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| Input contribution  Use case | |
| Use Case Title:\* | Use cases for dynamic traffic lights timing |
| Group Name:\* | TP#24 |
| Source:\* | CMCC |
| Contact: | Yawen Niu ([niuyawen@chinamobile.com](mailto:niuyawen@chinamobile.com)) |
| Date:\* | 2016-7-18 |
| Abstract:\* | Propose to add the use case for dynamic traffic lights timing to relief the traffic pressure. |
| Agenda Item:\* |  |
| Work item(s): |  |
| Document(s)  Impacted\* | Technical Specification TR 0026 – Vehicular Domain Enablement Technical Report |
| Intended purpose of  document:\* | Decision  Discussion  Information  Other <specify> |
| Decision requested or recommendation:\* | Approval of the Use Case |

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* 1. **Title**

Use cases for dynamic trffic lights timig.

* 1. **Description**

Normally the traffic lights timing is fixed. However, in some situations, vehicle flowrate varies a lot. In this case, dynamic traffic lights timing will be able to relief the traffic pressure and improve the traffic efficiency.

* 1. **Source**

CMCC

* 1. **Actors**
* Traffic lights (M2M Devices embedded in traffic lights).
* Vehicles (M2M Devices embedded in vehicles)
* Vehicle Service Centre
  1. **Pre-conditions**
  2. **Triggers**

1. The vehicle service platform monitors the traffic status period and will adjust the traffic lights timing if needed.
   1. **Normal Flow**

* Vehicles report data (such as location, speed, direction…) to vehicle service centre.
* Vehicle service centre analyze the vehicles data and adjust the traffic lights timing
  1. **Post-conditions** (if any)

NONE.

* 1. **High Level Illustration (**as applicable)
  2. **Potential requirements (as applicable)**
* The vehicles can get the data (such as location, speed, direction…) and report to vehicle service centre
* The vehicle service centre can analyze the traffic situation according to the vehicle data
* The vehicle service centre can config the parameter of the traffic data.