**This document is an excerption from the Non-Access-Stratum (NAS) protocol for 5G System (5GS); Stage 3, chapter 9.11.3.9A (5GS Update Type)**

9.11.3.9A 5GS update type

The purpose of the 5GS update type IE is to allow the UE to provide additional information to the network when performing a registration procedure.

The 5GS update type information element is coded as shown in figure 9.11.3.9A.1 and table 9.11.3.9A.1.

The 5GS update type is a type 4 information element with a length of 3 octects.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | | 7 | | 6 | 5 | | 4 | 3 | | 2 | | 1 | |  | |
| 5GS update type IEI | | | | | | | | | | | | | | octet 1 | |
| Length of 5GS update type | | | | | | | | | | | | | | octet 2 | |
| 0  Spare | | 0  Spare | | EPS- PNB-CIoT | | | 5GS-PNB-CIoT | | | NG-RAN-RCU | | SMS requested | | octet 3 | |

**Figure 9.11.3.9A.1: 5GS update type information element**

**Table 9.11.3.9A.1: 5GS update type information element**

|  |  |  |
| --- | --- | --- |
| SMS over NAS transport requested (SMS requested) (octet 3, bit 1) | | |
| Bit | | |
| **1** |  |  |
| 0 |  | SMS over NAS not supported |
| 1 |  | SMS over NAS supported |
|  | | |
| NG-RAN Radio Capability Update (NG-RAN-RCU) (octet 3, bit 2) | | |
| Bit | | |
| **2** |  |  |
| 0 |  | UE radio capability update not needed |
| 1 |  | UE radio capability update needed |
| For a list of RATs for which a radio capability update can be triggered by means of this indication see subclause 5.5.1.3.2, case n). | | |
| 5GS Preferred CIoT network behaviour (5GS PNB-CIoT) (octet 3, bits 3 and 4) | | |
|  | | |
| Bits | | |
| **4** | **3** |  |
| 0 | 0 | no additional information |
| 0 | 1 | control plane CIoT 5GS optimization |
| 1 | 0 | user plane CIoT 5GS optimization |
| 1 | 1 | reserved |
|  | | |
| EPS Preferred CIoT network behaviour (EPS-PNB-CIoT) (octet 3, bits 5 and 6) | | |
|  | | |
| Bits   |  |  |  | | --- | --- | --- | | **6** | **5** |  | | | |
| |  |  |  | | --- | --- | --- | | 0 | 0 | no additional information | | 0 | 1 | control plane CIoT EPS optimization | | 1 | 0 | user plane CIoT EPS optimization | | 1 | 1 | reserved | | | |
|  | | |
|  | | |
| Bits 7 to 8 of octet 3 are spare and shall be coded as zero. | | |