PUBLIC CALL FOR TENDER
PROJECT TEAM EXPERTS

for the execution of the work called for in the proposed Specific Agreement
SA/CEN/GROW/EFTA/546/2016-09

Emissions Management in Urban Areas

Introduction

Following the acceptance by the European Commission of a proposal from CEN, as prepared by the CEN/TC 278 Secretariat, funding is available for establishing a team of paid experts.

Recruiting these experts has been delegated by the CEN Secretary General to the secretariat of CEN/TC 278, held by NEN.

Task of the project team

The project team is tasked with the preparation of the following deliverable(s):

- A CEN technical Specification: Intelligent Transport Systems — Urban-ITS — Emissions Management in Urban Areas

Contractual details

The proposed Project plan is attached. The project plan describes in detail what is expected from the project team, the work plan and milestones and the expertise required for the execution of the task(s).

The experts selected will sign an agreement with NEN. Applicants should be forewarned that the elapsed time between completion of the deliverables and NEN being in a position to issue the payment is at least five months. This will be partly overcome by the fact that CEN and the European Commission have agreed on the following payment steps:

- Step 0: Pre-financing (25 % of the total budget) - following signature of the Agreement with NEN
- Step 1: Interim payment[1] - subject to the approval of the interim report by the European Commission and EFTA
- Step 2: Final payment[2] - subject to the approval of the final report by the European Commission and EFTA

Selection procedure

Applicants will be selected by a selection committee, which is composed of:

- the Chair of CEN/TC 278 Intelligent transport systems
- the Convenor of CEN/TC 278/WG 17 Urban-ITS
- the Secretary of CEN/TC 278 Intelligent transport systems
- a representative from the CEN Central Management Centre

[1] Up to 75% of the total budget, reflecting the actual number of man-days spent.
[2] Up to 100% of the total budget, reflecting the actual number of man-days spent.

Experts will be selected ensuring an equal representation of sectors, countries and skills, as well as the expected 'chemistry' within the project team. Additionally the selection will be based on the principle of best value for money, considering the day rate of the expert and the number of days the expert requires to execute the work.

The report of the selection committee on the selection of the experts will be submitted for approval to the European Commission and EFTA prior to the contracting of the experts.

Application procedure

Applications should be submitted using the attached application form (word format) by **28-02-2017**. Applications received after the deadline will not be taken into consideration.

I'm looking forward to receiving your application.

Yours sincerely,

Maarten Peelen
Secretary of CEN/TC 278

SA 2016-09

Emission Management in Urban Areas

Project plan

1 CONTEXT

This Project Proposal is made in the context of, and is part of the CEN response to the Standardisation request to the European standardisation organisations as regards Intelligent Transport Systems (ITS) in urban areas." Ref Standardisation Request M/546 (Published February 2016).

(1) The Project Proposal is made in support of the recommendations of CEN TC278 PT1701: *Technical Report: Intelligent transport systems: Standards and actions necessary to enable urban infrastructure coordination to support Urban-ITS.* http://media.wix.com/ugd/a7dbd0_8cc42a2831df44f6a2e040f65036579c.pdf

This project proposal is designed to meet PT 1701 High Level Recommendation HLRi:

I	**1701-HLRi**	**Emissions management in urban areas**

The task of PT1701 was to identify gaps and overlaps in ITS standards that may be needed by Urban Administrations to assist them to implement Urban-ITS. The PT was further charged to outreach into the Urban Administration community and EC Urban-ITS related projects community to identify the scope and issues relating to its work, and subsequently, to validate its interim findings. The project team itself comprised 11 persons comprising: Urban Administrations; practitioners and advisers to Urban Administrations; professional standards developers; ITS industry; automotive industry.

As part of its work, the PT created and examined 95 use cases for ITS deployment in the Traffic Management, Multimodal Information Systems and Urban Logistics domains. In addition more than140 projects/reports studied for relevance and content. These were used to create 103 interim recommendations for standards related activities that could usefully help to expedite the speedy deployment of Urban ITS.

These recommendations were included in the interim report produced by the PT in January 2016 and were used as the core of the extensive programme of outreach activities it carried out, contacting some 116 urban authority/related organisations. A list of outreach contacts can be found in Annex P of The final report of PT1701. The PT organised an open workshop that was held on 11/12 February 2016, and as a result of the discussions at that meeting, and based on early feedback from Urban Administrations, the content of the Interim Report was extensively revised, including a significant consolidation of the recommendations and the summary report and executive summary significantly rewritten to focus on the issues as identified by the Urban Administrations.

The PT1701 final report referenced above consolidates the recommendations supported by outreach feedback and provides 8 high level recommendations for support under the CID Ref Standardisation Request M/546. ThPT1701 final report has been accepted by CEN TC278, and, more significantly, by

the European Commission, and represents the key recommendations for support under the mandate Ref Standardisation Request M/546.

One of the main findings from the work of PT1701 and highlighted in its final report is that there are a number of major gaps that will weaken the ability of Urban Administrations to implement urban-ITS efficiently, and in some aspects, gaps may prevent its introduction unless faced and provided as a matter of urgency.

There are, additionally, a number of highly desirable aspects that could much better assist Urban Administrations to implement Urban-ITS, and a number of aspects of lower priority that need to be addressed at some point in time.

Key issues identified by Urban Administrations as identified barriers to implementation of Urban ITS, where Standards are needed to remove/reduce the barrier to the implementation of urban-ITS are identified as follows:

a) Awareness of what is available
b) Location referencing
c) Vendor lock-in
d) Standards for "New Modes" and "new measures
e) Data exchange/data management
f) Immaturity of some concepts

This project proposal is designed to develop a Technical Specification to meet the requirements of PT 1701 High Level Recommendation HLRi: **Emissions management in urban areas.**

2 OBJECTIVES AND IMPACT

2.1 Objectives

The objective of this study is to identify the standards and actions necessary to enable urban infrastructure coordination to support the deployment of Urban-ITS. In particular, the study will concentrate on what is relevant to PT 1701 High Level Recommendation HLRi:: **Emissions management in urban areas.**

PT1701 Final Report Executive Summary 1.9 "*New measures proposed as priorities by Urban Administrations include standards for emissions monitoring, geofencing, low emission zones data and applications; standardised emissions data; Geofencing data and applications. A project team is required urgently to develop technical specifications to fulfil these requirements.* (UL-0301; UL-0302; UL-0303; UL-0307).(See Annex B for the relevant Use Cases)."

Geofencing: A project team is probably required in respect of standardising geofencing protocols.

1701-HLRi Emissions management in urban areas	
Rc_UL03	Emissions monitoring - Project Team to determine standard for Air Quality outstations and Traffic Management Systems (I.7 of PT1701 Final Report)
Rc_UL04	Geofencing: A project team is probably required in respect of standardising geofencing protocols. (I.5.7 of PT1701 Final Report.)

Recommendations Rc_UL03, Rc_UL04Other use cases also indirectly have requirements for emissions monitoring and control. These requirements are summarised by PT1701 as:

1701-HLRi Emissions management in urban areas New Measures: examples of priorities: emissions monitoring. Low Emission zones data and applications; Geofencing data and applications; Energy efficient intersections services USE CASES: UL-0104; UL-0108; UL-0112; UL-0207; UL-0213; UL-0215; UL-0219; UL-0226; UL-0301; UL-0302; UL-0303	Emission Management in Urban areas • Technical Standard: Standards and data definitions for Emission management in urban areas Use Case: Low Emission Zones Use Case: Emissions enforcement measures Use Case: Geofencing Content: • Functional Specifications based on Use Cases • Design consistent data concepts and interfaces • Geofencing management requirements for hybrid vehicle busses, taxis, (potentially private vehicles) for use of EV modes in pollution hotspots and residential areas (PT estimate 130 manday. Team of 3)

2.2 Relevance

2.2.1 Emission management in urban areas

Cities are home to over 70% of the EU population and account for some 85% of the Union's GDP. Most journeys begin and end in cities. In many urban areas, however, increasing demand for urban mobility has created a situation that is not sustainable: severe congestion, poor air quality, noise emissions and high levels of CO2 emissions. Urban congestion jeopardises EU goals for a competitive and resource-efficient transport system.

As cities grow ever larger, the concentration of pollution becomes not only more important, but a significant health hazard. Cities are therefore turning to “low emission zones”, emissions sensing, as short term measures, and ‘geofencing’ to control the mode of driving for hybrids, or to create exclusion zones. However, this is currently being explored on a piecemeal city level. Development of Technical Specification(s): Standards and data definitions for emission management in urban areas is considered a high priority so that these measures can be implemented quickly and consistently across Europe.

These goals are heavily influenced by the European Commission White Paper on Transportation and associated documents and is seems appropriate to summarise those points that impact on the instantiation of Urban-ITS by Urban Administrations within the EU:

This document provides the executive summary of the Impact Assessment Report on the Commission’s White Paper on Transport Policy, which lays down a long-term strategy that would allow the transport sector to meet its goals with a 2050 horizon.

The White Paper includes a general policy objective to define a long-term strategy that would transform the EU transport system into a sustainable system by 2050. This general objective can be translated into more specific objectives:

> *A reduction of GHG emissions that is consistent with the long-term requirements for limiting climate change to 2 °C and with the overall target for the EU of reducing emissions by 80% by 2050 compared to 1990. Transport-related emissions of CO_2 should be reduced by around 60% by 2050 compared to 1990.*

The White Paper on Transportation 2011 "*Towards a single European transport area*" suggested a number of initiatives which relate to urban mobility and anticipate ITS applications, e.g.: ~ Sustainable Urban Mobility Plans {Initiative 31) ~ An EU framework for urban road user charging **and access restriction schemes (Initiative 32) ~ A strategy for near 'zero-emission urban logistics' 2030 (Initiative 33) ~ Urban Mobility Package "Together towards competitive and resource-efficient urban mobility"[37]** adopted in 2013 provided the framework for adoption of 'Sustainable Urban Mobility Plans', and underscored the key importance of Urban-ITS, urban logistics, access regulations, road safety in 4 respective EC Staff Working Documents.

Although at a micro level, Urban Administrations across Europe may have differing policy objectives for their traffic management, at a macro level the over-arching goals will be very similar (e.g. reduce emissions, improve safety, manage congestion) resulting in similar technical solutions being used.

There are a variety of means to manage the road network and address traffic congestion and traffic disruption (e.g. planned/unplanned events, accidents, floods, fires, etc.) through traffic management in an efficient and innovative manner. *For instance, a number of cities put in place different types of traffic re-routing, traffic prioritisation and access regulation measures, including intersections management, targeting all or a subset of vehicles (e.g. deviations, priority lanes, green waves, road user charging or tolling, low emission zones, low speed zones, pedestrian zones, etc.).*

Unfortunately, these measures are not necessarily managed in a holistic and coordinated manner and often not correctly taken into account in traffic information system towards users (e.g. navigation devices). Therefore, establishing compatible standards including emission data requirements in a consistent and standardised form will contribute to the overall efficiency of traffic information and management in urban areas, including access regulation management and enforcement.

The transport sector has the second biggest greenhouse gas emissions in the EU. More than two thirds of transport-related greenhouse gas emissions are from road transport. See Figure 1 and Table 1.

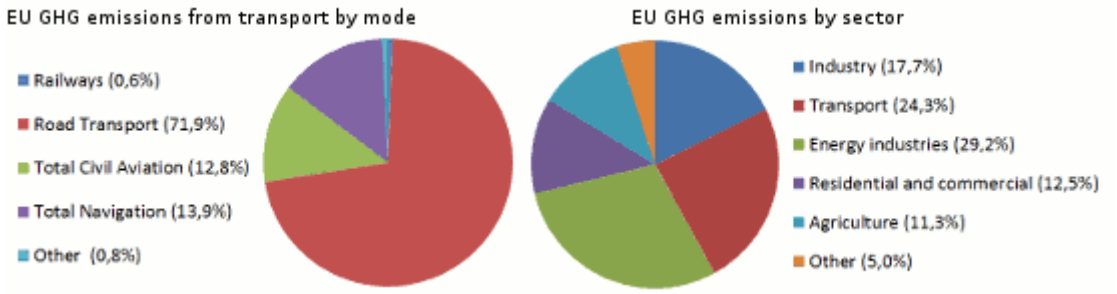


Figure 1 - EU Emissions from transport

(source: http://ec.europa.eu/clima/policies/transport/index_en.htm)

Table 1 - EU28 greenhouse gas emissions by sector and mode of transport, 2012

By sector	
Industry	17,7%
Transport	24,3%
Energy industries	29,2%
Residential and commercial	12,5%
Agriculture	11,3%
Other	5,0%

By mode	
Railways	0,6%
Road Transport	71,9%
Total Civil Aviation	12,8%
Total Navigation	13,9%
Other	0,8%

Greenhouse gas emissions in other sectors decreased 15% between 1990 and 2007 but emissions from transport increased 36% during the same period. This increase has happened despite improved vehicle efficiency because the amount of personal and freight transport has increased. Since 2008 greenhouse gas emissions from transport have started to decrease. Despite this trend, transport emissions were in 2012 still 20.5 % above 1990 levels and would need to fall by 67 % by 2050 in order to meet the 2011 Transport White Paper target reduction of 60% compared to 1990. See Figure 2 and Table 2.

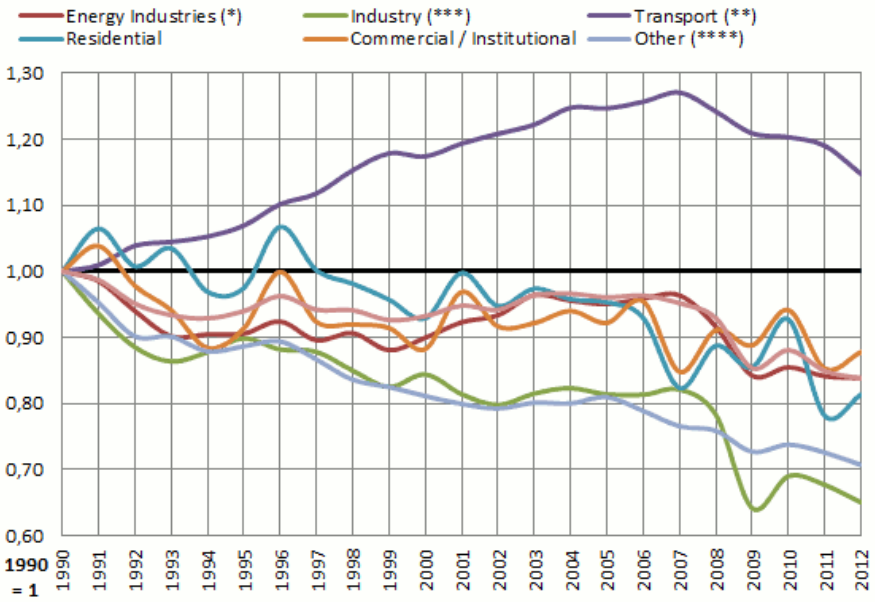


Figure 2 - Trends. Emissions EU

Table 2 - EU greenhouse gas emissions from transport and other sectors, 1990-2012

Year	Energy Industries (*)	Industry (***)	Transport (**)	Residential	Commercial / Institutional	Other (****)	Total
1990	**1**	**1**	**1**	**1**	**1**	**1**	**1**
1991	0,985009	0,935858	1,009402	1,064473	1,038497	0,952648	0,986888
1992	0,940146	0,885221	1,038667	1,007627	0,978254	0,901676	0,951123
1993	0,901696	0,863437	1,044512	1,034691	0,940998	0,90129	0,933523
1994	0,904676	0,877663	1,052493	0,969132	0,88404	0,87873	0,928836
1995	0,905661	0,89853	1,069122	0,974877	0,9135	0,886564	0,93969
1996	0,92388	0,881748	1,101439	1,067184	0,999025	0,893779	0,96242
1997	0,895784	0,87812	1,117612	1,001597	0,92356	0,866598	0,941917
1998	0,906355	0,849759	1,152909	0,981389	0,91966	0,835896	0,94114
1999	0,880741	0,825083	1,178453	0,957216	0,914411	0,824942	0,926251
2000	0,899507	0,843929	1,173855	0,92876	0,882446	0,811186	0,932151
2001	0,922864	0,814155	1,193211	0,997483	0,968569	0,799316	0,947878
2002	0,933518	0,797772	1,208118	0,947534	0,916662	0,792261	0,942007
2003	0,96404	0,815139	1,221933	0,97375	0,921653	0,801256	0,96384
2004	0,955689	0,823187	1,247299	0,957789	0,940043	0,799993	0,966126
2005	0,950459	0,813706	1,246657	0,953045	0,921989	0,809524	0,960628
2006	0,958817	0,813105	1,256491	0,929536	0,954653	0,788715	0,963339
2007	0,963525	0,82111	1,270389	0,823473	0,84789	0,765577	0,95188
2008	0,916295	0,782824	1,241761	0,887227	0,910777	0,758746	0,929195
2009	0,842117	0,641736	1,20888	0,854665	0,888021	0,726984	0,853641
2010	0,854646	0,690071	1,202982	0,92726	0,941323	0,737723	0,880728
2011	0,841354	0,676807	1,189913	0,78135	0,852818	0,725661	0,849087
2012	0,838352	0,649915	1,147048	0,813597	0,877979	0,707035	0,837749

Notes: (*) Excluding LULUCF (Land Use, Land – Use Change and Forestry) emissions and International Bunkers (**) Excluding International Bunkers (international traffic departing from the EU) (***) Emissions from Manufacturing and Construction and Industrial Processes (****) Emissions from Fuel Combustion in Agriculture/Forestry/Fisheries, Other (Not elsewhere specified), Fugitive Emissions from Fuels, Solvent and Other Product Use, Waste, Other.
EU greenhouse gas emissions from transport and other sectors, 1990-2012

2.2.2 Emissions in the longer term

Significant reductions in greenhouse gas emissions from transport are required if the EU is to achieve its long-term goals. Therefore, the Commission carried out a study to investigate the sorts of policies and technologies that are needed to achieve substantial emission reductions by 2050.

The full reports and an interactive tool showing potential greenhouse gas emission reductions from different technologies and policies can be found at the:

"EU Transport GHG: Routes to 2050" project.

In respect of the PT1701 pre-study, such commitments will impact journey options for transport users in order for Governments to meet their political commitments, and meet their sustainability objectives, and will place pressures on Urban Administrations to use all means available, (especially Urban-ITS) to achieve these objectives.

Typical overall TM objectives are for example:

- Safety objectives:
- Efficiency objectives:
  - …
- Environmental impact objectives:
  - Reduce energy consumption and traffic emissions
  - Decrease of car emissions by X% until XXXX
  - Increase attractiveness of public transport / Encourage modal shift
  - ....

Note: Emission problems in part of the networks with high volumes of polluting vehicles and topological features that prevent proper air circulation in the atmosphere;

2.2.3 Pollution control

Given that the 'Urban Consolidation Centre' functionality is probably already being largely performed by commercial organisations and the postal and freight delivery sectors, the vehicle kilometre efficiencies are already substantively achieved, and a competitive commercial environment already exists. The problem remaining here, is therefore not congestion, but pollution.

The role of the urban authority here is more regulatory, to restrict access to, or financially punish, high emitting vehicles; and/or to restrict their access timetable to times when the pollution is lower (e.g. night-time/off peak) or to limit the number of vehicles within the zone in any time-window.

Regulation is outside the scope of this pre-study, but standards to support that regulation, collect emission data end enforce, will benefit from, indeed will probably only be achievable with, the support of or reference to standards.

Data about high emissions area, ULEZ (ultra low emission zones) and other environmental data can be shared which can improve the overall environmental strategy of UCCs. See UL 0219 Urban Low Emission Zone Management below.

2.2.4 Emissions monitoring

It is clear that in the short to medium term, the monitoring and control of emissions remains a key area for Urban-ITS. 'Low Emission Zones' and other monitoring and enforcement measures need to be based on common data concepts.

2.2.5 Geofencing

Geofencing uses GNSS coordinates to create a virtual zone around a particular location which activates the electric mode of hybrid vehicle buses with extended zero emission capability and other hybrid vehicles when they enter the ultra-low emission zone or other zones. This can be configured to allow 'hard zones', where buses, certain vehicles/taxis must always run in electric mode and 'soft zones' where they run in electric mode if there is enough battery charge remaining. The technology could also be used in low emission neighborhoods and other roads with high concentrations of NOx and high levels of pedestrian activity. Clearly the data offered by, and used by Urban Administrations enforcing geofenced areas, and the data available to vehicles within geofenced areas, needs to be consistent.

2.3 Indicators

	Target	Minimum
Effectiveness		
Project progress in relation to the schedule specified in this proposal	In time	In time
Stakeholder Engagement		
The PT1701 Recommendations were developed as a result of • Phase 1: Expert study and outreach to known subject area experts/practitioners. • Phase 2: Outreach feedback to proposed recommendations, especially from Urban Administrations • Phase 3 consolidation, association and amalgamation See PT1701 Final report http://media.wix.com/ugd/a7dbd0_8cc42a2831df44f6a2e040f65036579c.pdf Outreach feedback that shaped the PT1701 final deliverable came from 116 urban authority/related outreach direct contacts	CEN/TC 278, ISO/TC 204 ISO/ TC 211 ETSI – ITS POLIS TISA DATEX II	Minimum from 3 different stakeholder groups.
The modus operandi of CEN, based upon a network of national standardisation bodies, is geared towards involving all parties concerned		
Dissemination Resuls		
Provide project overview on CEN/TC 278 website: www.TC 278.eu	Project overview + updates	Project overview
The deliverable will be disseminated to the CEN/TC 278 members at three occasions (Working Draft, TC review and Formal Vote) and at WG level more frequently. Participation in TC 278 and at WG level is open to any interested party.	3	2

2.4 Impact

The project will assist Urban Administrations to:

Manage emissions in urban areas

The Technical Specification developed by this Project Team will enable data to be made in a consistent form available to vehicles entering and within the Urban area; will enable enforcement to be applied in a consistent manner; will enable Geofencing projects (advisory or mandatory) to be developed and managed, and Low Emission Zones (LEZ) and Ultra-Low Emission Zones (ULEZ) to be operated and policed consistently.

2.5 SMEs, consumer organization and environmental and societal stakeholder representation (Art.17(4) (b) of standardization regulation No 1025/2012) example– Annex III organisations (ECOS, ETUI, ANEC, SBS) involvement

The modus operandi of CEN, based upon a network of national standardisation bodies, is geared towards involving all parties concerned, including SMEs and societal stakeholders.

The following European stakeholder organizations are member of CEN/TC 278

- ANEC, the European Consumer Voice in Standardization
- ECOS, the European Environmental Citizens Organisation for Standardisation
- SBS, Small Business Standards

As member of CEN/TC 278 they can participate in CEN/TC 278 and its Working Groups and have access to all CEN/TC 278 documents.

3 Description of the tasks

3.1 Introduction

To investigate and develop standardized data and protocols for Emission Management in Urban areas, including:

- Functional Specifications based on Use Cases
- Design consistent data concepts and interfaces
- Geofencing management requirements for hybrid vehicle busses, taxis, (potentially private vehicles) for use of EV modes in pollution hotspots and residential areas

USE CASES: UL-0104; UL-0108; UL-0112; UL-0207; UL-0213; UL-0215; UL-0219; UL-0226; UL-0301; UL-0302; UL-0303 (See Annex B)

3.2 Scope

TECHNICAL SPECIFICATION

Intelligent Transport Systems — Urban-ITS — Emissions management in urban areas

A Technical Specification providing:

- Standard data and Q of S parameters for Air Quality outstations and Traffic Management Systems
- Standard data and Q of S parameters for Geofencing
- Standard data and Q of S parameters for LEZ and ULEZ
- Standard data definitions for Emission management in urban areas
- standardised geofencing protocols and transactions
- Standardised LEZ and ULEZ protocols and transactions
- Standard air quality protocols for Air Quality outstations
- Energy efficient intersections services

3.3 Workplan & Milestones

The work plan is as follows:

0	Signature of contract between CEN and the EC	Start (s)
1	Consultation or Public Call for tender and signed contract to start work	S+3
2	Kick-off meeting & Work plan for the Project Team	S+5
3	First draft ready for TC review	S+14
	Interim report	**S+16**
4	End of TC review	S+16
5	Ready for Formal Vote	S+19

6	Start Formal Vote	S+22
7	End Formal Vote	S+25
8	Publication	S+27
	Final Report	**S+29**

3.4 Deliverables

Interim report (S+16 months)

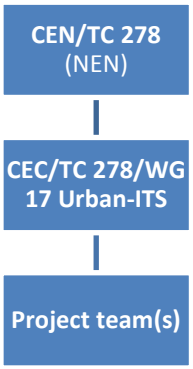
An interim report in the form of a progress report describing the work performed so far for and a first draft of the deliverables. Delivered at the stage that the first working draft is available.

Final report (S+29 months)

A final report for all tasks containing the reference of the TS published (CEN stage code 60.60)

4 EXECUTION OF THE DIFFERENT TASKS

4.1 Organisation & relationship



The work plan of the Project Team will be aligned with the standardisation process in CEN. The Project Team will co-ordinate the time schedule with the timing of TC 278/WG 17 Urban-ITS and provide deliverables in due time before their meetings. The work plan of the Project Team will give room for the given commenting and voting process within TC 278.

Regular status reports will be provided to WG17 for information and seeking assistance on issues where required. The Project Team will consider and take due account of inputs from the members of WGH17.

4.2 Subcontracting to external organizations

4.2.1 Motivation for hiring experts

The drafting of the documents requires specialized expertise which is not available to standardization managers as permanently employed by CEN and its member NEN. This is the justification for the Commission financial support.

To employ such specialized experts by a CEN member would be expensive and not economically viable considering the very specific area of specialization that is required for the execution of this contract. To engage the services of the appropriate specialist experts from the market is more cost-

effective. This sub-contracting also enables the quick availability of the drafts to enter the consensus building and validation processes, which are CEN's core business.

The management and administration of the consensus building and validation process with the aim to publish the end results as a standards deliverable is the responsibility of the CEN National Standards Body, in this case NEN.

CEN has a standard methodology to select specialized experts for a so called Project Teams. Project Team experts are selected via a consultation or Public Call for tender. A balanced composition of the different stakeholders (e.g. in terms of expertise) is preferred.

For the Project Teams in relation to this Grant, experts should have specific expertise and knowledge, which will be the main criterion for their selection and which is described in detail below.

4.2.2 Expertise required

A project team of 3 persons will be needed, comprising expertise in the needs of urban administration management of emissions data and systems, and knowledge of requirements for standardization.

Expert EM 1: Project Team leader	
Description	*Requirements*
The PT leader is responsible for the formal reporting to NEN, for moderating the work in the PT in order to achieve reasonable consensus inside the PT, and act as the interface to the 'parent body' CEN/ TC 278/WG 17 and liaises with other external groups. — project management (timeframe, indicators etc.); — organise and manage the project team, — organize and chair physical and e-meetings, — responsible for initiation, management, development and coordination of the deliverable. Lead and conduct research into the needs of urban administrations regarding standards to support emissions management (This will be a significant undertaking in this evolving area). Research into area where further investigation/research is needed.	Detailed knowledge of CEN standardisation system, plus a general knowledge of ITS systems and Urban-ITS in particular and detailed knowledge of the PT1701 work and its report. Standardisation Team experience (preferably standardisation team leadership expertise). Experience in undertaking research surveys and analyzing needs is more important than knowledge of particular practices for emissions management, although a high level understanding of emissions management techniques is needed.
Expert EM 2: Urban Administration Expert – LEZ and Geofencing	
Description	*Requirements*
Provide detailed expertise of data and protocol requirements for LEZ and Geofencing.	Detailed knowledge and experience of Urban Administration practices and procedures for managing LEZ, Geofencing and air quality data collection, plus a knowledge of the PT1701 context and its recommendations.
Expert EM 3: Urban Administration Expert : Traffic Management and Environment	
Description	*Requirements*
Provide detailed expertise of data and protocol requirements for the use of environmental/pollution information in traffic management systems. Knowledge of PT 1701 context and Recommendations.	Detailed knowledge in the use of data in traffic management systems, especially Energy efficient intersections services.

The role 'Editor' will be carried out by one of the above mentioned experts.

Editor EM	
Description	*Requirements*
Developing, revising and editing EM1 deliverables (which may be one combined deliverable of 100-150 pages, or may be several shorter deliverables)	Detailed knowledge of CEN deliverables development rules, structure and procedures. MS WORD & MS OFFICE Apps.

4.2.3 Travel requirement

It is anticipated that much of the work can be undertaken individually and shared electronically. With such a small group Skype/Gotomeeting can be used. Probably 3-5 physical meetings will be required (to be agreed/decided by PT members amongst themselves).

NOTE The travel budget will be part of the man-day tariff.