**OsmoHLR - Feature #5183**

**EIR functionality**

06/16/2021 06:17 AM - laforge

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<th>06/16/2021</th>
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**Description**

There are use cases, particularly in private networks, where one may want to restrict usage to specific device types. Such device types are identified by the TAC (type approval code) portion of the IMEI.

We would need some kind of EIR functionality to allow modes such as:

- allow-all IMEI except those (prefix-matched) that are black-listed
  - can be used to prevent access by known broken devices, or by those reported as stolen
- deny-all IMEI except those (prefix-matched) that are white-listed
  - can be used in private networks to constrain the use to certain specific approved UE models.

**Related issues:**

Related to OsmoHLR - Feature #2542: have subscriber create-on-demand

In Progress 10/06/2017

**History**

**#1 - 06/16/2021 06:18 AM - laforge**

- Checklist item [ ] check required MSC support added
- Checklist item [ ] check required SGSN support added
- Checklist item [ ] check required GSUP procedures added
- Checklist item [ ] implement EIR functionality as part of OsmoHLR added

**#2 - 06/16/2021 06:18 AM - laforge**

- Related to Feature #2542: have subscriber create-on-demand added

**#3 - 06/16/2021 06:22 AM - laforge**

As discussed in #2542, there is already a CHECK_IMEI procedure in GSUP, and it's implemented in osmo-msc. So for the CS side of things, we should be fine to just add the EIR functionality to the HLR and have it working.

For the SGSN, it seems the entire procedure is not yet implemented. It would have to be added, and given the relative lack of FSMs in the GMM code, this might need quite a bit of work.