Funding Forecast Assumptions for Fiscal Years 2024-2028

27 October 2022



Introduction

This document has been prepared as part of the development of the Internet Corporation for Assigned Names and Numbers (ICANN) Five-Year Operating and Financial Plan for fiscal years 2024-2028, which runs from 1 July 2023 through 30 June 2028. The primary objective of this document is to outline the various funding-related assumptions and projections included in its Five-Year Operating and Financial Plan. This document also supports ICANN's efforts to achieve the financial goals outlined in the ICANN Strategic Plan for Fiscal Years 2021-2025, specifically Goal 5.2: "to develop reliable and predictable funding projections."

This document contains forward-looking information that represents ICANN organization's attempt to conservatively estimate its future levels of funding. The intent is to maximize the chances that such future funding is equal to, if not higher than these projections would suggest, and thus allow ICANN org to plan for a level of activity and expenses that minimize the risk that funding would be lower than expenses in the future. The forward-looking information contained in this paper is based upon what ICANN org believes are reasonable assumptions derived from the most current information available at the time of publication. However, the use of such forward-looking information involves risks and uncertainties. As a result, actual funding levels could differ materially from those projected in this document in any given year.

The funding assumptions and forecasts outlined in this document have been prepared amidst expectations of challenging global macroeconomic prospects. The World Bank suggests that just after two years of contending with a global recession induced by the COVID-19 pandemic, the world economy is now again likely to experience a deceleration and prolonged slowdown in growth, which is likely to be further exacerbated by an increase in inflation rates.²

This document describes ICANN's 'base-case' funding scenario, along with 'low' and 'high' funding scenarios and further outlines the prospective impacts that these scenarios have on ICANN's funding. The "base-case" scenario can be considered as ICANN's view of the "most likely" and "conservatively-determined" scenario. ICANN org incorporates various assumptions of growth or decline for each of its funding categories to develop multiple plausible viewpoints of how ICANN's funding might evolve over the five-year horizon. These are developed for the specific purpose of creating reasonably conservative funding assumptions, and are not intended to convey ICANN org's views or positions on any specific aspect of the Domain Name System (DNS) ecosystem.

¹ Targeted outcomes as part of this strategic goal include the development of reliable and predictable five-year funding projections based on a sound understanding of the evolution in the domain name marketplace and realistic assumptions, as well as the use of data about the directions and trends in the market to effectively guide the organization. ICANN org's Strategic Plan for Fiscal Years 2021-2025 is available via: https://www.icann.org/en/system/files/strategic-plan-2021-2025-24jun19-en.pdf

² World Bank. 2022. Global Economic Prospects, June 2022. Washington, DC: World Bank. doi: 10.1596/978-1-4648-1843-1. License: Creative Commons Attribution CC BY 3.0 IGO. Further details are available via: https://www.worldbank.org/en/publication/global-economic-prospects

Other parties may use the same information but for different purposes, which can lead them to draw different conclusions.

Consistent with its approach towards developing funding forecasts, ICANN org's funding forecast assumptions and outputs are regularly evaluated and calibrated as additional data becomes available.³

This document is divided into three sections:

Section 1, Industry Context: This section summarizes a report produced by an independent market analyst about the DNS industry. It provides an overview of key factors that have had significant effect on the DNS industry, along with corresponding assumptions related to the potential evolution of the DNS marketplace. The key trends summarized within this section represent those identified by the independent market analyst in order to assist ICANN with developing its funding projections through FY2028. The trends and commentary provided within this section are not intended to convey ICANN org's views or positions on any specific aspect of the DNS ecosystem.

Section 2, Funding Forecast Assumptions: Taking into consideration the key trends identified in Section 1 of this report, ICANN is developing three discrete forecast scenarios, 'low', 'base-case', and 'high', to accommodate a range of eventualities for the Five-Year Operating and Financial Plan for FY2024-FY2028.

ICANN org's primary sources of funding are generated from domain name registration activities through various fixed, transaction, and variable fees paid by registries and registrars, along with application fees and other sources of funding such as Regional Internet Registry (RIR) and country code top-level domain (ccTLD) contributions. This section summarizes the assumptions used by ICANN org to develop the funding projections for each of these funding categories.

Section 3, Funding Forecast Summary: This section features detailed forecast data at the 'low', 'base-case', and 'high' scenarios across each of ICANN's funding categories.

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³ A detailed description of ICANN's funding forecasting approach is available as part of the appendix.

1. Industry Context

This section includes data and key factors that have had significant bearing on the evolution of the DNS industry over the past five years. It is important to note that the complexity of the industry means that some of the factors presented may produce mixed effects. The analysis below summarizes a report produced by an independent market analyst to assist ICANN with developing its funding projections for FY2024-FY2028.⁴ The trends and commentary provided within this section are not intended to convey ICANN org's views or positions on any specific aspect of the DNS ecosystem.

A. The domain name industry's return to "normalcy" in post-COVID world When the COVID-19 pandemic first appeared in 2020 concerns arose that, like many other parts of the economy, domain names would be in less demand. The actual experience, however, proved to be the opposite as demand increased as online activity expanded and the usefulness of Internet presence became more apparent. But now current growth trends for legacy generic top-level domains (gTLDs), such as .COM, .NET and .ORG, are lower than 2020 and 2021⁵ and seem to track towards similar rates in the pre-pandemic world.

Figure 1 depicts domains under management (DUMs) in the broad categories of new gTLDs following the 2012 Round, legacy gTLDs, and ccTLDs from 2013 to mid-2022. This time span captures the marketplace baseline prior to the introduction of new gTLDs stemming from the 2012 Round of the New gTLD Program, the changes resulting after their introduction, and the impacts of the COVID-19 pandemic up through the present. From this there is a tendency of 2 to 4 percent annual growth rates pre-pandemic followed by much more varied growth rates in 2020 and 2021 with legacy gTLDs experiencing an increase (largely driven by .COM), new gTLDs seeing a reduction in numbers, and ccTLDs decreasing in 2020 but growing in 2021.

Contrasted with the 2020-2021 period, the first six months of 2022 have been more uniform in that all three TLD categories have increased the number of domains under management and returned to patterns reminiscent of pre-pandemic trends. New gTLDs are particularly noteworthy as the estimated growth rate (15 percent) is in line with very strong pre-pandemic levels of 15% and 19% in 2018 and 2019, respectively. Legacy gTLDs and ccTLDs have dropped from the higher rates experienced in 2021 and currently are on track to be somewhat lower than before the pandemic (between 1% and 2% vs. pre-pandemic growth in 2018 and 2019 above 2%).

⁴ ICANN evaluates a wide range of factors when developing its funding projections, including recent and expected marketplace developments that are likely to have an impact on supply-side and demand-side conditions. To this end, ICANN engaged with the DNS industry analyst, ZookNIC Inc., to support the development of its funding projections for the period between FY2024-FY2028. The key trends summarized herein, including those on the prospective impacts of current global macroeconomic conditions on the DNS industry, represent those identified by the consultant through interviews conducted with various industry representatives, privately gathered input, a review of historical domain name transaction data, and various publicly available industry information (e.g., investor statements, regulatory filings, news profiles, etc.).

⁵ Verisign Q2 2022 Earnings Conference Call. July 28, 2022. Further details are available via: https://investor.verisign.com/static-files/3d785cf7-2e58-4044-b245-bab16cb5eb2b

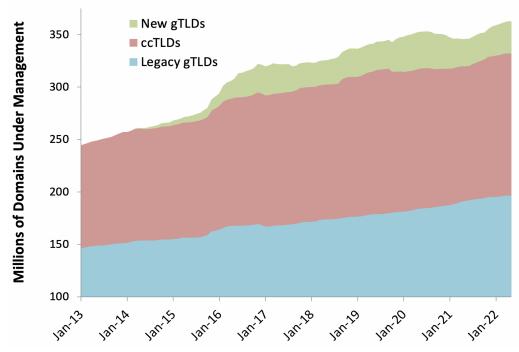


Figure 1: Number of Domains Under Management by Category, 2013-2022

Source: ZookNIC Domain Counts for legacy gTLDs, ccTLDs and new gTLDs

B. Economic slowdown & inflationary pressure potentially affecting demand for domain names

ICANN regularly monitors global gross domestic product (GDP) forecasts and the general trend throughout 2022 has been downward revisions among leading forecasts by the World Bank, International Monetary Fund (IMF) and the Economist Intelligence Unit (EIU). The most recent global GDP growth forecasts come from the IMF (October) and the EIU (September). The IMF is forecasting 3.2 percent growth in 2022, and 2.7 percent in 2023, while the EIU expects growth of around 3 percent in 2022 and 2.4 percent in 2023. Previous World Bank, IMF and EIU GDP growth forecasts for 2022 in January had been 4 percent or higher, a material adjustment to global growth expectations in just a few months.

The concern with the sharp drop in growth forecasts is that similar significant weakening of global growth has been found to be a leading indicator in previous global recessions. The IMF notes, "this is the weakest growth profile since 2001 except for the global financial crisis and the acute phase of the COVID-19 pandemic." This bearish global

⁶ World Bank. 2022. Is a Global Recession Imminent? Washington, DC. September. Further details available via: https://openknowledge.worldbank.org/bitstream/handle/10986/38019/Global-Recession.pdf

⁷ International Monetary Fund. 2022. World Economic Outlook: Countering the Cost-of-Living Crisis. Washington, DC. October. Further details are available via:

https://www.imf.org/en/Publications/WEO/Issues/2022/10/11/world-economic-outlook-october-2022

outlook among leading forecasters should be noted as ICANN considers its own forecasts related to the DNS space.

The general concern about current macroeconomic conditions such as higher-than-historical inflation, is that it could result in a global economic slowdown next year. Additional macroeconomic concerns include the potential effect on pricing, exchange rates, and the overall impact on firm capital and energy costs.

To be clear, it is far from certain what lies in store for the global economy but given the current experience of high inflation and interest rates, many voices in industry, government, and international organizations, including the IMF, are suggesting the world might be entering a recessionary period or one with diminished growth.⁸ Based on prior experience linking domain counts and global economic growth, a global economic slowdown could potentially depress demand for domains, as well as for various complementary add-on services.

C. Continued dynamism in domain use and markets

Efforts to make the use of domain names and purchase of domain name registrations easier for customers continue to help drive the number of such registrations. These market actors can be roughly divided between resellers (focusing on sales) and turnkey service providers (focusing on web and e-commerce implementation).

An example of experimentation is the idea of 'link in bio' services, or ways to easily connect people's social media space to a larger online identity. This is based around a number of drivers including social media platforms only allowing a single link in an account bio (e.g., Instagram, TikTok and Twitter), the premium placed on brevity in social media, and the emphasis placed on visual/audio content versus text, among others. "Link in bio" provides an easy way to connect to an expanded information about someone, including buying products or other forms of e-commerce. A number of free and paid services already exist, but more recently people have worked on how to leverage TLDs for 'link in bio' services.

Another example of market dynamism is the domain market segment focused on investing/speculating. There are a number of practices associated with this ranging from using domains for search engine optimization (SEO) purposes to seeking to profit in aftermarket sales.

D. Alternative name spaces

Alternative name spaces—including those based on DNS protocol, but using an alternative root; and those not based on the DNS protocol—have been expanding registrations within their respective systems. It should be noted, however, that these systems are not currently compatible with the Internet's DNS, which ICANN helps coordinate. This current incompatibility with the DNS, as consumers have come to know

⁸ Ibid

and expect, is not something that companies operating within the alternative name space segment appear to be conveying to customers clearly.

Intended utilization of alternative name space domains can range from blockchain applications to alternatives to the DNS, the main naming system of the Internet. Exploring the objectives or aspirations for alternative name spaces, their underlying technology and use, is not purview of the Funding Forecast Assumptions. But the number of registrations by alternative name space companies is noteworthy, as is the interest in ensuring consumers are aware of their incompatibility to the DNS. Alternative name space consumers may not be fully aware that the trust, interoperability and security attributes on alternative name spaces is distinct from the DNS.

ICANN has published a blog⁹ in November of 2021 and a Research Report¹⁰ in April of 2022 on the topic, mainly aimed at informing readers about the distinction between the DNS naming system of the Internet and the system of unique identifiers ICANN helps coordinate; and the completely separate efforts and distinctly different technologies of alternative name spaces and their respective domains. Of particular concern the blog notes, "the potential for confusion among unsuspecting [alternative name space] customers seems high."

As the April 2022 ICANN Research Report notes, "Alternative naming systems face a huge deployment challenge. A number of solutions exist to bridge the DNS to those parallel worlds, but they all come with their own drawbacks," which consumers of alternative name space domains may not be fully aware of.

E. Industry consolidation

The domain name industry continues to mature and that consolidation within registrars and registry operators is creating larger operations. Reasons for this consolidation appear to be attributable, at least in part, to efforts to drive down fixed costs, including expenses such as database management and customer service as well as contractual obligations ranging from ICANN requirements to various regulatory obligations such as General Data Protection Regulation (GDPR) compliance. Given these fixed costs, the marginal costs of registering an additional domain (as a registrar) or operating an additional TLD (as a registry operator) are relatively low and encourage companies to expand operations. A caveat to this in the current economic climate are rising interest rates, which make consolidation more expensive from a debt-financing perspective; and global economic uncertainty, which may alter firm-level market expansion strategies via consolidation.

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⁹ Internet Corporation for Assigned Names & Numbers. 2021. Buyer Beware: Not All Names Are Created Equal. Los Angeles, CA. November. Further details are available via: https://www.icann.org/en/blogs/details/buyer-beware-not-all-names-are-created-equal-24-11-2021-en

¹⁰ Internet Corporation for Assigned Names & Numbers. 2022. Challenges with Alternative Name Systems. Los Angeles, CA. April. Further details are available via: https://www.icann.org/en/system/files/files/octo-034-27apr22-en.pdf

Efforts by registrars to expand their sales channels and range of offerings have been a key market enabler during the past five years, before rising interest rates this year. Motivations for such efforts would include, but are not limited to, the formation of greater economies of scale, improved flexibility to changing market conditions, positioning organizations higher up within the domain name value chain, and leveraging the large number of domain name customers to position higher-value ancillary services.

F. Continued differences in regional adoption rates

Viewed through the lens of global regions, there remain significant differences in domain name registration levels worldwide. While some regions such as North America and Europe have relatively higher domain penetration rates, others have notably much lower adoption on a per capita basis.

In terms of future industry growth, the steady historical average growth rates in mature markets is expected to be counterbalanced by those regions where demand for domain names is much less developed historically. There remains an expectation of higher growth rates in underpenetrated and emerging regions over the upcoming five-year period, as individuals and businesses that currently do not have a digital presence seek to establish one.

Despite this higher growth expectation in underrepresented regions, seen consistently across all regions from 2019-2022 in Figure 2, there is an observable short-term trend, potentially having been impacted by a global event, i.e., COVID-19. This short-term trend has shown some degree of change different from that established in the prior five years. ICANN will continue to monitor trends and evaluate whether tracking since 2020 presents a new expectation moving forward or whether underrepresented regions will once again experience higher growth rates.

Figure 2: Domain Registrations per 1,000 People by ICANN Region

Region	2014-EOY	2019-EOY	2022-Q2	Average Annual Growth Rate, 2014-19	Average Annual Growth Rate, 2019-22
North America	251.6	285.1	307.9	3.2%	3.2%
Europe	134.4	153.4	161.1	3.0%	2.0%
Latin America/Caribbean islands	18.3	20.9	24.3	3.5%	6.5%
Asia/Australia/Pacific	17.9	20.8	16.5	3.9%	-8.2%
Africa	3.0	3.9	4.2	8.0%	3.3%

Note: the negative growth shown for the Asia/Australia/Pacific region from 2019 to 2022 can be traced to the ccTLDs .CN and .TK, which both shrank during this time. If these two ccTLDs were removed, the average annual growth rate for the region would be approximately 2.3 percent.

G. Universal Acceptance

Universal Acceptance (UA) is the concept that all domain names and email addresses – regardless of language, script, or character length (e.g., .pφ, .PHOTOGRAPHY) – are accepted equally by all Internet-enabled applications, devices, and systems.

Achieving UA remains a key challenge for the DNS industry. Difficulties remain in meeting this goal for Internationalized Domain Names (IDN), domain names formed using newer gTLDs, as well as longer TLDs, as some applications and systems erroneously assume that such domain names are invalid.

Unfortunately, many of the problems associated with UA are widely distributed, including standards, operating systems, programming languages, and applications/websites. This is further compounded by how a wide array of actors (including independent developers, Internet Service Providers, public and private organizations, educational institutions, among others) configure and deploy their systems.

UA hinders the opportunity to expand the adoption of such domains, including in new markets (e.g., those which use native languages and scripts). Incremental progress is ongoing and is expected to continue towards resolving many of the challenges hindering UA. Such efforts may gradually reveal the opportunity that exists within existing and new markets, thereby triggering further industry growth in the years ahead.

H. Globally dispersed regulation aimed at targeting digital security risksAs with the global character of the Internet, companies operating within the DNS often operate globally and have business lines that extend beyond the DNS. A challenge that comes from having such a global reach is the differing rules and regulations that may cover particular segments of a company's operations.

Regulatory hurdles are not a new phenomenon for global companies. But given the rise of major Internet platforms, in areas such as search, video streaming or social media, there are various legislative and regulatory proposals at national or regional levels. These proposals can range from additional privacy protection requirements to content moderation policies. From the DNS perspective, while these policies and proposals mostly extend to tech actors from outside of the domain industry, enforcement could fall on companies within the DNS ecosystem. This enforcement, by extension, could lead to added compliance costs: particularly, how additional and conflicting jurisdictional requirements for maintaining data privacy and consumer protection, and how increased compliance costs might impact technology companies that may have DNS business lines.

Higher compliance costs to address issues envisioned in proposed rules and regulation may not be directly relevant to the practices of the domain name industry in all instances. But if companies in the domain name industry face higher compliance costs due to new proposed rules and requirements, these costs could be passed on to consumers and ultimately impact domain name registration demand. There is no one

particular proposal at issue, but merely, the divergence that may arise as different jurisdictions consider different rules and enforcement.

2. Funding Forecast Assumptions

Any forecasting exercise must rely on assumptions on the future development of a marketplace. Because such assumptions are by definition hypothetical and the number of potential outcomes virtually infinite, a well-accepted way to consider marketplace uncertainty in forecasting is to select a number of projection scenarios depicting a range of plausible but divergent outcomes. 11 Creating several forecast scenarios, each with varying assumptions and thresholds representing viewpoints of the future, allows ICANN org to quantify the impacts of such assumptions on ICANN's funding.

ICANN is developing three discrete forecast scenarios to accommodate a range of outcomes for the Five-Year Operating and Financial Plan for FY2024-FY2028. ICANN's highest-confidence estimate or 'base-case' funding scenario has been historically utilized as the basis for the organization's annual budget. As a principle, ICANN takes a conservative approach towards developing its funding forecasts, which is considered when developing its 'base-case' funding projections. In addition, ICANN 'low' and 'high' funding scenarios consider alternate values for assumptions that have a financial impact on the organization's funding, thereby providing lower and upper bound values in its projections. While the organization does not rely on these latter values to plan its operations, such 'low' and 'high' funding scenarios are helpful to develop contingency plans considering the possibility that such scenarios become reality.

All three scenarios assume a retention of the current fee values remitted by ICANN's contracted parties and registrar accreditation applicants (summarized in Appendix C), and do not currently factor any further gTLDs arising from the next round of the New gTLD Program. While there is ongoing work and an intent to launch the next round of the New gTLD Program, the timing of that launch remains uncertain and the potential impact(s) on funding are indeterminate. Given this, ICANN org has deemed it prudent not to assume any prospective impacts from a future new gTLD round across its described scenarios.

In this section, ICANN org provides a qualitative (see Figure 3) and quantitative (see Figure 4) assessment of the potential impacts of the various industry trends presented in Section 1 on ICANN's funding categories between FY2024-FY2028 across its 'low', 'base-case', and 'high' funding forecast scenarios.

¹¹ This approach is consistent with the one previously taken by the World Bank to forecast the impacts of the COVID-19 global recession on global economic growth. Similar scenario analysis is also presented by the same institution to assess the prospective impacts of current downside risks on the global economy. Further details are available via the June 2021 and June 2022 editions of the World Bank's 'Global Economic Prospects' publication: https://www.worldbank.org/en/publication/global-economic-prospects

Figure 3: Market Trends and Qualitative Assessment of Expected Impacts on ICANN Funding Scenarios

Industry Trend	•	ative Forecast Statements as per Section 1)	Potential Impact on ICANN Funding Scenarios
marketplace amid uncertain macroeconomic conditions	A. Return to "normalcy" in a post COVID-19 world B. Economic slowdown and inflationary pressures potentially affecting demand for domain names	remain a central tool for Internet presence and online identity, but questions linger as to whether the recent increase in demand can be sustained in the post-COVID-19 period in light of steady maturation of the DNS industry. Perspectives diverge as to whether the recent COVID-19 pandemic temporarily accelerated domain name registrations or if the addressable market for domain names has ultimately expanded. There are heightened concerns about a slowing global economy along with an increase in inflation rates and an increasingly strong U.S. dollar. All have the potential to negatively impact domain	High impact: The close connection between economic growth and demand for domain names means that slower global growth will likely have a negative impact on the demand for domains. At the 'base-case' and 'high' funding scenarios, this forecast assumes that domain name transaction volumes will continue to grow over the five-year horizon, albeit at varying levels. The forecast also assumes that irrespective of any short-term weakness that mirrors global macroeconomic conditions, domain name transactions will not experience any long-lasting dislocations. To account for the potential of an accelerated pace of DNS industry maturation, as well as the negative impacts of a stagflationary environment and a strong U.S. dollar, the 'low' scenario factors progressive decline in transaction volumes over the entire five-year forecast period. The 'low' funding scenario also features fewer total accredited registrars and gTLDs, while the 'base-case' and 'high' funding scenarios depict a flat-to-moderate increase in the base of ICANN registrars and relatively lower rates of attrition among gTLDs.

Growth and diversity in digital platforms	C. Continued dynamism in domain name use cases	value and role in building digital presence. The variety of use cases for domains will continue to keep demand rather steady.	High impact: Domain names will remain a key enabler for Internet presence and online identity over the forecast period. In the 'base-case' and 'high' funding scenarios, this forecast assumes continued demand for domain names, albeit at varying levels. The forecast also assumes that irrespective of any short-term weakness
	·	Alternative namespaces for digital identity and content hosting are viewed as being potentially confusing to consumers. However to date, the prospective impacts of this, if any, on the gTLD space remain uncertain.	that mirrors global macroeconomic conditions, domain name transactions will not experience any long-lasting dislocations. The 'low' scenario factors progressive decline in transaction volumes owing in part to a potential increase in the rates of migration to alternative platforms that negate the need for domain names. The roughly two percent subset of ICANN's annual funding currently derived from the voluntary contributions of various ccTLDs and Regional Internet Registries (RIRs) is expected to remain constant relative to these organizations' prior contributions.

Evolving DNS service provider ecosystem	among ICANN's contracted parties	industry will continue, further blurring the lines between gTLD	Moderate impact: Domain name market actors will continue to diversify offerings organically (via geographic expansion, new services, partnerships, etc.), and improve their economies of scale via merger and acquisition activity. Over the upcoming five-year period, the 'low' funding scenario forecasts far fewer total ICANN-accredited registrars and substantial attrition in the total number of gTLDs, assuming further industry consolidation. The 'base-case' funding scenario depicts flat-to-moderate growth in the base of ICANN-accredited registrars, along with relatively lower rates of attrition among gTLDs. To account for the potential of resurgent industry growth triggering a proliferation of market participants, the 'high' funding scenario depicts strong growth in the base of ICANN-accredited registrars, along with minimal attrition among gTLDs.
Uneven global dispersion of domain names	regional domain adoption rates	domain name adoption rates across regions of the globe. While specific experiences vary	This forecast also assumes stepwise progress will continue towards resolving many of the challenges hindering Universal Acceptance (UA).
			At the 'base-case' and 'high' funding scenarios, this forecast assumes that domain name transaction

	new gTLDs	name industry, albeit one in which significant efforts and improvements are regularly taking place. This challenge	volumes will see positive growth rates, albeit at varying levels. The forecast also assumes that irrespective of any short-term weakness that mirrors global macroeconomic conditions, domain transactions will not witness any long-lasting dislocations. To account for the probability of muted progress in UA of domain names, and disproportionate impacts of the current macroeconomic conditions on the uptake of domain names from within developing countries, the 'low' scenario factors a progressive decline in domain transaction volumes.
Heightened regulatory climate	dispersed regulation aimed at targeting digital security risks	A dispersion of oversight resulting in a patchwork of regulation that varies across countries and regions has the potential to negatively impact the DNS industry, and is thus viewed as a risk by service providers. However, the impacts of such regulatory differences on the demand for domain names is yet to be established.	Low Impact: Governmental interest in general issues related to the DNS industry will continue. To date, regulatory measures have not fundamentally altered the service provider ecosystem nor the underlying demand for domain names. This forecast assumes that confidence and trust in the industry and its overall impact on demand for domain names will remain largely constant and have a largely neutral impact on the size of the contracted party base as well as the demand for domain names over the forecast period.

In general terms, each of the three funding scenarios further detailed in Figure 4 below can be described as follows:

- Base-case scenario: Representing the funding outcome deemed most likely to occur, this scenario is a conservative appraisal of the growth of the ICANN-accredited registrar base and domain name transaction volumes, along with retention of the current fee values. Irrespective of any short-term weakness that mirrors global macroeconomic conditions, the scenario assumes that domain name transactions do not experience any long-lasting dislocations. On the whole, this scenario leverages historical growth values and is aligned closely with global GDP growth trends, thereby implying an overall maturing industry.
- Low funding scenario: Some uncertainty around the future outlook of the industry remains in light of a maturing marketplace, service provider consolidation, and the potential spillover effects arising from challenging global macroeconomic conditions. Accordingly, the 'low' scenario illustrates a plausible depressed forecast outcome should these impact the DNS industry more severely than currently assumed per the base-case scenario. Beyond the retention of the current fee values, this scenario factors in a decrease in all drivers to ICANN's funding from the total number of contracted parties to the volume of domain name transactions. The decrease for each driver, individually, is plausible though considered unlikely. The decrease in all of the combined drivers within this scenario reflects a contraction of the entire DNS marketplace.
- High funding scenario: This scenario combines increases across all the drivers to ICANN's funding, except for a marginal decline in the number of total delegated gTLDs and the retention of the current fee values. The growth rates in this scenario therefore depict an optimistic view of resurgent growth in the overall DNS marketplace, total size of the accredited registrar base, and domain name transactions. This scenario also reflects expectations of a positive effect on domain name transaction volume due to increased online activity and the digital transformation of many practices, continued expansion of the accredited registrar base and range of domain name offerings, increased uptake of domain names from forthcoming general availability launches, campaigns, and from within underpenetrated economies, and continued progress towards the resolution of Universal Acceptance and DNS security-related issues.

Figure 4: Market Trends and Assessment of Expected Impacts on ICANN FY2023-FY2027 Funding Scenarios

Category	Funding Type	'Low' Scenario	'Base-case' Scenario	'High' Scenario
Legacy gTLDs	Transaction- based Fees	annual growth rate (CAGR) from FY2024-FY2028, reflecting an assumption of marketplace contraction. Projected decrease in transaction fees equivalent to 5 percentage points ¹² below forecast global gross domestic product (GDP) growth rate trend for	FY2024-FY2028, which is equal to the average transaction-based fee growth rates for legacy gTLDs since the launch of the New gTLD Program ¹² . As historical growth momentum in this category has tended to mirror global GDP growth momentum, the overall trendline remains in-line with the	10
New gTLDs	Fixed Fees	of FY2028, a decline of 158 (or -14 percent) from the	FY2028, a decline of 91 (or -8 percent) from the start of	1100 TLDs delegated by end of FY2028, a decline of 46 (or -4 percent) from the start of FY2024 ¹⁴ .

¹² In formulating quantitative forecast scenarios, ICANN org is mindful not to create contradictory expectations and unduly influence the viewpoints of shareholders of publicly traded entities operating within the DNS industry. Accordingly, whenever available and relevant, the assumptions presented are derived from historical trends or otherwise based on conservative estimations. For instance, the growth rate described in the 'base-case' scenario represents the average Legacy gTLD transaction volume growth rate since the launch of the 2012 Round of the New gTLD Program. For its lower and upper bound scenarios, ICANN org has conservatively selected a threshold of 5 percentage points below and above projected global GDP rates for FY2024-FY2028, respectively.

¹³ For an assessment of global GDP growth rates over the forecast period, ICANN org consulted The Economist Intelligence Unit's (EIU) summary forecast (September 2022 update). Data tables are provided as an appendix to this document. ICANN org assumes that global GDP growth rates during the second half of its FY 2028, which covers the period from 1 January to 30 June 2028, do not diverge significantly from trends and values denoted by the EIU for calendar year 2028.

¹⁴ These scenarios do not assume any further TLD delegations arising from the resumption of the New gTLD Program. While there is ongoing work and an intent to launch a subsequent round, the timing of its release remains unclear and potential impact(s) on funding indeterminate.

occurrences such as relatively lower rene rates from a subset	FY2024-FY2028 reflecting assumed annual growth rates low-to-mid single digits. The overall growth trendline remaining for ewal of new discount FY2024-FY2028 ¹⁵ .	annual growth in high
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¹⁵ Given their relatively lower domain transaction volumes and more fragmented provider composition, new gTLDs have thus far demonstrated higher levels of transaction volume volatility in comparison to legacy gTLDs. Accordingly, to account for this likelihood of fluctuations, a broader range of variance is being projected for new gTLD transaction volumes over the forecast period in comparison transaction volumes for legacy gTLDs.

Registrar Accreditation	Application Fees	Reflects 0 new registrar accreditation applications annually from FY2024-FY2028.	accreditation applications annually from FY2024-FY2028.	Reflects 60 new registrar accreditation applications annually from FY2024-FY2028.
	Accreditation Fees	consolidation, declining by 368 accreditations which equates to a decrease of -15 percent over the forecast period. Overall base ranges from 2447 at the start of FY2024 to 2079	and attrition largely cancel each other, resulting in an increase in the registrar base by 1 percent or 23 accreditations over the forecast period. Overall base ranges from 2447 at the start of	Registrar base increases by 12 percent or 300 accreditations over the forecast period. Overall base ranges from 2447 at the start of FY2024 to 2747 at the end of FY2028.
	Per-registrar Variable Fees	\$3.4 million annually, consistent with prior years.	1.	\$3.4 million annually, consistent with prior years.

3. Funding Forecast Summary

This section provides a summary of forecast outcomes at the 'low', 'base-case', and 'high' scenarios across each of ICANN's funding categories.

As outlined in Figure 5 below, from actual funding of \$149.5 million in FY2022 and an updated 'base-case' estimate of \$147.7 million in FY2023¹⁶, ICANN's total funding in FY2024 is projected to range between \$134.6 million (at the 'low' funding scenario) and \$156.2 million (at the 'high' funding scenario), with a 'base-case' funding forecast of \$145.3 million.

By the end of FY2028, total funding is projected to range from \$116.9 million (at the 'low' funding scenario) and \$189.5 million (at the 'high' funding scenario), with a 'base-case' funding projection of \$152.7 million.

Considering all three scenarios over the forecast period, FY2024-FY2028 CAGR for ICANN's funding is projected to range from -3.5 percent (at the 'low' funding scenario) and 4.9 percent (at the 'high' funding scenario), with a 'base-case' CAGR of 1.3 percent.

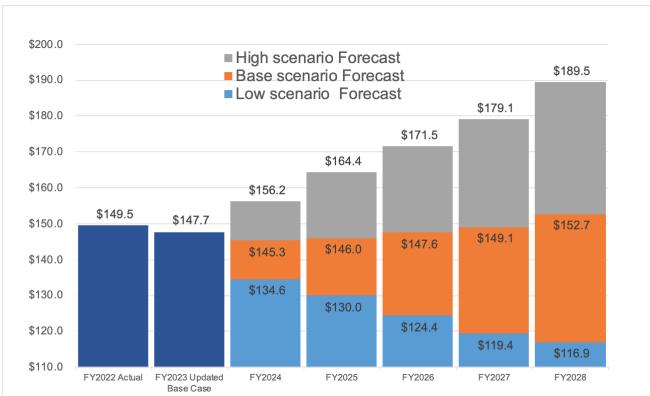


Figure 5: ICANN Forecast Funding Sensitivity Analysis

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¹⁶ The FY2023 total funding value of \$147.7 million presented herein represents an updated 'base-case' funding estimate utilizing FY2023 Q1 actual values, which varies slightly from the adopted FY2023 budget of \$152.0 million. A detailed comparison between the updated FY2023 'base-case' estimate and the adopted FY2023 budget is outlined in Appendix B.

Figure 6: ICANN FY2023-FY2028 Forecast Funding at the 'Base-case' Scenario

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(Values in USD millions unless otherwise denoted)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Transactions						
Registry Transaction Fees - Legacy	\$54.5	\$53.7	\$54.4	\$56.5	\$58.7	\$60.8
Registry Transaction Fees - New gTLD	\$5.2	\$4.9	\$5.0	\$5.3	\$5.5	\$5.7
Registrar Transaction Fees - Legacy	\$33.8	\$33.4	\$34.0	\$35.3	\$36.7	\$38.0
Registrar Transaction Fees - New gTLD	\$4.6	\$4.3	\$4.5	\$4.7	\$4.9	\$5.1
Subtotal	\$98.1	\$96.4	\$97.8	\$101.8	\$105.7	\$109.7
Volume: Legacy Transactions (in millions)	187.9	185.8	188.7	196.1	203.6	211.1
Volume: New gTLD Transactions (in millions)	25.7	24.2	24.8	26.1	27.2	28.3
New gTLD Average Billable Rate (%)	81%	82%	81%	81%	81%	81%
Registry Fixed Fees	\$28.7	\$28.4	\$27.6	\$27.1	\$26.7	\$26.4
Registrars Accreditation				•		
Application Fees	\$0.4	\$0.1	\$0.1	\$0.1	\$0.1	\$0.1
Accreditation Fees - Annual	\$9.9	\$9.8	\$9.8	\$9.9	\$9.9	\$9.9
Per Registrar Variable Fees	\$3.4	\$3.4	\$3.4	\$3.4	\$3.4	\$3.4
Subtotal	\$13.7	\$13.3	\$13.4	\$13.4	\$13.4	\$13.4
Count of Total Registrars at the end of Year	2,447	2,452	2,458	2,463	2,467	2,470
Other Funding	Other Funding					
Meeting Sponsorships, Contributions, and Other	\$7.3	\$7.3	\$7.3	\$5.3	\$3.3	\$3.3
ICANN Total Funding	\$147.7	\$145.3	\$146.0	\$147.6	\$149.1	\$152.7

Figure 7: ICANN FY2023-FY2028 Forecast Funding at the 'Low' Scenario

(Values in USD millions unless otherwise denoted)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Transactions						
Registry Transaction Fees - Legacy	\$54.5	\$48.4	\$46.8	\$45.7	\$44.7	\$43.9
Registry Transaction Fees - New gTLD	\$5.2	\$4.4	\$4.0	\$3.7	\$3.4	\$3.1
Registrar Transaction Fees - Legacy	\$33.8	\$30.1	\$29.2	\$28.4	\$27.8	\$27.3
Registrar Transaction Fees - New gTLD	\$4.6	\$4.0	\$3.6	\$3.3	\$3.1	\$2.8
Subtotal	\$98.1	\$86.9	\$83.7	\$81.1	\$78.9	\$77.2
Volume: Legacy Transactions (in millions)	187.9	167.3	162.0	158.0	154.6	151.9
Volume: New gTLD Transactions (in millions)	25.7	22.1	20.2	18.5	17.0	15.7
New gTLD Average Billable Rate (%)	81%	80%	80%	80%	80%	80%
Registry Fixed Fees	\$28.7	\$27.6	\$26.7	\$26.0	\$25.3	\$24.8
Registrars Accreditation						
Application Fees	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Accreditation Fees - Annual	\$9.9	\$9.3	\$8.9	\$8.6	\$8.4	\$8.3
Per Registrar Variable Fees	\$3.4	\$3.4	\$3.4	\$3.4	\$3.4	\$3.4
Subtotal	\$13.7	\$12.8	\$12.3	\$12.0	\$11.8	\$11.7
Count of Total Registrars at the end of Year	2,447	2,299	2,189	2,123	2,090	2,079
Other Funding	Other Funding					
Meeting Sponsorships, Contributions, and Other	\$7.3	\$7.3	\$7.3	\$5.3	\$3.3	\$3.3
ICANN Total Funding	\$147.7	\$134.6	\$130.0	\$124.4	\$119.4	\$116.9

Figure 8: ICANN FY2023-FY2028 Forecast Funding at the 'High' Scenario

(Values in USD millions unless otherwise denoted)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	
Transactions							
Registry Transaction Fees - Legacy	\$54.5	\$59.3	\$63.7	\$68.6	\$73.7	\$79.2	
Registry Transaction Fees - New gTLD	\$5.2	\$5.7	\$6.3	\$6.9	\$7.6	\$8.4	
Registrar Transaction Fees - Legacy	\$33.8	\$36.8	\$39.6	\$42.7	\$45.9	\$49.3	
Registrar Transaction Fees - New gTLD	\$4.6	\$5.1	\$5.5	\$6.0	\$6.5	\$7.1	
Subtotal	\$98.1	\$106.9	\$115.1	\$124.2	\$133.7	\$144.0	
Volume: Legacy Transactions (in millions)	187.9	204.6	220.2	237.1	254.9	274.1	
Volume: New gTLD Transactions (in millions)	25.7	28.2	30.5	33.3	36.4	39.6	
New gTLD Average Billable Rate (%)	81%	81%	82%	83%	84%	85%	
Registry Fixed Fees	\$28.7	\$28.4	\$28.1	\$27.9	\$27.7	\$27.5	
Registrars Accreditation							
Application Fees	\$0.4	\$0.2	\$0.2	\$0.2	\$0.2	\$0.2	
Accreditation Fees - Annual	\$9.9	\$10.0	\$10.3	\$10.5	\$10.7	\$11.0	
Per Registrar Variable Fees	\$3.4	\$3.4	\$3.4	\$3.4	\$3.4	\$3.4	
Subtotal	\$13.7	\$13.7	\$13.9	\$14.1	\$14.4	\$14.6	
Count of Total Registrars at the end of Year	2,447	2,507	2,567	2,627	2,687	2,747	
Other Funding	Other Funding						
Meeting Sponsorships, Contributions, and Other	\$7.3	\$7.3	\$7.3	\$5.3	\$3.3	\$3.3	
ICANN Total Funding	\$147.7	\$156.2	\$164.4	\$171.5	\$179.1	\$189.5	

Appendix A: Economist Intelligence Unit, Global Economic Outlook, 2018-2027

GDP Average Growth Rates (Percent Change)							
	Actual Estimate Forecast						
	2018-2021	2022	2023	2024-2027			
Real GDP growth (market exchange rates)							
World	1.9	2.6	1.7	2.6			

Source: The Economist Intelligence Unit, World Summary, September 2022 update. Retrieved from https://country.eiu.com/article.aspx?articleid=1772424160

Appendix B: Adopted FY2023 Budget and Updated FY2023 Forecast Estimate based on FY2023 Q1 Actuals

(Values in USD millions unless otherwise denoted)	Adopted FY2023 Budget (as of FY2022 Q1 Actuals)	Updated 'Base-case' FY2023 Forecast Estimate (as of FY2023 Q1 actuals)			
Transactions					
Registry Transaction Fees – Legacy	\$56.8	\$54.5			
Registry Transaction Fees – New gTLD	\$5.3	\$5.2			
Registrar Transaction Fees – Legacy	\$36.2	\$33.8			
Registrar Transaction Fees – New gTLD	\$4.7	\$4.6			
Subtotal	\$103.0	\$98.1			
Volume: Legacy Transactions (in millions)	201.2	187.9			
Volume: New gTLD Transactions (in millions)	25.8	25.7			
New gTLD Average Billable Rate (%)	82%	81%			
Registry Fixed Fees	\$28.7	\$28.7			
Registrars Accreditation	Registrars Accreditation				
Application Fees	\$0.1	\$0.4			
Accreditation Fees – Annual	\$9.7	\$9.9			
Per Registrar Variable Fees	\$3.4	\$3.4			
Subtotal	\$13.3	\$13.7			
Count of Total Registrars at end of Year	2,447	2,447			
Other Funding					
Meeting Sponsorships, Contributions, and Other	\$7.1	\$7.3			
ICANN Total Funding	\$152.0	\$147.7			

Appendix C: ICANN's Approach to Funding Forecasting

A. What are ICANN org's aims in forecasting its future funding levels?

Funding forecasting efforts serve the purpose of ensuring that ICANN is able to sustainably carry out its mission in the public interest amidst shifts in the macroeconomic environment and continued DNS industry evolution. The intent is to allow ICANN org to plan for a level of activity and expenses that minimize the risk that funding would be lower than expenses in the future.

Efforts to generate and regularly iterate funding projections as part of its budget development process reflect ICANN org's commitment to utilize market data in estimating future funding levels in adherence to principles of strict financial responsibility and conservatism. While it may be challenging to predict long-term economic impacts arising from near-term developments, as a steward of public funds ICANN org is committed to ensuring ICANN's activities are planned with fiscal responsibility. Reliable and predictable funding projections based on a sound understanding of the evolution of the domain name marketplace represents a key component of that commitment.

Given the risk of new or changing market conditions, actual funding could differ materially from the projections in this document in any given year. ICANN org therefore regularly updates and reviews its funding projections to accommodate operational changes or unforeseen events.

B. What funding sources are covered by ICANN's forecast?

ICANN's primary funding sources are generated from domain name registration activities and DNS services. Funding sources covered as part of forecasting efforts are described in the table below:

Funding Source	Fee Category	Description
Registrar- level Fees		A total of 82 applicants sought to receive ICANN registrar accreditation during FY2022. A one-time application fee of \$3,500 is paid at the time of application by applicants seeking to become an ICANN-accredited registrar.
	fees	A total of 2,547 registrars were accredited by ICANN at the end of FY2022. Annual accreditation fees are fees that all registrars are required to pay annually to maintain accreditation. The fee is \$4,000 per year. Registrars have the option of paying the annual accreditation fee in quarterly installments of \$1,000.
	variable fees	A fixed amount of \$950,000 quarterly or \$3.8 million annually is equally divided among all ICANN-accredited registrars that have at least been accredited for one full quarter or have made at least one transaction, taking into consideration the

		forgiveness factor ¹⁷ . A discount of 10 percent is granted to all registrars operating under the 2013 Registrar Accreditation Agreement (RAA).
		Transaction-based fees are assessed on each annual increment of an add, renew, or a transfer transaction that has survived a related add or auto-renew grace period. This fee is billed at \$0.18 per transaction for registrars operating under the 2013 RAA (resulting from a \$0.20 base fee, discounted by 10 percent to \$0.18).
Registry- level Fees		There are 1,154 TLDs delegated at the end of FY2022. Registry-level fees for each of these TLDs are described in the respective registry agreements. Based on those agreements, registries pay to ICANN a fixed fee, transaction-based fees, or both. These fees are due quarterly and are billed 30 days following the end of each calendar quarter.
		To learn more about registry-level fees, please refer to Article 6 of the gTLD Base Registry Agreement. Registry operators not contracted on the gTLD Base Registry Agreement may have slightly different language and references.
Other Funding		ICANN receives sponsorships from parties in return for providing exhibition space and advertisements at ICANN Public Meetings.
	top-level domain (ccTLD) contributions	ccTLD operators contribute on a voluntary basis to ICANN. The Country Code Names Supporting Organization (ccNSO) maintains guidelines offered to ccTLD operators that decide to contribute financially to ICANN. These guidelines suggest amounts of voluntary contributions based on the number of domains under management ¹⁹ .
		ICANN coordinates with the Regional Internet Registries (RIRs), which are responsible for the assignment and administration of Internet addresses. RIRs contribute annually to ICANN.
	and resiliency (SSR)	ICANN receives contributions in support for activities that preserve and enhance the security, stability and resiliency of the Domain Name System.

¹⁷ To be eligible for forgiveness, the registrar must have less than 350,000 gTLD names under its management and made no more than 200 attempted adds per successful net add in any TLD. Forgiveness will be granted each quarter to all registrars that qualify.

¹⁸ The gTLD Base registry Agreement is available via: https://www.icann.org/en/registry-agreements

¹⁹ The guidelines for voluntary contributions of ccTLDs to ICANN is available via: https://ccnso.icann.org/sites/default/files/filefield_42805/guidelines-cctld-contributions-27nov13-en.pdf

C. What funding sources are excluded from ICANN's forecast?

Excluded from the forecasting effort are funds relating to ICANN's New gTLD Program and auction proceeds, as these are non-recurring sources of funding associated with the launch of the 2012 Round of the New gTLD Program.

New gTLD Program funds correspond to the unspent portion of the New gTLD Program application fees collected from applicants during the application window in 2012. These application fees were paid by applicants seeking to become a gTLD registry operator for a particular gTLD. These funds are used to evaluate the applications and to cover "hard-to-predict" costs, including risks.

Auction proceeds are generated from auctions conducted for the 2012 Round of the New gTLD Program by an ICANN-authorized service provider as the method of last resort to resolve string contention in the New gTLD Program. Auction proceeds will be reserved and earmarked until the ICANN Board determines a plan for the appropriate use of the funds after consultation with the community.

D. How does ICANN develop its funding forecasts?

ICANN's funding forecasts are developed through the following activities:

 Marketplace scan: ICANN org updates its funding model by considering the wider context of key industry drivers and inhibitors. A marketplace scan exercise serves as the foundational activity through which trends expected to impact the domain name industry over the forecast horizon are uncovered.

As part of this activity, ICANN org engages with an independent market analyst to obtain various DNS industry experts' insights into the future. A sample of industry experts are selected for participation considering a requirement for representation by geographic region, nature of business, and size of entity, and are subsequently invited to participate in an in-depth qualitative interview.

ICANN org supplements this independent third-party market review with ongoing information gathering through its contracted parties pertaining to key industry developments. Insights gathered through this effort are further supplemented by a review of historical ccTLD and gTLD registration data as well as various publicly available information, such as investor statements, regulatory filings, and news profiles of DNS industry participants.

2. Formulation of assumptions: ICANN org conducts a periodic review of its existing forecast assumptions and updates its projections, as required, based on the latest domain name industry developments, domain name transaction volume data, and the size of its contracted party base.

ICANN org conducts time-series analysis to forecast future domain transaction volumes (defined as the sum of domain name additions, renewals, and transfers). A wide range of datasets are considered when conducting such projections, which

include but are not limited to, the total volume of domain name transactions, additions, renewals, transfers, and domain names under management. ICANN org evaluates such datasets for legacy gTLDs and new gTLDs, separately.

New gTLDs are further segmented for analysis based on their total domain name portfolio size. Mid-to-long-term forecasts for domain name transaction growth rates also take into account wider macro-economic projections, specifically global GDP growth rates, as published by reputable third-party sources.

ICANN org applies a judgmental forecasting approach when evaluating and projecting changes to the size of its contracted party base. Given their visibility on the status of applicants and existing contracted parties, individuals within the organization's Global Domains and Strategy (GDS) division provide information on what changes the team members think are most likely to occur over the forecast period in terms of new registrar accreditations and terminations, as well as incremental TLD delegations and terminations. Values utilized in ICANN's forecasts may also reflect historical averages for specific funding categories.

3. Forecast generation: Any forecasting exercise requires the development of assumptions concerning the future evolution of a marketplace. Creating several forecast scenarios, each with varying assumptions that represent diverging viewpoints of the future, offers a measure of sensitivity on the impacts of such assumptions on the resulting forecast values. They also provide a quantitative measure of the prospective impacts of various marketplace events that may be deemed to be plausible but improbable.

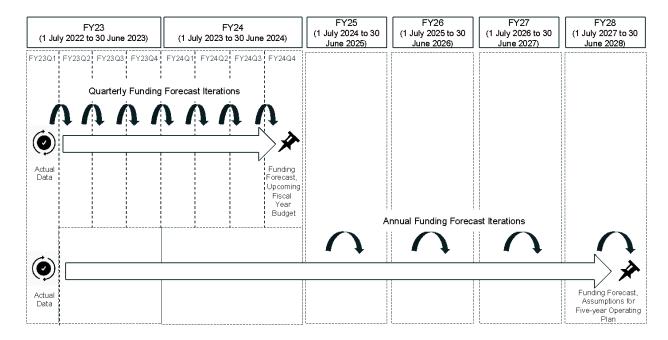
As a principle, ICANN org takes a conservative approach towards developing its funding forecasts, which is considered when developing its 'base-case' funding projections. In addition, ICANN org also develops 'high' and 'low' scenario estimates to consider alternate forecast values, thereby providing upper and lower bound values in its projections. While the organization does not rely on these extreme-end values to plan its operations, such 'high' and 'low' scenarios are helpful to develop contingency plans should such scenarios become reality.

E. How often does ICANN org iterate its funding forecasts?

ICANN org produces its funding forecasts as an input to two separate internal budget planning activities – namely the generation of the organization's annual budget for its upcoming fiscal year and the development of funding assumptions for its rolling five-year operating and financial plan. The development of the funding projections that inform ICANN's annual budget for its upcoming fiscal year covers a forecast horizon of approximately seven quarters (or roughly 21 months). Such forecasts are reviewed and updated on a quarterly basis until the conclusion of the said fiscal year.

In parallel, ICANN org also develops longer-term projections that extends ICANN's annual fiscal year budget forecast by a further four years, resulting in a forecast horizon of roughly 69 months. This forecast, utilized in the organization's rolling five-year

operating and financial plan, is updated on an annual basis. The following illustration depicts the expected funding forecast refresh cycles for the two aforementioned budget planning activities over the course of ICANN's FY2023 fiscal period.



F. Historically, how have ICANN's adopted budgets tracked in comparison to its actual funding levels?

The accuracy of ICANN's adopted budgets versus actual funding levels over the past five fiscal years are presented in the table below:

Fiscal Year (FY)	Adopted Budget (in USD millions)	Actual Funding (in USD millions)	Variance, Actual Funding vs. Adopted Budget (%)
FY2017	\$ 132.4	\$ 135.9	+2.6%
FY2018	\$ 142.8	\$ 134.7	-5.7%
FY2019	\$ 137.6	\$ 136.4	-0.9%
FY2020	\$ 140.1	\$ 140.7	+0.4%
FY2021	\$ 129.3	\$ 141.5	+9.4%
FY2022	\$ 144.4	\$ 149.5	+3.5%