the registrant. The registrar will then provision the information into the registry system using standard Extensible Provisioning Protocol (“EPP”) commands through a secure connection to the registry backend service provider.

When the domain is created, the standard five day Add Grace Period begins, the domain and contact information are available in WHOIS, and normal operating EPP domain statuses will apply. Other specifics regarding registration rules for an active domain include:

- The domain must be unique;
- Restricted or reserved domains cannot be registered;
• The domain can be registered from 1-10 years;

• The domain can be renewed at any time for 1-10 years, but cannot exceed 10 years;

• The domain can be explicitly deleted at any time;

• The domain can be transferred from one registrar to another except during the first 60 days following a successful registration or within 60 days following a transfer; and,

Contacts and hosts can be modified at any time.

The following describe the domain status values recognized in WHOIS when using the EPP protocol following RFC 5731.

• OK or Active: This is the normal status for a domain that has no pending operations or restrictions.

• Inactive: The domain has no delegated name servers.

• Locked: No action can be taken on the domain. The domain cannot be renewed, transferred, updated, or deleted. No objects such as contacts or hosts can be associated to, or disassociated from the domain. This status includes: Delete Prohibited / Server Delete Prohibited, Update Prohibited / Server Update Prohibited, Transfer Prohibited, Server Transfer Prohibited, Renew Prohibited, Server Renew Prohibited.

• Hold: The domain will not be included in the zone. This status includes: Client Hold, Server Hold.

• Transfer Prohibited: The domain cannot be transferred away from the sponsoring registrar. This status includes: Client Transfer Prohibited, Server Transfer Prohibited.

The following describe the registration operations that apply to the domain name during the registration period.

a. Domain modifications: This operation allows for modifications or updates to the domain attributes to include:

i. Registrant Contact

ii. Admin Contact

iii. Technical Contact

iv. Billing Contact

v. Host or nameservers

vi. Authorization information

vii. Associated status values
A domain with the EPP status of Client Update Prohibited or Server Update Prohibited may not be modified until the status is removed.

b. Domain renewals: This operation extends the registration period of a domain by changing the expiration date. The following rules apply:

i. A domain can be renewed at any time during its registration term,

ii. The registration term cannot exceed a total of 10 years.

A domain with the EPP status of Client Renew Prohibited or Server Renew Prohibited cannot be renewed.

c. Domain deletions: This operation deletes the domain from the Shared Registry Services (SRS). The following rules apply:

i. A domain can be deleted at any time during its registration term, if the domain is deleted during the Add Grace Period or the Renew/Extend Grace Period, the sponsoring registrar will receive a credit,

ii. A domain cannot be deleted if it has “child” nameservers that are associated to other domains.

A domain with the EPP status of Client Delete Prohibited or Server Delete Prohibited cannot be deleted.

d. Domain transfers: A transfer of the domain from one registrar to another is conducted by following the steps below.

i. The registrant must obtain the applicable <authInfo> code from the sponsoring (losing) registrar.

• Every domain name has an authInfo code as per EPP RFC 5731. The authInfo code is a six- to 16-character code assigned by the registrar at the time the name was created. Its purpose is to aid identification of the domain owner so proper authority can be established (it is the "password" to the domain).

• Under the Registry-Registrar Agreement, registrars will be required to provide a copy of the authInfo code to the domain registrant upon his or her request.

ii. The registrant must provide the authInfo code to the new (gaining) registrar, who will then initiate a domain transfer request. A transfer cannot be initiated without the authInfo code.

• Every EPP <transfer> command must contain the authInfo code or the request will fail. The authInfo code represents authority to the registry to initiate a transfer.

iii. Upon receipt of a valid transfer request, the registry automatically asks the sponsoring (losing) registrar to approve the request within five calendar days.
• When a registry receives a transfer request the domain cannot be modified, renewed or deleted until the request has been processed. This status must not be combined with either Client Transfer Prohibited or Server Transfer Prohibited status.

• If the sponsoring (losing) registrar rejects the transfer within five days, the transfer request is cancelled. A new domain transfer request will be required to reinitiate the process.

• If the sponsoring (losing) registrar does not approve or reject the transfer within five days, the registry automatically approves the request.

iv. After a successful transfer, it is strongly recommended that registrars change the authInfo code, so that the prior registrar or registrant cannot use it anymore.

v. Registrars must retain all transaction identifiers and codes associated with successful domain object transfers and protect them from disclosure.

vi. Once a domain is successfully transferred the status of TRANSFERPERIOD is added to the domain for a period of five days.

vii. Successful transfers will result in a one year term extension (resulting in a maximum total of 10 years), which will be charged to the gaining registrar.

e. Bulk transfer: Afilias supports bulk transfer functionality within the SRS for situations where ICANN may request the registry to perform a transfer of some or all registered objects (includes domain, contact and host objects) from one registrar to another registrar. Once a bulk transfer has been executed, expiry dates for all domain objects remain the same, and all relevant states of each object type are preserved. In some cases the gaining and the losing registrar as well as the registry must approved bulk transfers. A detailed log is captured for each bulk transfer process and is archived for audit purposes.

Defender Security will support ICANN’s Transfer Dispute Resolution Process. Defender Security will work with Afilias to respond to Requests for Enforcement (law enforcement or court orders) and will follow that process.

1. Auto-renew grace period

The Auto-Renew Grace Period displays as AUTORENEWPERIOD in WHOIS. An auto-renew must be requested by the registrant through the sponsoring registrar and occurs if a domain name registration is not explicitly renewed or deleted by the expiration date and is set to a maximum of 45 calendar days. In this circumstance the registration will be automatically renewed by the registry system the first day after the expiration date. If a Delete, Extend, or Transfer occurs within the AUTORENEWPERIOD the following rules apply:

i. Delete. If a domain is deleted the sponsoring registrar at the time of the deletion receives a credit for the auto-renew fee. The domain then moves into the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.
ii. Renew/Extend. A domain can be renewed as long as the total term does not exceed 10 years. The account of the sponsoring registrar at the time of the extension will be charged for the additional number of years the registration is renewed.

iii. Transfer (other than ICANN-approved bulk transfer). If a domain is transferred, the losing registrar is credited for the auto-renew fee, and the year added by the operation is cancelled. As a result of the transfer, the expiration date of the domain is extended by minimum of one year as long as the total term does not exceed 10 years. The gaining registrar is charged for the additional transfer year(s) even in cases where a full year is not added because of the maximum 10 year registration restriction.

2. Redemption grace period
During this period, a domain name is placed in the PENDING DELETE RESTORABLE status when a registrar requests the deletion of a domain that is not within the Add Grace Period. A domain can remain in this state for up to 30 days and will not be included in the zone file. The only action a registrar can take on a domain is to request that it be restored. Any other registrar requests to modify or otherwise update the domain will be rejected. If the domain is restored it moves into PENDING RESTORE and then OK. After 30 days if the domain is not restored it moves into PENDING DELETE SCHEDULED FOR RELEASE before the domain is released back into the pool of available domains.

3. Pending delete
During this period, a domain name is placed in PENDING DELETE SCHEDULED FOR RELEASE status for five days, and all Internet services associated with the domain will remain disabled and domain cannot be restored. After five days the domain is released back into the pool of available domains.

Other grace periods
All ICANN required grace periods will be implemented in the registry backend service provider’s system including the Add Grace Period (AGP), Renew/Extend Grace Period (EGP), Transfer Grace Period (TGP), Auto-Renew Grace Period (ARGP), and Redemption Grace Period (RGP). The lengths of grace periods are configurable in the registry system. At this time, the grace periods will be implemented following other gTLDs such as .ORG. More than one of these grace periods may be in effect at any one time. The following are accompanying grace periods to the registration lifecycle.

Add grace period
The Add Grace Period displays as ADDPERIOD in WHOIS and is set to five calendar days following the initial registration of a domain. If the domain is deleted by the registrar during this period, the registry provides a credit to the registrar for the cost of the registration. If a Delete, Renew/Extend, or Transfer operation occurs within the five calendar days, the following rules apply.

i. Delete. If a domain is deleted within this period the sponsoring registrar at the time of the deletion is credited for the amount of the registration. The domain is deleted from the registry backend service provider’s database and is released back into the pool of available domains.

ii. Renew/Extend. If the domain is renewed within this period and then deleted, the sponsoring registrar will receive a credit for both the registration and the extended amounts. The account of the sponsoring
registrar at the time of the renewal will be charged for the initial registration plus the number of years the registration is extended. The expiration date of the domain registration is extended by that number of years as long as the total term does not exceed 10 years.

iii. Transfer (other than ICANN-approved bulk transfer). Transfers under Part A of the ICANN Policy on Transfer of Registrations between registrars may not occur during the ADDPERIOD or at any other time within the first 60 days after the initial registration. Enforcement is the responsibility of the registrar sponsoring the domain name registration and is enforced by the SRS.

Renew / extend grace period
The Renew / Extend Grace Period displays as RENEWPERIOD in WHOIS and is set to five calendar days following an explicit renewal on the domain by the registrar. If a Delete, Extend, or Transfer occurs within the five calendar days, the following rules apply:

i. Delete. If a domain is deleted within this period the sponsoring registrar at the time of the deletion receives a credit for the renewal fee. The domain then moves into the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.

ii. Renew/Extend. A domain registration can be renewed within this period as long as the total term does not exceed 10 years. The account of the sponsoring registrar at the time of the extension will be charged for the additional number of years the registration is renewed.

iii. Transfer (other than ICANN-approved bulk transfer). If a domain is transferred within the Renew/Extend Grace Period, there is no credit to the losing registrar for the renewal fee. As a result of the transfer, the expiration date of the domain registration is extended by a minimum of one year as long as the total term for the domain does not exceed 10 years.

If a domain is auto-renewed, then extended, and then deleted within the Renew/Extend Grace Period, the registrar will be credited for any auto-renew fee charged and the number of years for the extension. The years that were added to the domain’s expiration as a result of the auto-renewal and extension are removed. The deleted domain is moved to the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.

Transfer Grace Period
The Transfer Grace period displays as TRANSFERPERIOD in WHOIS and is set to five calendar days after the successful transfer of domain name registration from one registrar to another registrar. Transfers under Part A of the ICANN Policy on Transfer of Registrations between registrars may not occur during the TRANSFERPERIOD or within the first 60 days after the transfer. If a Delete or Renew/Extend occurs within that five calendar days, the following rules apply:

i. Delete. If the domain is deleted by the new sponsoring registrar during this period, the registry provides a credit to the registrar for the cost of the transfer. The domain then moves into the Redemption Grace Period with a status of PENDING DELETE RESTORABLE.
ii. Renew/Extend. If a domain registration is renewed within the Transfer Grace Period, there is no credit for the transfer. The registrar's account will be charged for the number of years the registration is renewed. The expiration date of the domain registration is extended by the renewal years as long as the total term does not exceed 10 years.

Special considerations
Defender Security will conduct auctions for multiple registration applications for the same domain name in the Sunrise and Landrush phases; exceptions is the reserved list of names for appropriate authorities that supersedes any registration applications and can only be registered to the designated entity. More details are provided in response to question #18b. Afilias will manage the domain name auction using existing technology. Upon the completion of the auction, any domain name acquired will then follow the standard lifecycle of a domain.

Registration lifecycle resources
Since its founding, Afilias is focused on delivering secure, stable and reliable registry services. Several essential management and staff who designed and launched the Afilias registry in 2001 and expanded the number of TLDs supported, all while maintaining strict service levels over the past decade, are still in place today. This experiential continuity will endure for the implementation and on-going maintenance of this TLD. Afilias operates in a matrix structure, which allows its staff to be allocated to various critical functions in both a dedicated and a shared manner. With a team of specialists and generalists, the Afilias project management methodology allows efficient and effective use of our staff in a focused way. Virtually all Afilias resource are involved in the registration lifecycle of domains.

There are a few areas where registry staff devote resources to registration lifecycle issues:

a. Supporting Registrar Transfer Disputes. The registry operator will have a compliance staffer handle these disputes as they arise; they are very rare in the existing gTLDs.

b. Afilias has its development and quality assurance departments on hand to modify the grace period functionality as needed, if ICANN issues new Consensus Policies or the RFCs change.

Afilias has more than 30 staff members in these departments.