

Charging by Local Internet Registries

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1. Abstract

This paper deals with charging for services by Internet registries, and indicates acceptable practice for such charging. It identifies name- and address-space as finite resources with no intrinsic value; as such, direct costs cannot be ascribed to such space. It also makes recommendations for the operation of European registries in general, and additionally for those with monopoly positions.

2. Internet services

In Europe as elsewhere, providers offer a range of services relating to Internet access. These include Internet connectivity, the provision of applications to end-users, design, consultancy and training services, as well as system services such as IP registration, DNS, routing and packet forwarding.

With some identifiable exceptions (to which we shall return), there is generally an open market in the provision of such services. On the supply side, there is freedom to enter the market, to compete for business, and to charge for services in order to stay in business. In this context, it is acceptable practice for Internet service providers (ISPs) to charge for services such as domain registration, routing services, packet forwarding and IP services. On the demand side, the general plurality of service providers means that the customer has a choice; if not satisfied with the terms of one supplier, she can take her business to another.

3. Registries and Resources

Two of the above services involve the assignment of finite resources to customers; these are domain name space and IPv4 address space. They are managed and assigned by registration agencies, respectively domain name registries and IP registries. By themselves, these resources have no intrinsic value; their worth is only realised in conjunction with the provision of

Internet access. Thus, while registries may charge for their administrative and technical services, they may not charge for namespace or address space as such; no unit cost or price tag can be attached to a domain name or to an IP address, public or private.

This principle must be made clear to the market in general and to the customer in particular. The customer must be aware of precisely what she is getting from the registry, whether it is paid for or not. Where there is a charge, the customer must not be under the illusion that this translates into a unit cost per resource assigned, nor that the transaction is an indefinite transfer of ownership of the merchandise. Finally, the customer must accept the terms under which name or address space is assigned. In the case of IP address space, these include the contractual term that the assignment is only valid for so long as the criteria of the assignment are valid [ref 1]. As soon as the original criteria no longer apply, the address space must be returned without penalty or premium to the assigning registry.

4. Special Case Registries

As indicated above, there are certain exceptions to the market principle in the Internet registration services. These occur where, by virtue of their location in the hierarchy of Internet registration, certain registries find themselves in a monopoly position. In the case of namespace, this applies to top-level domain (TLD) registries (in Europe, these are all country registries), as well as certain administratively unique second-level domain registries (such as .co.uk, .ac.at etc). When it comes to IP address allocation, regional registries constitute monopolies within the communities they serve. The RIPE NCC is the regional registry for the European region [ref 2]. Other possible examples are the last resort (non-provider) IP registries, although nowadays the customer has an alternative to their services.

It is important that there be transparency in the procedures and accounts of such "special case" registries. They must not generate excessive surplus by virtue of their monopoly position.

5. Recommendations

To meet with the objectives outlined in this paper, it is recommended that all registries:

- publish their operating procedures;
- publish details of the services they offer and the conditions and terms that apply, including scales of tariffs if applicable;
- explicitly publish the fact that they do not sell name or address space as such.

As for "special case" registries as defined above, it is recommended that where such a registry charges for service, it should, in addition to complying with the recommendations listed above:

- relate charges to costs of operation and apply all revenues to such costs;
- regularly publish a budget of its anticipated operating costs and revenue;
- publish guidelines and apply these uniformly;
- ensure equality of access to registration services;
- aim to achieve consensus within the community it serves as to the disposal of any surplus revenues;
- regularly publish accounts of income and expenditure;
- refrain from using their unique position as leverage in any other business venture.

References

1. "European Internet Registry Policies and Procedures" by Orange, C., Kuehne, M., Karrenberg, D. (ripe-104, 1996)
2. "RIPE NCC - Delegated Internet Registry" (ripe-112, 1994)