# Annex 1 - C-ITS deployment description template

C-ITS Deployment [Name of the City]

# Objectives

[Free text addressing the main general objectives of the C-ITS implementation]

## Use-cases objectives:

Main policy goal(s) for C-Roads participation in C-ITS deployment.

[ ] Increase road safety

[ ] Improve traffic management and road operations

[ ] Increase user satisfaction

[ ] Reduce environmental impact

[ ] Other

**Cooperation with private and/or public bodies in the procurement, deployment, and operation of the C-ITS Services**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Public | Private | Public & Private |
| Procurement |[ ] [ ] [ ]
| Deployment & Installation |[ ] [ ] [ ]
| Service Operation |[ ] [ ] [ ]

**C-ITS Investment funds**

[ ] C-Roads Project

[ ] National/Local funds

[ ] Others

# C-ITS deployment Description

[Free text to provide a general description of the city’s characteristics]

## Use-cases description:

# C-ITS Geographical Coverage

Linear length (km):

Area (km2):

Figure 1 - Map of [City] C-ITS deployments.

**City Geography**

[ ] Mountainous/hilly

[ ] Flat

[ ] Valley

[ ] Other

**Urban streets network (C-ITS deployment areas)**

See Figure 1 below for an explicative example.



*Figure 1 - Designs of urban street networks.*

[ ] Traditional Grid Design

[ ] Curvilinear Loop Design

[ ] Beginning of Cul-De-Sac

[ ] Conventional Cul-De-Sac

[ ] Other

# Technical elements

[Free text with further details regarding the Architecture of the C-ITS deployments]

**Regarding European interoperability, the use of C-Roads specifications**

[ ] Yes

[ ] No

**C-Roads WG2 specifications version**

[ ] 1.1

[ ] 1.4

[ ] 1.5

[ ] 1.6

[ ] 1.8

[ ] 2.0

[ ] Other:

**Type of communication**

[ ] Short-range communication (ITS G5 - RSUs)

[ ] Cellular communication

[ ] Hybrid communication

**Short-range communication (RSU's) deployed until 2023/Q4**

[ ] 1 to 10

[ ] 11 to 20

[ ] 21 to 50

[ ] More than 50

[ ] Not applicable

**C-Roads challenging aspect(s) faced in the C-ITS deployment**

[ ] Need for modifications of existing data source (e.g. format, content) to be compliant with ETSI message standard / WG2 technical requirements.

[ ] Need for frequent updates per changes in WG2 technical requirements (e.g. C-ITS Server).

[ ] Procurement of HW (e.g. traffic controllers, sensors, RSUs) due to lack of documentation on minimum requirements / available vendors

[ ] Use case specifications not in line with existing system architecture/infrastructure

[ ] Other:

# C-ITS use-cases and deployment stage

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **C-ITS Service** | **Acronym** | **Use-Case** | **Type of Road Network** | **Code** | **Deployment date** | **Initial Stage** | **Intermediate stage** | **Operational** |
|  |  |  |  |  |  | **Planned but not yet started** | **Procurement phase** | **Installation phase** | **Testing phase** |  |
| In-Vehicle Signage | IVS | Free Text | All | IVS-FT | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Traffic Signs | All | IVS-TS | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
| Hazardous Location Notification | HLN | Accident Zone | All | HLN-AZ | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Traffic Jam Ahead Warning | All | HLN-TJA | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Stationary vehicle | All, mainly on motorway | HLN-SV |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Weather Condition Warning  | All | HLN-WCW | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Temporarily slippery road | All | HLN-TSR | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Animal or person on the road | Motorway | HLN-APR |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Obstacle on the road | All | HLN-OR |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Emergency or Prioritized Vehicle Approaching | All | HLN-EPVA | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Emergency or Rescue/Recovery vehicle in Intervention | All | HLN-ERVI | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Railway Level Crossing | All | HLN-RLX |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Unsecured Blockage of a Road | All | HLN-UBR |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Alert Wrong Way Driving | Motorway | HLN-AWWD |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Public Transport Vehicle Crossing | Road, Urban Road | HLN-PTVC |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Public Transport Vehicle at a Stop | Road, Urban Road | HLN-PTVS |  |[ ] [ ] [ ] [ ] [ ]
| Signalized Intersections | SI | Signal Phase and Timing Information | All | SI-SPTI |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Green Light Optimal Speed Advisory | All | SI-GLOSA |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Imminent Signal Violation Warning | All | SI-ISVW | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Traffic Light Prioritization | All | SI-TLP | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
|  |  | Emergency Vehicle Priority | All | SI-EVP | 2023 Q4 |[ ] [ ] [ ] [ ] [ ]
| Probe Vehicle Data | PVD | Vehicle Data Collection | All | PVD-VDC |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Event Data Collection | All | PVD-EDC |  |[ ] [ ] [ ] [ ] [ ]
| Road Works Warning | RWW | Lane Closure | All | RWW – LC |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Road Closure | All | RWW – RC |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Road Works - Mobile | All | RWW - RM |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Winter Maintenance | All | RWW - WM |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Extended Work Zone |  |  |  |[ ] [ ] [ ] [ ] [ ]
| Automated Vehicle Guidance | AVG | SAE Level Guidance | Interurban roadways | AVG-SAELG |  |[ ] [ ] [ ] [ ] [ ]
|  | AVG | Platoon Support Information | Interurban roadways with more than one lane | AVG-PSI |  |[ ] [ ] [ ] [ ] [ ]
|  | AVG | Situation Based Distance Gap |  |  |  |[ ] [ ] [ ] [ ] [ ]
|  | AVG | Vehicle Type and Lane Specific Speed Limit / Recommendation |  |  |  |[ ] [ ] [ ] [ ] [ ]
| Collective Perception |  | Perception of VRU on the Road |  | VRU |  |[ ] [ ] [ ] [ ] [ ]
| Navigation Information |  | Smart Routing |  |  |  |[ ] [ ] [ ] [ ] [ ]
|  |  | Parking Information |  |  | 2022 Q2 |[ ] [ ] [x] [ ] [ ]
|  |  | HD-Cartography |  |  |  |[ ] [ ] [ ] [ ] [ ]
| Connected and Cooperative Navigation in and out of the city |   | Dynamic Access Control of Designated Infrastructure |  |   |  |[ ] [ ] [ ] [ ] [ ]
| Dynamically Controlled Zones |   | Zone access control for urban areas |  |   |  |[ ] [ ] [ ] [ ] [ ]
|  |   | Dynamic Environmental Zone |  |   |  |[ ] [ ] [ ] [ ] [ ]
|  |   | Loading zone management |  |   | 2021 Q3 |[ ] [ ] [ ] [x] [ ]
|   |   | Smart Slip Ramp |  |   |  |[ ] [ ] [ ] [ ] [ ]
|   |   | Emergency electronic brake light |  |   |  |[ ] [ ] [ ] [ ] [ ]
|   |   | Motorcycle approaching indication |  |   |  |[ ] [ ] [ ] [ ] [ ]
|   |   | Cooperative collision risk warning |  |   |  |[ ] [ ] [ ] [ ] [ ]
|   |   | Information on AFV fuelling & charging stations |  |   |  |[ ] [ ] [ ] [ ] [ ]
|   |   | Wrong way driving |  |   |  |[ ] [ ] [ ] [ ] [ ]

**The average necessary deployment time (months) for each stage:**

Initial stage - Planned but not yet started:

Initial stage - Procurement phase:

Intermediate stage - Installation phase:

Intermediate stage - Testing phase:

Operational: