IEEE P802.19
Wireless Coexistence

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| Mobility Information Parameters in Profile 2 |
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Abstract

This document provides text proposal for comment resolution CID #86 of the document IEEE 802.19-13/0057r10 on including mobility information in profile 2.

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**Comment CID #86**

Include MobilityInformation in profile 2.

**Proposal**

*It is proposed to add mobilityInforamtion (optionally present) in CxMediaRegistrationResponse primitive table, ceRegistrationRequest table (section 6.4.2.3, DF3.05\_Clean), CxMediaRegistrationIndication primitive table and ceRegistrationRequest table (section 6.4.2.6, DF3.05\_Clean) as follows.*

* CxMediaRegistrationResponse primitive table (Page 152 in DF3.05\_Clean):

|  |  |  |
| --- | --- | --- |
| *Parameter* | *Data type* | *Value* |
| ***wsoID*** | ***OCTET STRING*** | In case of the IEEE 802.22 CE and IEEE 802.11af CE, the value of this parameter shall be set to ***0***. In case of the RLSS CE, each WSO served by this RLSS shall be given unique ID. |
| ***networkID*** | ***OCTET STRING*** | Network ID. |
| ***networkTechnology*** | ***NetworkTechnology*** | This parameter shall be set to the WSO network technology. |
| ***geolocation*** | ***Geolocation*** | ***coordinate*** shall be selected and set to the location of the WSO. |
| ***coverageArea*** | ***CoverageArea*** | If coverage area of the WSO is not known, then this parameter is not used. If it is know, this parameter is used (see table below). |
| ***installationParameters*** | ***InstallationParameters*** | If installation parameters of the WSO are not known, then this parameter is not used. If they are know, this parameter is used (see table below). |
| ***listOfAvailableFrequencies*** | ***ListOfAvailableFrequencies*** | List of available frequencies from TVWS DB (see table below). |
| ***txScheduleSupported*** | ***BOOLEAN*** | ***TRUE*** if IEEE 802.19.1 transmission scheduling is supported, ***FALSE*** otherwise. |
| ***listOfOperatingFrequencies*** | ***ListOfOperatingFrequencies*** | If the WSO is not operating, this parameter is not used, otherwise it is set to the WSO operating frequency (see table below). |
| ***requiredResource*** | ***RequiredResource*** | Resource required for the WSO operation (see table below). |
| ***mobilityInformation*** | ***MobilityInformation*** | WSO mobility information (see table below) |

After the table listing ***requiredResource*** parameter (Page 153-Line 12, DF3.05\_Clean), add the following:

Table below shows expected values of the parameters in the ***mobilityInformation*** parameter.

|  |  |  |
| --- | --- | --- |
| *Parameter* | *Data type* | *Value* |
|  ***maxSpeed*** |  ***REAL*** | Optionally present. If present, this parameter shall be set to indicate the maximum speed value of the WSO (in km/h) |
|  ***speedInformation*** |  ***SpeedInformation*** | Optionally present. If present, this parameter shall be set to indicate detailed information on the WSO speed and direction. |
|  ***routeInformation*** |  ***RouteInformation*** | Optionally present. If present, this parameter shall be set to indicate the WSO planned route and time.  |

* ceRegistrationRequest table (Page 154, DF3.05\_Clean)

|  |  |  |
| --- | --- | --- |
| *Parameter* | *Data type* | *Value* |
| ***operationCode*** | ***OperationCode*** | ***new*** |
| ***wsoID*** | ***OCTET STRING*** | Value of ***wsoID*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***networkID*** | ***OCTET STRING*** | Value of ***networkID*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***networkTechnology*** | ***NetworkTechnology*** | Value of ***networkTechnology*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***geolocation*** | ***Geolocation*** | Value of ***geolocation*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***coverageArea*** | ***CoverageArea*** | Value of ***coverageArea*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***installationParameters*** | ***InstallationParameters*** | Value of ***installationParameters*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***listOfAvailableFrequencies*** | ***ListOfAvailableFrequencies*** | Value of ***listOfAvailableFrequencies*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***txScheduleSupported*** | ***BOOLEAN*** | Value of ***txScheduleSupported*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***listOfOperatingFrequencies*** | ***ListOfOperatingFrequencies*** | Value of ***listOfOperatingFrequencies*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***requiredResource*** | ***RequiredResource*** | Value of ***requiredResource*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |
| ***mobilityInformation***  | ***MobilityInformation*** | Value of ***mobilityInformation*** parameter from the received ***CxMediaRegistrationResponse*** primitive. |

* CxMediaRegistrationIndication primitive table (Page 158-159, DF3.05\_Clean):

|  |  |  |
| --- | --- | --- |
| *Parameter* | *Data type* | *Value* |
| ***wsoID*** | ***OCTET STRING*** | WSO ID. |
| ***wsoStopOperation*** | ***BOOLEAN*** | ***FALSE*** |
| ***listOfAvailableFrequencies*** | ***ListOfAvailableFrequencies*** | List of available frequencies from TVWS DB (see table below). |
| ***listOfOperatingFrequencies*** | ***ListOfOperatingFrequencies*** | List of operating frequencies (see table below). |
| ***requiredResource*** | ***RequiredResource*** | *This parameter is not used.* |
| ***mobilityInformation***  | ***MobilityInformation*** | *WSO mobility information (see table below)* |

After the table listing ***listOfOperatingFrequencies*** parameter (Page 159-Line 9, DF3.05\_Clean), add the following:

Table below shows expected values of the parameters in the ***mobilityInformation*** parameter.

|  |  |  |
| --- | --- | --- |
| *Parameter* | *Data type* | *Value* |
|  ***maxSpeed*** |  ***REAL*** | Optionally present. If present, this parameter shall be set to indicate the maximum speed value of the WSO (in km/h) |
|  ***speedInformation*** |  ***SpeedInformation*** | Optionally present. If present, this parameter shall be set to indicate detailed information on the WSO speed and direction. |
|  ***routeInformation*** |  ***RouteInformation*** | Optionally present. If present, this parameter shall be set to indicate the WSO planned route and time.  |

* ceRegistrationRequest table (Page 159-160, DF3.05\_Clean)

|  |  |  |
| --- | --- | --- |
| *Parameter* | *Data type* | *Value* |
| ***operationCode*** | ***OperationCode*** | ***update*** |
| ***wsoID*** | ***OCTET STRING*** | Value of ***wsoID*** parameter from the received ***CxMediaRegistrationIndication*** primitive. |
| ***networkID*** | ***OCTET STRING*** | *This parameter is not used.* |
| ***networkTechnology*** | ***NetworkTechnology*** | *This parameter is not used.* |
| ***geolocation*** | ***Geolocation*** | *This parameter is not used.* |
| ***coverageArea*** | ***CoverageArea*** | *This parameter is not used.* |
| ***installationParameters*** | ***InstallationParameters*** | *This parameter is not used.* |
| ***listOfAvailableFrequencies*** | ***ListOfAvailableFrequencies*** | Value of ***listOfAvailableFrequencies*** parameter from the received ***CxMediaRegistrationIndication*** primitive. |
| ***txScheduleSupported*** | ***BOOLEAN*** | *This parameter is not used.* |
| ***listOfOperatingFrequencies*** | ***ListOfOperatingFrequencies*** | Value of ***listOfOperatingFrequencies*** parameter from the received ***CxMediaRegistrationIndication*** primitive. |
| ***requiredResource*** | ***RequiredResource*** | *This parameter is not used.* |
| ***mobilityInformation***  | ***MobilityInformation*** | Value of ***MobilityInformation*** parameter from the received ***CxMediaRegistrationIndication*** primitive. |