

# IESG Response to Appeal from Tim McSweeney regarding draft-mcsweeney-drop-scheme

July 27, 2020

## Appeal Statement

On July 2nd, 2020, the IESG via the IETF Chair received an appeal from Tim McSweeney regarding rejection of his request to register a URI scheme, documented in draft-mcsweeney-drop-scheme. The appeal contains 18 points and is available in full at <https://www6.ietf.org/iesg/appeal/mcsweeney-2020-07-08.txt>.

On July 16th, 2020, follow-up emails clarified certain appeal points and identified the specific remedies being sought, which are:

- Publish draft-mcsweeney-drop-scheme as an RFC.
- Make the IANA assignment for the drop scheme into the URI.ARPA zone along with a permanent status in the registry.

Copies of the conversations between the appellant, the Internet Assigned Numbers Authority (IANA), and the Designated Expert for the Universal Resource Identifier (URI) Scheme registry were released to the IESG to process this appeal. The specific IANA ticket numbers were:

- 1167794, filed April 14, 2020: Request to publish a NAPTR record for “drop” in URI.ARPA. This request was rejected.
- 1168626, filed April 22, 2020: Request to change the “drop” URI scheme from provisional to permanent. This request was rejected.
- 1174454, filed June 22, 2020: Request to reconsider the previous request. This request is still open, awaiting the result of this appeal.

## Summary Response

After investigation and consideration, the IESG finds no basis to support any of the appeal points raised. Specific reasons for this are presented below with each appeal point.

## Background

The triggering issues are as follows:

1. A request to register a new permanent URI scheme called “drop” under the established procedures for registering a URI scheme. A provisional registration already exists.
2. A proposal to apply this scheme using a delimiter of “#” (a “pound” character) rather than “:” (a colon character) as specified in RFC 3986, the standard for URI syntax.
3. A request to publish the new URI scheme in the URI.ARPA zone.

The relevant procedural documents governing the requests are:

- RFC 2396, “Uniform Resource Identifiers (URI): Generic Syntax (Obsoleted by RFC 3986)
- RFC 2717, “Registration Procedures for URL Scheme Names” (Obsoleted by RFC 4395)
- BCP 65/RFC 3405, “Dynamic Delegation Discovery System (DDDS) Part Five: URI.ARPA Assignment Procedures” (Best Current Practice)
- STD 66/RFC 3986, “Uniform Resource Identifier (URI): Generic Syntax” (Internet Standard; replaces RFC 2396)
- RFC 4395, “Guidelines and Registration Procedures for New URI Schemes” (Obsoleted by RFC 7595; replaces RFC 2396)
- BCP 35/RFC 7595, “Guidelines and Registration Procedures for URI Schemes” (Best Current Practice; replaces RFC 4395)

In summary, the IESG interprets these background documents as follows:

RFC 2717 established the original registration procedures for URL (now called “URI”) scheme names. It proposed registration “trees”, namely the IETF tree and alternative trees that the community might create via other standards actions. URI schemes in alternative trees are grouped by a common prefix. Registration of a URI scheme in the IETF tree required publication of an Informational or Standards Track RFC.

RFC 3405 (BCP 65) established the procedures under which a URI scheme could be registered in the URI.ARPA zone and, in particular, stipulated that only “IETF tree” URI schemes were eligible for such registrations.

Seven years after RFC 2717, RFC 4395 replaced it and, in pertinent part, observed that no alternative trees had been created by the community, and thus the tree construct was revoked and a single namespace is now in use. Instead of the “trees”, RFC 4395 established “provisional” and “permanent” URI schemes, specifying stricter requirements for the latter. Since then RFC 7595 has become authoritative for registration procedures for URIs, replacing RFC 4395.

Notably, there was an oversight during this evolution: BCP 65, which is still in effect as RFC 3405, demands that only IETF tree URI schemes are eligible to be published in the URI.ARPA zone. However, no such tree exists as of RFC 4395 (and RFC 7595 did not reintroduce it).

Therefore, registration of URI schemes in the URI.ARPA zone is presently impossible under our current procedures. That oversight was noticed as a result of the discussion triggered by this registration request, and a proposal to correct it is in a draft currently being considered in the DISPATCH working group, with alternative proposals invited.

Independently, RFC 2396 established the syntax of a URI. It was obsoleted by RFC 3986, which did not alter this syntax. RFC 3986 is still in effect. It specifies, in pertinent part and unambiguously, that a URI scheme has an ABNF expression constraining its lexical construction, and that the delimiter between the scheme and the remainder of the URI is always a colon character.

Finally, per these documents, both the URI.ARPA zone and the URI Scheme registry are assigned Designated Experts, appointed by the IESG, who review applications and either approve or reject them, in the latter case also enumerating identified defects that prevented approval.

## Detailed Response

The IESG response to each point of the appeal is therefore as follows:

*1.) The decision on 4/21/2020 to not allow my provisional URI scheme to be entered into uri.arpa.*

This appeal point refers to the resolution of IANA ticket #1167794. As a partial result of that ticket, there was an update to the extant provisional registration of the “drop” URI scheme.

Simply put, registration into URI.ARPA is not possible at present because of the oversight described above, even if the URI scheme being registered is not provisional. This is not merely because this particular application is ineligible, but rather because, at present, none are.

We note the appellant’s assertion that this apparent procedural ambiguity should be resolved in favor of the appellant because the registration is not expressly barred. However, it is clear to us that the intent of the original restriction on new URI.ARPA entries was to set a high bar for such registrations: RFC 3405 Section 3.1.1 says that the URI scheme “MUST be registered under the IETF URI tree”, and RFC 2717 Section 2.2 says that the IETF tree is “for URL schemes that require a substantive review and approval process.” To grant this registration predicated solely on an unclear situation created later would be to disregard the spirit under which the original registration procedures were established. The Designated Expert indicated this in his email of June 2, 2020, and we agree.

Accordingly, the IESG affirms the decision of the URI.ARPA registry’s Designated Expert.

*2.) The decision on 5/8/2020 to not allow my provisional URI scheme a permanent status and to not allow placement of my scheme into uri.arpa as either permanent or provisional.*

This decision refers to a reply from IANA of the cited date, regarding ticket #1168626, which relayed the decision from the URI Scheme Registry's appointed designated expert.

We note that the publication of the -00 version of draft-mcsweeney-drop-scheme appeared on May 18, 2020, ten days after the date of this appeal point. It was thus unavailable at the time of the Designated Expert's evaluation of the application.

In addition to the procedural issue identified in our response to the previous appeal point, there is the matter of the requirements stipulated by RFC 3986. At the time of this decision, there appears to have been no meaningful public documentation for the proposed URI scheme referenced by the registration, which RFC 3986 requires. Moreover, RFC 3986 unambiguously declares that a URI starts with a scheme name, followed by a colon character (the beginning of Section 3), and the scheme name must comply with the unambiguous ABNF provided in that document. RFC 3986 further requires that the text in application fields such as "encoding considerations" and "security considerations" be adequately developed. The registration request, and the current provisional registration, conform to none of these requirements. Therefore, the Designated Expert was obligated to reject this request since the proposed URI format is not interoperable with the deployed base according to the established standard.

The appellant's argument that the colon is part of an ABNF-defined character group, and thus other members of that group should be allowed as a scheme delimiter, is unavailing given the non-ambiguity of the overall ABNF which does not permit that construction. It is clear that RFC 3986 defines a set of delimiters, but that each delimiter in that set has a specific purpose that is further specified within.

The IESG affirms the decision of the URI Scheme Registry's Designated Expert.

*3.) The decision on 5/8/2020 that my scheme syntax is invalid.*

We interpret the message from IANA of this date to indicate that it is not the scheme syntax that is invalid, but that the proposed URI's syntax as a whole is invalid. (The term "scheme" here refers only to the word "drop" which, per RFC 3986, is a syntactically valid scheme name. Indeed, it has a provisional registration already.)

In any case, a request to register a valid scheme name coupled with a troublesome specification is rightly rejected until those issues are resolved.

To the extent that this appeal point is actually about the scheme syntax, IESG determines that the appeal point does not apply. To the extent that this appeal point is about the URI syntax being invalid, the IESG affirms the decision of the URI Scheme Registry's Designated Expert.

*4.) The decision on 5/8/2020 to require require [sic] a new path of effort without any well defined criteria for approval.*

Given the backdrop provided above, we disagree with the claim that there are no well defined criteria for approval. Indeed, there are over 300 registered URI schemes, which demonstrates the existence of a community that finds the published criteria to be actionable. We do not believe the path or effort requested was either unusual or imposed any undue burden.

The IESG affirms the decision of the URI Scheme Registry's Designated Expert.

*5.) The decision on 5/8/202 [sic] to require me to place scheme documentation on the uri-review mailing list for review.*

The IESG affirms this decision, and points out that community review of registrations is far from unusual in the IETF, and is furthermore defined in RFC 7595 Section 7.2 (list item 3.2) as part of the registration process for permanent registrations. Moreover, it is not uncommon for Designated Experts to yield to consensus even if they disagree with it; indeed, as the appellant correctly points out, RFC 7595 Section 7.1 expressly requires this. It is also not uncommon for documents to improve significantly when offered the benefit of community review, so such review can often be advantageous to the applicant.

*6.) The decision on 5/8/2020 to not to be [sic] able to communicate directly with the IESG expert.*

The IESG takes the term "IESG expert" to refer to the Designated Experts for the URI Schemes registry and the URI.ARPA registry. To be clear, those persons are not members of the IESG, but are appointed as Designated Experts by the IESG. The names of Designated Experts are public and are listed at the headers of the relevant registries.

The purpose of IANA acting as an intermediary for the Designated Experts is to ensure that an audit trail for each request is retained and to screen Designated Experts from clearly incomplete or defective applications. There may occasionally be some orthogonal conversation between a Designated Expert and IANA related to process management about a request as well. Direct communication between applicants and a Designated Expert deprives IANA of those records, so the IANA tracking is the preferred procedure.

To the extent that the IESG can make assertions about IANA policies, we affirm this decision. Notwithstanding, we note that neither IANA nor the IESG possess the authority to forbid private communications with a Designated Expert who chooses to engage with applicants that way, and we also note that at some point that sort of communication did happen here: the appellant has, in fact, had email exchanges directly with both Designated Experts.

*7.) The decision on 6/2/2020 to not allow placement of my scheme into uri.arpa as either permanent or provisional.*

This and the next several appeal points of the same date appear to refer to a message also attached to ticket #1168626.

Although by this date the draft describing the “drop” scheme was published and revised based on feedback received, it did not cure any of the major deficiencies that had been identified and described above.

Because the registration request cannot be approved as a permanent registration for the reasons previously stated, and because BCP 65 does not support the notion of provisional entries into the URI.ARPA zone, the IESG affirms this decision of the URI.ARPA Registry Designated Expert.

*8.) The decision on 6/2/2020 that my scheme is not a URI.*

The IESG affirms this decision for the reasons previously stated: the appellant’s specification does not define a URI that conforms to the syntax in RFC 3986 Section 3.

*9.) The decision on 6/2/2020 that my scheme does not adhere to RFC3986-defined syntax.*

The IESG affirms this decision for the reasons previously stated.

*10.) The decision on 6/2/2020 to not complete the review and leave issues open-ended.*

We disagree that the message from IANA of this date indicates that the review was incomplete or that there were issues with the review that were open-ended. The Designated Expert rendered a decision that the registration could not proceed, with cogent reasoning, which is within his purview.

The IESG affirms this decision for the reasons previously stated.

*11.) The decision on 6/24/2020 by the expert to override the consensus.*

This appeal point appears to refer to a message regarding ticket #1172992. It is IANA’s reply to an earlier message wherein the appellant evaluated the consensus of the uri-review mailing list’s response to his proposal and asserted that consensus favored approval of the proposal as “basically harmless”.

We note that the respondents cited were in unanimous agreement with the Designated Expert that the proposed URI syntax does not conform to the standard and does not meet the requirements for a permanent URI scheme. While we concur with the significant majority that

indicated the only party harmed by this deficiency on deployment is the appellant or implementers of his proposal, we disagree that this constitutes consensus dissent against the position of the Designated Expert. To the contrary, the consensus is that the proposal does not meet the requirements for a permanent URI scheme.

Accordingly, we do not find that any consensus was overridden, and thus the IESG determines that this appeal point does not apply.

*12.) The decision on 6/24/2020 to not allow placement of my scheme into uri.arpa as either permanent or provisional.*

As the URI.ARPA registry does not accommodate provisional registrations (and there is already a provisional registration of the URI scheme), the latter part of this appeal point does not apply. The IESG affirms the decision not to place the scheme into URI.ARPA for the reasons previously stated.

*13.) The decision of the IESG expert to not ask me a single question about the inter-workings of my scheme in order to make a quality examination of the scheme and to gain a full understanding of its operations if its operations were unclear.*

The Designated Expert did ask for documentation in the form of an Internet Draft, and also asked for discussion of that proposal on the uri-review mailing list. The analysis on that list was that the proposed URI scheme cannot possibly interoperate with an independently developed component adhering to the current URI standard. It is, therefore, difficult to see how a deeper understanding of the proposed scheme or products that use it would be relevant. These fundamental issues would need to be addressed before a deeper review of the proposed scheme could become a good use of a limited resource.

The IESG affirms the decision of the URI Scheme registry's Designated Expert, that the scheme is not properly defined, and that that needs to be corrected before further consideration is useful.

*14.) The decision of the IESG to designate an URI review expert that may not be aware of the responsibility of the uri.arpa zone.*

Based on clarifying communications received on July 16, 2020, this appears to be in reference to a message on June 30, 2020, from the URI Scheme Registry's Designated Expert wherein after being asked if he is the person who checks the NAPTR record for errors, he replied, "I have no connection with NAPTR", among other things. We thus interpret this appeal point to be a claim that this Designated Expert is unaware of who manages the URI.ARPA zone, and that on that basis he should be recalled from that position.

We interpret this Designated Expert's remarks to mean he is not directly connected to the work of editing the content of the URI.ARPA zone. Indeed, he likely does not have that access; IANA staff would make those edits and update the domain name servers afterwards. Moreover, that person does not handle approvals of URI.ARPA registrations.

To clarify: The URI Scheme Registry's Designated Expert is tasked to review applications for URI Schemes. Changes to the URI.ARPA zone are reviewed by a different Designated Expert. These are related, but separate, processes. Importantly, the former does not review the work of the latter, though the latter may use as input to his deliberations the decisions of the former. In any case, the Designated Expert for the URI.ARPA zone would be the person that approves a registration into that zone and confirms the syntax of the NAPTR record to be added before relaying the request to IANA, whose staff actually publishes the record.

It follows that the URI Scheme Registry's Designated Expert is not expected to know who actually approves or enacts the zone changes, because that is simply not part of his remit.

The Designated Expert for the URI Scheme Registry has served well and effectively since 2006, and the IESG finds no cause presented in this appeal to replace him.

*15.) The decision of the IESG expert to send me on a wild goose chase defining a URN scheme for a two way transformation of one scheme to another scheme.*

Based on clarifying communications received on July 16, 2020, we believe that what is being called a "wild goose chase" is in fact a creative solution proposed by the Designated Expert as a way to get this proposal unblocked, with a path to meet both the needs of the appellant and the requirements of RFC 3986 with some connecting "glue" in the middle in the form of a simple translation function.

While we sympathize that this path toward implementation is likely not what was envisioned or hoped when the request was originally made, the claim that this suggestion or the one about URNs were made with malice, as mere distractions, or attempts to waste time, is not supported by the record.

The IESG therefore determines that this appeal point does not apply.

*16.) The decision to not issue a last call as suggested would be done on 5/8/2020*

This appears to refer to a message that was part of the exchange around ticket #1168626.

IETF procedure for document processing is also described in BCP 9 (RFC 2026). This message appears to refer to a "last call" as part of that typical process.



As of the date cited in this appeal point, the first version of draft-mcsweeney-drop-scheme had not yet appeared, so there was no document to be placed in a Last Call state at that time. Since then it has appeared and been revised twice. However, it has not been submitted to or adopted by any of the processing streams that might start it on its journey to publication as an IETF RFC; it would need to be sponsored by an Area Director or adopted by a Working Group. As neither of those two things have happened, the document was not then, and is not now, far enough along in its normal life cycle to warrant a Last Call.

The IESG therefore determines that this appeal point does not apply.

*17.) The decision on 6/29/2020 to not allow placement of my scheme into uri.arpa as either permanent or provisional after offering to adjust the internet draft as well as the scheme dereferencing.*

This appears to refer to a message of the cited date regarding ticket #1172992.

As described above, a provisional URI scheme has never been a candidate for entry into the URI.ARPA zone. As such, the IESG determines that the reference to “provisional” in this appeal point does not apply.

To the remainder of the appeal point: Since neither the fractured URI.ARPA registration procedure nor the deficient permanent URI scheme application have been addressed, the IESG once again affirms the decisions of the two Designated Experts to disallow the permanent registration and the URI.ARPA registration.

We note in the email from IANA of this date that the Designated Expert made a suggestion about scheme dereferencing, but the current (-02) version of draft-mcsweeney-drop-scheme appears not to have incorporated any text around this idea.

*18.) The decision on 6/29/2020 to override the consensus.*

This appears to be in reference to the same message in appeal point 17, which incorporates the text of prior emails. As such, we believe this refers to a subsequent decision, with the same outcome, in reference to appeal point 11 wherein the appellant made his own consensus evaluation. As in that instance, the IESG considers the appellant’s evaluation to be incorrect, and thus determines that this appeal point does not apply.

With respect to the two requested remedies, as is by now evident, we find no compelling reason to deviate from typical policies and procedures here. Accordingly, we decline to bypass procedure or override the Designated Experts with respect to registration. We further decline to direct accelerated publication of the draft, but encourage the appellant to continue to develop his idea through the normal document evolution process in concert with interested parties to progress it so that it becomes suitable for publication as an RFC.

Finally, in reviewing the numerous messages and records relevant to this appeal, the IESG observes that the Designated Experts, IANA staff, and in general the participants of the DISPATCH working group and the uri-review mailing list, have shown a great deal of assistance and mentorship of the appellant as he attempts to navigate processes that could easily be frustrating to newcomers, and wish to take this opportunity to commend them.

The IESG