

The following info is required and must be filled in by the partner in order for the System owner to configure HLR reselling service:

Protocol(s) to send requests: ENUM, HTTP, both	
If ENUM is selected: IP addresses from which ENUM requests will be sent (ENUM requests from unallowed IP addresses will be rejected)	
If HTTP is selected: login (will be generated by the System owner and provided to the partner once the service is configured if the value is not specified)	
If HTTP is selected: password (will be generated by the System owner and provided to the partner once the service is configured if the value is not specified)	

The following info is filled in by the System owner and provided to the partner once the service is configured:

NOTE: this line must be removed from the document before sending it to the partner alongside with the description of the fields (8.1, 8.2) that have been hidden from the HLR response (in case of any). Values highlighted red must be replaced by actual values.

1. Supported protocol(s): HTTP (GET method), ENUM
2. HLR address/domain name: **to be specified**
3. Login: **to be specified if differs from the provided by the partner**
4. Password: **to be specified if differs from the provided by the partner**
5. Destination addresses format: e.164
6. ENUM example of a request:

dig @<hlrAddress> -t NAPTR <reverseDnis>.<dummyDomainName> -p <port> +short
where

<hlrAddress>: the HLR server IP address

<reverseDnis>: the destination address number in reverse, separated by dots. E.g., if the original number is 123456789, the **reverseDnis** will be 9.8.7.6.5.4.3.2.1

<dummyDomainName>: any domain name. For instance, *e164enum.int.alarislabs.com*

<port> : the ENUM listening port. The default value is 5053, can be overridden by internal configuration

7. HTTP example of a request:

http://<HLRdomain>:port/hlr/mccmnc_request?

login=<userlogin>&password=<userpass>&dnis=<dnis>&message_id=1

where

HLRdomain: HLR domain name

userlogin: login

userpass: password

dnis: destination addresses in e.164 format

message_id: is not taken into consideration

8. Response format:
 - 8.1. Successful response

If an initial request was obtained over HTTP, a response will look as follows:

```
{  
  "message_id": "-1",  
  "mccmnc": "250001",  
  "result": 0,  
  "ported": 0,  
  "source": "MNP",  
  "source_name": "some_mnp",  
  "source_type": "mnp",  
}
```

```

        "dnis": "12345678910",
        "cached": 0,
        "login": "login",
        "message": ..
    }

```

where

"message_id": the ID set for the request

"mccmnc": returned 6-digit MCCMNC

"result": shows if the result is successful (0 – yes, other values - no)

"ported": shows if the number is ported (0 - no, 1 - yes)

"source": MNP database or HLR service

"source_name": internally configured HLR service name

"source_type": internally configured HLR service type

"cached": shows if the result was taken from cache (0 - no, 1 - yes)

"message": contains extended information in regard to the requested number; may be absent from the response

If an initial request was obtained over ENUM, a response will look as follows:

;; ANSWER SECTION:

```

2.8.1.0.1.4.2.2.6.2.1.2.e164.arpa. 0 IN NAPTR 100 10 "U" "E2U+pstn:tel" "!^(.*)$!
country=null;operator=null;mcc=604;mnc=001;ported=false;err=0! .

```

8.2 Unsuccessful response:

A response does not contain an MCCMNC

If an initial request was obtained over HTTP, a response will look as follows:

```

{
    "message_id": "-1",
    "result": -1,
    "ported": 0,
    "source": "MNP",
    "source_name": "some_mnp",
    "source_type": "mnp",
    "dnis": "12345678910",
    "cached": 0,
    "login": "login",
    "message": ..
}

```

where

result: following values can be returned for an unsuccessful response:

- "result" : -1 - No MCCMNC found for the requested destination address
- "result" : -3 - No valid MCCMNC found for the requested destination address or no translation rule is found for the returned error code/status
- "result" : -4; -6; -7 – System timeout
- "result" : -5 – the number is blacklisted

message: contains extended information in regard to the requested number

If an initial request was obtained over ENUM, a response will look as follows:

```

3.2.4.3.6.0.4.6.2.0.2.e164.arpa. 0 IN NAPTR 100 10 "U" "E2U+pstn:tel" "!^(.*)$!
country=null;operator=null;mcc=null;mnc=null;ported=false;err=-3! .

```