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**FINAL MEETING OF THE TECHNICAL WORKING GROUP FOR THE REFERENCE
DOCUMENT ON BEST ENVIRONMENTAL MANAGEMENT PRACTICES IN THE
PUBLIC ADMINISTRATION SECTOR**

Sevilla, 28th and 29th June 2012

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1. Introduction

The Community Eco-Management and Audit Scheme (hereafter EMAS) was originally established in 1993 by Regulation (EC) No 1836/93. This voluntary scheme was originally restricted to companies from industrial sectors. EMAS was revised in 2001 by Regulation (EC) No 761/2001 to allow participation by organisations from all economic sectors. A second revision of EMAS was recently undertaken, called EMAS III, reflected in Regulation (EC) No 1221/2009. This new regulation foresees the development of sectoral reference documents on best environmental management practice (Article 4.6). The goal of this workshop was to bring stakeholders together to discuss on the background report of the reference document for the public administration sector.

2. Opening of the workshop and Introduction to EMAS Sectoral Reference Documents

The chairman, Harald Schöenberger, opened the session and welcomed the participants. Working group members presented themselves and summarised their experience in public administration, environmental assessment and EMAS. A list of participants, including contact details, is provided in Annex 1. The meeting agenda (Annex 2) was accepted without changes. Annex 3 summarises information and links working group members of the IPTS during the meeting. The presentations given during the meeting by IPTS were sent prior to the meeting and are not attached. The presentation of Holger Robrecht is sent along with this minutes.

The goals of the meeting and the voluntary nature of the descriptive sectoral reference document (SRD) were presented in a brief presentation. The main purpose of the meeting was to conclude on appropriate indicators and benchmarks, refine the list of best practices, identify gaps and collect information for further document development. The scope of the SRD was summarised.

The frontrunner approach was explained, stating the importance of using, if possible, process-level indicators that are comparable across organisations and linking benchmarks of excellence with frontrunner performance. It was agreed that frontrunners are usually identifiable as organisations that have been collecting environmental performance data for many years, motivated by social responsibility and economic efficiency. They are often more willing to share information.

Sectoral reference document was implemented in EMAS also to facilitate registration, but the main reason is to have references on the environmental performance for organisations, helping them to focus on the relevant environmental aspects, as stated in Recital 19 of the regulation. As public administrations have some concerns on the applicability of core indicators in EMAS registration, the use of SRD will be very useful as a help for that. As well, documents will be revised periodically. The character of the document was further explained: it can not be mandatory for EMAS registration, but a useful source of information and a reference for the evaluation of the performance, but without any compliance requirement.

3. Overview of the document

Holger Robrecht provided an overview of the approach to the development of the background report for the Public Administration (PA) Sectoral Reference Document (SRD). He co-ordinated a consortium consisting of ICLEI, the Lake Constance Foundation and Ambiente Italia which drafted this background report posted on the IPTS website. It was remarked the need to go for regional/local level, as the replication of best environmental management practices would have higher impact due to the huge scope (more than 82000 municipalities) and the similarity of processes. So, the report focuses on cities and local authorities (LAs) in order to effectively leverage maximum environmental benefit whilst maintaining a manageable scope and ensuring transferable best practice. Holger emphasised that the provision of services is a core function of PA, and, therefore represent a direct environmental aspect. In the PA sector, depending on the organization concerned, certain environmental aspects may be considered as direct or indirect environmental aspects. There is no clear borderline. However,

where the PA has direct management control or at least significant influence with respect to measures or activities to improve the environmental performance, it is of importance to provide information concerned and it is of less importance whether the considered environmental aspect is considered to be direct or indirect."

It was noted that aspects traditionally classified as direct under EMAS, such as office operations, should be included within the document, even though their environmental impact is small compared with service provision and planning functions of PA. Office operations and building management will be included in the Integrated Environmental Management System BEMPs chapter, that will be moved to the beginning of the BEMP part of the document.

4. Indicators and benchmarks

On the basis of the background document, it was not possible to draw conclusions on a final list of environmental performance indicators and benchmarks of excellence. For this purpose, the BEMP techniques will have to be developed further using additional data and information.

Below is a summary of the discussion in relation to each theme within the document.

4.1. Mobility

The three main objectives of the best practice approach to mobility management by PA are: (i) deter car use; (ii) encourage use of public transport; (iii) encourage soft mobility.

Sustainability Urban Mobility Plan.

This BEMP requires integration with other BEMPs such as air quality management and land planning, and between local and regional administrations. Monitoring and benchmarking against quantitative targets is also best practice, and indicators could include CO₂ and non-CO₂ transport emissions per capita. The Netherlands' Energy Project has been underway for the past three years, and must include transport energy consumption. IPTS will explore this.

Fiscal measures are important. KD will provide information on an experiment in the Netherlands where people were paid not to take their car in rush hour traffic. Differential taxation based on vehicle emission rating is important (could include NO_x and PM as well as CO₂), but these measures are often implemented at the national, rather than local, level. The average parking tariff applied in an area could indicate deterrence of car use. It was noted that measures to reduce car use should allow for private transport by elderly people with reduced mobility who may not be able to walk to public transport stops.

PA may undertake measures to reduce staff transport in cars and planes, and to reduce the impact of distance travelled. For PA and PA service fleets, car sharing, bike schemes (e.g. mileage rates for cycling) and computerised routing (e.g. for social housing maintenance) can reduce transport distances by car. PA departments and companies may also change staff or parking spaces, and provide incentives for staff to decline access to a parking space at work. Encouraging and enabling teleworking is another way in which enterprises can reduce transport impacts, though may be somewhat offset by increased home energy consumption for e.g. daytime heating and lighting. In the Netherlands, PA and private companies form consortia to buy electric cars in volume at discounted rates (this may be included in the green procurement BEMP). Finally, transport related emissions may be offset using certified CO₂ offset schemes.

The final SRD will differentiate and describe best practice for both integrated ticketing and network integration. Measures to reduce car use in cities should be accompanied by schemes to reduce car use outside of cities by commuters. A number of indicators and benchmarks may not be applicable to rural areas where population density is low. This will be referred to under the 'applicability' heading for

each BEMP. Nonetheless, all urban and sub-urban areas, and major commuting areas, fall within the scope of this BEMP. Tourist areas may be associated with peaks in demand for public transport, as referred to in the SRD for tourism. 'Affected population' rather than 'inhabitants' could be used as the denominator for transport indicators where these data are available, in order to capture non-resident population numbers. Specifically in relation to biogas buses, Heidelberg city council experienced limitations in the gradient that such buses are able to deal with (the supplier could overcome this by modifying the engine, but only for an order above 1000 buses).

It was cautioned that mobility is a controversial and divisive topic. For example, many of the best practice measures discussed were already contained in a transport plan for Heidelberg published in 1994, but have yet to be implemented owing to logistical and political challenges.

Additional measures that could be included under the SUMP technique include: use of consolidation centres on outskirts of cities to optimise delivery logistics and minimise HGV use in cities (MP will provide info), provision of additional public transport to events, car sharing/car clubs (care will be taken with the definition, as in the UK car sharing refers to multiple occupancy rather than multiple ownership), education through schools (e.g. providing alternative, non-car, transport options at least one day per week). Bremen may offer an example of best practice for car clubs.

There is no universal definition of 'green vehicles', leading to the conclusion that the percentage of the vehicle fleet (PA and/or public transport service) running on alternative fuel types should be reported, rather than an aggregate 'green' fraction. In relation to this point, electric vehicles can only be regarded as 'green' if they run on renewable electricity, although they are associated with significant urban air quality benefits where they displace petrol/diesel cars.

Cycling network.

The focus of this BEMP is on the provision of cycling infrastructure (cycle lanes, priority signals, route planners, etc) and encouragement of a cycling culture. This BEMP could be expanded to include all 'soft' mobility – especially walking. For example, 30 UNESCO cities are working to create open spaces around historical areas in order to encourage walking.

In relation to the proposed benchmark based on the frequency of cycling within Amsterdam city centre (i.e. 55% journeys by bicycle), it was cautioned that such an ambitious benchmark may not be applicable to other cities with less favourable geography (i.e. hills) and a less evolved cycling culture. Indicators could also reflect the distance travelled by bicycle, which is increasing in the Netherlands owing to the introduction of battery-assisted bicycles. More generally, population density will affect benchmarks for e.g. cycle lane length per inhabitant.

Safety of cycling is a key issue, and the number (or fraction) of cyclists who are injured annually could be a relevant indicator. One practical measure to improve cycle lane safety is for lane testers to use the lanes with a camera fitted to their helmets in order to identify potential danger spots. The number of public bike parking slots provided is another possible indicator, as is permission to take bikes onto trains. Freiburg train station was mentioned as a possible example of best practice for bike parking provision. The question of whether motorbikes should also be encouraged over cars, and how these impact on cycling, was brought up.

Electric vehicles.

This BEMP focuses on the promotion of electric vehicle uptake in preference of petrol/diesel vehicles, and measures to encourage the use of renewable electricity for charging. It could be extended to include all low-emission vehicles, including compressed natural gas and biogas. Helsinki, Stockholm (and other Swedish cities) were referred to as possible examples of best practice, with high target penetration rates for electric vehicles by 2050.

HR will send IPTS a Lifecycle costing tool developed by ICLEI for the Smart, Sustainable Procurement project, which can be used to inform vehicle selection in green procurement (this may be relevant for GPP BEMP). Another indicator of best practice is that PA planning requirements include charging points in new buildings (e.g. Barcelona).

4.2. Environmental services

Waste management

This BEMP is based on the hierarchy for waste management. The IPTS requires data on mass streams for different waste fractions for municipalities and it was recommended to elaborate more the list of indicators. It was noted that many best practice measures referred to are regarded as normal practice required by legislation in Germany. Nonetheless, they remain valid as best practice for PA in other countries. The indicator kg waste per employee in PA buildings should be normalised instead against the number of building users. Cordoba provides some useful examples of waste reuse and recycling, including an eco park where extensive composting is performed (MS will provide info). Return and deposit systems can achieve high recovery rates of up to 98%, but are usually implemented at a national level (MH will provide data). Collection of hazardous waste is a basic element of best practice.

Within Hungary, it is mandatory for PAs to have a waste management plan, and waste charging can be decided by LAs. Some pricing strategies may be referred to in the text to reduce landfilling, especially for green waste and biomass, and it was recommended to develop indicators for collection, where the municipality has direct control. The quantity of energy generated from anaerobic digestion is another possible indicator. There remains debate over whether incineration with energy recovery can be regarded as equivalent to recycling with respect to material efficiency.

Other best practice measures include the multilingual identification of containers, especially in important tourist cities and schemes to encourage material exchange across companies or individuals (MP will provide an example from Barcelona). It was highlighted that GDP is a major determinant of waste generation, and could be used alongside number of inhabitants as a normalisation factor. As well, it was proposed to use the term "affected population" for normalisation. Commercial waste can be managed with municipal waste to achieve economies of scale, but to ensure more accurate comparison of household waste generation, household waste data can be extracted from most PA datasets. The percentage area covered by separate waste collection is another relevant indicator. Relevant data sources include the European Green Capital award, the city of Jonköping in Sweden (a good example of incineration heat recovery for district heating), data from Sandwell Homes on waste recycling (AF will provide) and data from Cordoba (MS will provide).

Noise

Implementing an Integrated Noise Action Plan is best practice, and this BEMP includes measures to minimise vibrations. The IPTS require information on Len (level of noise evening and night) and front-runner examples. It was noted that pedestrians in the inner city are the main source of noise in Heidelberg, and this requires action by planning and licensing authorities, so land use should also be considered in the benchmarking of noise. Noise maps may fail to capture these sources where there is an exclusive focus on traffic sources. Link to mobility for this chapter is required. An unusual measure to reduce pedestrian noise (e.g. after events) is the provision of free lollipops. Night-time restrictions on HGVs are important to reduce noise and vibrations in urban areas, and asphalt characteristics are important.

Air quality

Implementing an Integrated Air Quality Plan is best practice. Indicators relate to the Air Quality Directive. Best practice in this case is compliance with this directive (many targets remain challenging for urban areas). IPTS is seeking data for ozone exceeding days. Pollen and allergens concentration could be included as an air quality parameter. MH will provide information on the Swiss approach to guide household procurement and use of wood stoves in order to minimize PM emissions. It was noted that the forthcoming Euro 6 standard for new vehicles will address these issues. There is a question of how much ozone and other regional-level air quality parameters can be influenced by Local Authorities (LAs). It was recommended describing information tools between neighbor cities.

In general, care should be taken to avoid 'false' benchmarks that cannot be achieved at e.g. local level. For instance, Heidelberg was able to reduce by 2% PM emissions by banning traffic circulation.

Stockholm city council can provide examples of measures to reduce PM2.5 and PM10. Studded tires are a problem in Sweden. PA will send the IPTS air quality data reported by the Observatorio de la Sostenibilidad en España for Spanish cities. TK will also provide IPTS with air quality information for Europe. KD will provide good practice examples on provision of integrated environmental services, and on new asphalt that can reduce noise. Silent tires are also an option to reduce traffic noise, though are associated with a speed limitation. Odours impact was recommended to be taken into account for the document.

4.3. Urban water management

Integrated Urban Water Management

The IPTS is seeking data for frontrunner rainwater harvesting percentages and examples of treated wastewater reuse for e.g. agriculture. Data on rural population percentages connected to municipal WWTP are also required. With respect to indicators, the protection of all surface water resources, not just those used to supply drinking water, is important. MH will provide examples of shoreline protection for lakes and low-cost WW treatment based on floating macrophyte 'green filters'. MP can provide examples from Spain of municipalities and cities with consumption < 105 L per capita per day, supporting the ambitious proposed benchmark of 100 L per capita per day. It was noted that in some cases, water saving measures can be seen as a threat to achieving low pollutant concentration in effluent water (e.g. for ammonia). In Germany, best practice is driven by legislation, and household WWT fees are calculated based on household wastewater generation plus the size of the sealed area around the house. Although 'affected population' may be a more accurate indicator than 'inhabitant' for this BEMP, there is no standardised and reliable estimation procedure for the former, so that it may be necessary to rely upon the latter.

'Authorisation of discharge to soil' will be removed as an indicator because it refers to bad practice. Disinfection of WW using hypochlorite is applied in the US, but is not best practice; in Europe, UV treatment may be applied for this purpose. The energy efficiency of WW treatment should also be benchmarked, expressed as kWh primary energy consumed per m³ WW treated. Meanwhile, for nutrient-sensitive receiving waters, 80% phosphorus removal is too low for a benchmark (90-95% removal is achievable). It may be too early to conclude on best practice for the removal of endocrine disrupting chemicals, but Stockholm can provide examples of best practice for mercury, lead and cadmium concentrations in effluent (HL will provide information). Over 100% of on-site energy use can be supplied by conversion of influent solid material energy content, so the proposed 70% benchmark will be revised upwards. Constructed wetlands may be used for centralised WWTP (e.g. for Stockholm).

The benchmark for wastewater treatment in centralised WWTP could be amended to 100% 'appropriate WW treatment' in order to extend applicability to rural areas. It was noted that benchmarks of excellence for this BEMP cannot be below the challenging targets established under the Water Framework Directive (i.e. 'good' ecological status of all waters). A recommendation to include household wastewater treatment plant was also made, specifically for rural areas.

Leakage management

TB can provide numbers for benchmarks on leakage loss for water supply in Poland. Infiltration of groundwater to sewers depends on many variables such as age and geographical spread of the network. For leakage detection, some examples of ICT systems for online monitoring may be added to the document. A second indicator refers to the percentage of the network that is inspected/improved every year. Indicators that focus on outcomes rather than 'throughput' processes may provide a useful overview of performance (e.g. final water consumption per capita captures leakage rate).

Sludge reuse for energy crops

IPTS proposes that this technique is removed from the document. There was some debate over whether incineration represents exclusive best practice for sludge management – TB will provide information on use of sludge by Swedish LAs to fertilise willow plantations used to fuel district heating systems (e.g. Enköping). This may at least be a good option for smaller WWTPs (the 10 000

inhabitant equivalent threshold for incineration should be increased, maybe to 40 000). It was noted that sludge cannot be spread on agriculture land in some German states or in the UK.

Stormwater management

Flood protection management will be included here. KD will provide IPTS with an article referring to an urban drainage benchmarking system in the Netherlands. Desealing surfaces, green roofs and garden infiltration are all covered under the sustainable water use programme for Heidelberg. Portland and Seattle provide good examples of storm water management that HL will send to IPTS. KD offered a case study description for Portland, and TB offered a case study on Chicago's 'green street' programme. Melbourne in Australia may provide an example of good practice with its 'rain garden' programme in which households are encouraged to capture rainwater for later use.

The diversion and storage of initial (first-flush) storm runoff is also important to minimise pollutant loading to surface waters. An additional measure or BEMP that could be considered is management of water bodies in anticipation of climate adaptation. The percentage of surface water infiltrated could be a new indicator.

4.4. Green spaces and biodiversity

Local Biodiversity Strategy and Action Plan.

Best practice is to include comprehensive biodiversity and habitat assessment, benchmarking, and habitat compensation schemes in a strategic action plan. The challenge is that biodiversity measures of species and abundances are not comparable across areas. Therefore, the proposed benchmark is to ensure that biodiversity is stable or increasing over time.

Numerous datasets exist at national and EU level (e.g. CORINE) that may be used to calculate land cover classes and possibly the extent of various habitats. The Spanish National Biodiversity Inventory provides a database of which species are present where. Spatial datasets for Europe and Spain have resolutions of 5 ha and 0.5-2 ha, respectively. Bird monitoring programmes may also contain data. Important indicators could include the percentage of endangered species present within an area that have a specific management plan, the number of invasive species present, and the number of agricultural varieties of various plants present. PA will send links to relevant data sources.

It was agreed that for this BEMP, descriptions of best practice measures will be more important than benchmarks. RW will send IPTS the Heidelberg action plan for biodiversity. A Spanish study of 232 municipalities with action plans will be referred to. The German biodiversity compensation law could also be described as best practice. GM will send examples from Hungary.

Long term monitoring of species number and abundance is required to detect trends in biodiversity performance. The European No Net Loss group has therefore decided that it could be better to focus on ecosystem/habitat inventories. MH will provide further information on this. Length of biotope corridors should be expressed in relation to total area.

It was noted that the core biodiversity indicator reported under EMAS in the UK – m² green area – is meaningless. Middlemarch in the UK propose that the percentage of all green space that is managed is used as an indicator, with management effectiveness indicated by species abundance. This may be feasible for smaller organisations.

Blue green-networks.

It was noted that an indicator for connectivity will be essential, and that this should capture connectivity within urban areas and between urban and surrounding areas. Barcelona is a good example. The percentage of native species from a region found within the urban area is a good indicator, reflecting the performance of biodiversity management in relation to local biodiversity potential (another example is the percentage of local streams integrated into the blue-green network). The Conama foundation has sustainability awards for municipalities that may provide a source of information. Another possible example of best practice is the GRABs project from Manchester, referring to development of blue-green infrastructure. TB will provide contact information for a

Danish expert on GIS connectivity measurement. PA will provide IPTS with Spanish guidelines from 2007-2008 on the development of blue-green network action plans.

It was noted that the accessibility of blue-green areas to citizens is important, but that the percentage of people within e.g. 300 m of a blue-green area relates more to quality of life than the quality of the blue-green network. MH will provide information on the shoreline index developed in Italy that refers to the percentage of shorelines (lakes, rivers) that are natural, and the functionality of the riparian zone. This can be used to assess the quality of the blue part of the network.

Green roofs

This BEMP includes best practice for the construction of individual brown/green roofs and measures to encourage or require such roofs within a municipality. Green roofs are those where vegetation is directly planted, whilst brown roofs are comprised of local substrate material that is left for natural colonisation by indigenous species. It was remarked that Rotterdam may also provide an example of best practice for this BEMP. There was discussion over possible conflict between green/brown and 'blue' (i.e. solar-PV-cell-covered) roofs, but ultimately PV cells may be placed on green/brown roofs, and may even be more efficient on such roofs (MH will provide long term data on this from the German 'green roof gardener association'). Heidelberg city council has produced guidelines on combining green/brown roofs with solar PV. Also in Heidelberg, it is assumed that green/brown roofs retain 50% of rainfall when calculating split WW fees.

LAs may include specific requirements for green/brown roof construction, and also for other external green areas (lists of acceptable species, requirements to plant flowering meadows, etc) – MH will provide a list of criteria that could be used by PA. A key indicator of building biodiversity potential is the biotope area factor, expressed as the ratio of ecological (green/brown) surface to the total surface area. A level of 0.6 has been established for new buildings in Berlin. KW will provide further information. The example of Kleve in Germany was noted: local regulations require a green zone of 1.5-2 m width around each home, planted from a list of acceptable species. The abundance of wild bees would be an ideal indicator of biodiversity protection, reflecting the benefits of green roofs and native planting, but current monitoring is not well developed.

Urban sprawl

As with other aspects of biodiversity protection, current PA performance in containing urban sprawl is difficult to assess using absolute indicators because of widely differing historical development patterns. Current circumstances may also differ widely across urban areas, and thus limit the applicability of benchmarks. For example, German cities benefit from large brown field areas left by the abandonment of railway lines and US military bases. It was noted that use of dwelling/inhabitant density as an indicator may fail to reflect large seasonal variations in tourist areas, and may also fail to reflect the self-sufficiency of areas – i.e. a densely inhabited area may depend on a large area on the periphery for recreational and service provision.

4.5. Energy

Best practices for energy depend on the role of the PA: as consumer, as service provider or as a regulator in charge of decision and policy making.

In general, the list of best practices was accepted. Other techniques and approaches were indicated by the group. For instance, public lighting and district heating is revealed to be quite important. To encourage the use of renewables, property tax reduction was proposed for homes and businesses. For the development, then, it will be quite important to check also the quality of energy monitoring important – e.g. frequency, continuous, online .. as a new technique or measure. Education on energy management through e.g. demonstration projects/centres is considered important through the display of energy certificates.

For islands, self sufficient and energy independence is quite relevant, as the example of Texel and the Cradle-to-Cradle project.

Sustainable energy action plan

IPTS is seeking data on energy consumption and equivalent CO₂ data, and performance trends. It was recommended to describe financial incentives for the promotion of low-energy housing, especially for house retrofitting. In the UK, Standard Application Procedure (SAP) rates house energy and CO₂ rating. The target is to increase SAP via refurbishment, and high SAP ratings of new houses.

It was stated that a 65% CO₂ reduction by 2020 is not achievable for many cities (although this benchmark is established by Vauxjo, which already took into account 40% reductions since 1993). Heidelberg master plan being developed – ready in November 2013. As well, Frankfurt Master Plan completed, with a 2050 target for energy reduction with zero CO₂ emissions, reflecting long period required to realise retrofit and new build improvements. The basic rules for measurement of commitments should be developed in the text, as main reductions are based on changing conversion factors. Covenant of Mayors insists energy reduction must be based on constant conversion factors, so only captures demand reduction. It was recommended to consult the Sustainable Now project. Other benchmarks rather than 65% CO₂ reduction should be proposed.

District heating

The implementation of a district heating system is best practice when it is the optimum solution, and not per se, as many factors affect its performance. As well, some outstanding techniques are included in this section, as industrial waste heat recovery and the use of biomass boilers in CHP plants.

It was recommended to include volume served, as it will include also commercial clients (less inhabitants but higher demand). District cooling requires commercial demand, not economic just for residential).

Other options may be considered as heat source, e.g. geothermal sources. District cooling efficiency should be carefully considered as its efficiency is usually not high (or maybe not regarded as best solution). As well, indicators on the type of fuel source used for district heating should be included. District heating techniques is likely not be applicable for existing neighbourhoods in the UK, where this technique is currently not applied.

Use of renewable energy

The use of renewable energy sources and the purchase of green electricity under certain conditions is considered best practice. As well, financial instruments to encourage local business and homes to implement renewable energy source is considered best practice, although an assessment on its feasibility and applicability should be checked. Concern was expressed about the applicability of kWh unit for EMAS core indicators (some flexibility is considered here).

For the definition of renewable energy sources for the benchmark, it was stated that renewable energy should come from local production or neighbouring areas. For instance, Frankfurt objectives in 2050 are to have 50% local production and the rest coming from surrounding areas. As well, some definitions may be required to be developed against consideration of all biomass energy as renewable, especially in relation to biodiversity effects and in direct land use change. For education and information reasons, it is also considered as best practice the display of energy produced as best practice. As well, the concept of zero energy buildings should be expanded to zero energy areas, where the total balance is negative or even positive. Some examples will be provided for this.

Development of smart grids

Although smart grids are still in an early stage of development, the use of some elements of the smart grids may be regarded as a best practice. San dwell Homes have smart metering in all commercial buildings, but not associated with benefits such as demand distribution because they pay a flat rate. This chapter of the document will be significantly expanded with a number of new BEMP techniques, as described in the presentation.

Passive standard for public buildings/integrative approach required for all new building stock within a municipality.

The use of passive house approach for every new public building and the retrofitting of existing ones to it is considered as a best environmental management practice.

It was recommended to address the Euronet 50:50 programme for school energy reduction, including a financial incentive for owners (financial benefits shared 50:50). Benchmarks will be developed for different types of buildings. The most important is to retrofit existing buildings. It was recommended to consult two projects: (i) 'block for block' programme looking for economies of scale and modular improvements and financing options; (ii) 'energy jump' – how to achieve large necessary reductions (70%-90%), also including generation by renewables. As well, for building stock, examples on best practice for financial incentives should be given.

In terms of building materials, sand and gravel extraction industry is regarded as a key upstream impact with respect to biodiversity. PA is a major buyer and could have a requirement such as 'extraction company has a biodiversity management programme'. This is directly linked to the construction products chapter in the sectoral reference document.

Public lighting

This practice still needs development and will cover lighting strategies, efficient devices and monitoring and maintenance plans. As well, light pollution may be referred (e.g. Barcelona developed procurement guidelines for lighting and night lighting regulation e.g. for biodiversity protection, as the Starlight Initiative in Europe.).

The group proposed some examples: a hospital generating energy savings from LED installation, Sandwell Homes example of sensor-activated lighting in common outdoor areas, Cascais (Portugal) savings from low- low-energy public lighting (Smart SVP project).

4.6. Public administration management

Integrated management systems

The description of this best practice has to be further developed. The aim is to cross-refer to specific process best practice techniques through the document, providing a non-overarching assessment/management framework. Integrated management systems means that the limits of the internal management system should be expanded to the e.g. urban area, covering the activities, and also integrating other sustainability issues. Sandwell Homes have an IMS (at least partly integrated, aligned with common areas). All plans are already cross-related to City Development Plan in Heidelberg. There is a project, called CHAMP, which is focused on the implementation of integrated management systems in Baltic cities. There are other examples, as Ecoprofit (Gratz, Frankfurt, etc). In Hungary, integrated settlement management plans are required to receive state funds.

A main recommendation from the group was EMAS as the bridge with other main initiatives: e.g. by receiving funds to implement EMAS, support SMEs to introduce environmental management systems. This would also affect Corporate Social Responsibility for indicators and, as indicator, the number of EMAS registered organisations within the city. The modular approach of EMAS may be regarded as an example for the implementation, step by step, of integrated management systems.

Financial or procurement incentives should be used to encourage EMAS. It was also remarked the importance of considering sustainability, using EMAS as basis, and refer to ISO 26000 guidance.

Green public procurement

This is a framework best practice, recommending to give priority to ISO type 1 ecolabels that identify best performing products or services. Verified performance labels or specific environment related criteria can be used as a basis to select better performing products. The technique should be further developed to provide more specific examples (e.g. developing separated techniques, for instance, for building and construction services). It was pointed out that indicators on green public procurement investment should reflect the proportion to the environmental risk, i.e. prioritising products and services.

Some discussion on the requirements of environmental management system to be used as basis for GPP was held. Nevertheless, this practice would be oriented to best performing products or services rather than to the type of management system of suppliers. Guidelines of DG Environment on the implementation of GPP will be also considered.

Gaps

Gaps include public participation in decision making, event management, procurement of buildings and equipment, procurement of construction services. In the UK, PAS91 for the procurement of construction services can be used as an example. As well, the approach of Frankfurt can be considered outstanding. The participatory approach used in the Basque Country is regarded also as exemplary. The guide from UN event management will also be taken into account.

5. Way Forward

New deadlines are summarized in the table below.

Extra written comments and extra supporting info	until 15/9/2012
Final draft with filled gaps	15/12/2012
2nd commenting round and telephone/videoconf. meetings	until 31/1/2013
Final draft	to be delivered by 15/3/2013
Final Meeting	Not confirmed

6. Conclusions

There was a brief discussion about whether the title of the SRD should be changed to reflect the focus on LA, but this would not be desirable because many best practices described for LA can be applied at higher levels of PA, and the EC list of SRDs uses this definition which is also reflected in the NACE code scope summarised in the background document.

A summary of the meeting is listed below.

1. The very **constructive atmosphere** of the meeting was highly appreciated. IPTS warmly thanks all participants for their input, including promised data and information, and for their commitment to support the development of PA SRD.

2. On the basis of the background document drafted by ICLEI, the Lake Constance Foundation and Ambiente Italia, it was not possible to draw conclusions on a final list of environmental performance indicators and benchmarks of excellence. For this purpose, the **BEMP techniques will have to be developed further** using additional data and information.

3. It may be **very helpful to have another meeting** at the end of this year in order to draw conclusions on a list of environmental performance indicators and benchmarks of excellence. A large majority of participants indicated that such a meeting should be held, and about two thirds of participants indicated that they would like to participate in such meeting, held in Brussels or another accessible location, even if travel expenses could not be reimbursed.

4. The **minutes of the meeting will be sent within one week**, by 6th July at the latest. The range of data and information contributions offered by participants are documented in the minutes.

5. The approach to SRD development and the scope of the document were welcomed, although **one voice indicated that the document should focus more on direct on-site environmental aspects of PA activities**. However, this conflicts with the understanding that core PA functions, such as service provision, are in fact direct environmental aspects. **It was decided that the BEMP chapter will now start with in-house (on-site) management techniques**, including Integrated Management Plans and Green Public Procurement.

6. The **scope of the BEMP techniques described should be limited to the regional and municipality level** to maintain a manageable scope and minimize overlap with national and European level regulation/policy-making.

7. **Further work and thought will be invested in the descriptions of BEMP techniques** in relation to key legislation, especially for ambient air quality, noise, surface- and groundwater quality.

8. Concerning **biodiversity**, the development of quantitative benchmarks of excellence may not be possible owing to highly location-specific characteristics and difficulties in identifying comprehensive indicators. Nonetheless, **performance trends based on change in habitat coverage offer a promising option to be explored**.

Annex 1. List of participants (plus contacts from kick-off meeting)

Abbrev.	Participant	Organisation	Country	E-mail
HS	Harald Schoenberger	European Commission JRC-IPTS	Spain	
JG	José Luis Galvez	European Commission JRC-IPTS	Spain	
DS	David Styles	European Commission JRC-IPTS	Spain	
RH	Rolf-Jan Hoeve	European Commission DG-ENV	Belgium	
CC	Constantin Ciupagea	European Commission JRC-ES	Italy	
RP	Rana Pant	European Commission JRC-ES	Italy	
PA Pi	Iñaki Alvarez	Observatorio de la Sostenibilidad en España	Spain	
MB	Mihai Dumitru Baltador	Fundatia de perfectionare în administratie	Romania	
TB	Tomasz Bergier	The Sendzimir Foundation	Poland	
LB	Lorenzo Bono	Ambiente Italia	Italy	
AC	Angela Maria Casucci	Comune di Rosignano Marittimo	Italy	
AF	Andrew Fletcher	ESP Ltd	UK	
MH	Marion Hammerl	Lake Constance Foundation	Germany	
TK	Tarja Knudsen	European Environment Agency Denmark	Denmark	
ML	Mathias Linder	Hochbauamt Frankfurt a.M.	Germany	
HL	Helene Lindman	City of Stockholm	Sweden	
ML	Mario Lodigiani	German EMAS Advisory Board Office	Germany	
GM Ga	Gábor Molnár	Lake Balaton Development Coordination	Hungary	
MP	Maria Passalacqua	Club EMAS	Spain	
HR	Holger Robrecht	ICLEI-Local Government for Sustainability		
MS	Marcelo Sabanes	SES Efficiency	UK	
LT	Luc Thiessen	AIB-Vinçotte International SA	Belgium	
KD	Koos van Dijken	Nicis Institute	Netherlands	
KW	Katherina Wallyn	POD DO	Belgium	
RW	Raino Winkler	City of Heidelberg, Office of Env. Protection	Germany	

Annex 2. Meeting Agenda



EUROPEAN COMMISSION
 DIRECTORATE-GENERAL JRC
 JOINT RESEARCH CENTRE
 Institute for Prospective Technological Studies (Seville)
 Sustainable Production and Consumption Unit

WORKSHOP ON THE EMAS REFERENCE DOCUMENT ON BEST ENVIRONMENTAL MANAGEMENT PRACTICE FOR THE

PUBLIC ADMINISTRATION SECTOR

IN SEVILLE ON 28-29 JUNE 2012

DRAFT AGENDA

28 JUNE 2012: 15.00 – 18.30

- 15:00 - 15:15 Opening and welcome by chairperson
- 15:15 – 15:30 Purpose and goals of the workshop –HS
- 15:30 – 15:45 Sectoral Reference Documents for the retail trade, tourism and construction sectors; approach, findings, lessons learned – HS presentation followed by discussion
- 15:45 – 16:00 General overview of the background report – ICLEI presentation followed by discussion
- 16:00 – 16:30 Break
- 16:30 – 17:30 Indicators and Benchmarks of Excellence, mobility – DS presentation followed by discussion
- 17:30 – 18:30 Indicators and Benchmarks of Excellence, environmental services, JLG – presentation followed by discussion

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29 JUNE 2012: 9.00 – 17.30

- 09:00 – 10:00 Indicators and Benchmarks of Excellence, urban water management JLG – presentation followed by discussion
- 10:00 – 11:00 Indicators and Benchmarks of Excellence, green spaces and biodiversity_DS– presentation followed by discussion
- 11:00 – 11:20 Break
- 11:20 – 12:30 Indicators and Benchmarks of Excellence, energy JLG– presentation followed by discussion
- 12:30 – 13:00 Indicators and Benchmarks of Excellence, public administration management – JLG presentation followed by discussion
- 13:00 – 14:30 Lunch
- 14:30 – 15:15 Indicators and Benchmarks of Excellence: DS remaining work, – presentation followed by discussion
- 15:15 – 15:30 Way forward – presentation followed by discussion
- 15:30 – 16:00 Summary of identified gaps, information needs and TWG input
- 16:00-16:30 Break
- 16:30 – 17:00 Workshop conclusions
- 17:00 – 17:30 Any Other Business
- Close of workshop

Annex 3. Participant information commitments

Participant	Commitment
Holger Robrecht	<ul style="list-style-type: none"> – Life cycle cost assessment tool from the Smart, Sustainable Procurement project, which can be used to inform vehicle selection
Marcelo Sabanes	<ul style="list-style-type: none"> – Info on Cordoba waste management (amount, recycling rate, collection rates, etc...) – Info on Güssing, Austrian city, as energy management example – Example of Cordoba public lighting management.
Marion Hammerl	<ul style="list-style-type: none"> – Bottles return systems – Swiss guidance on wood stoves to reduce PM emissions – examples of shoreline protection for lakes and low-cost WW treatment based on floating macrophyte 'green filters' – European No Net Loss group work on ecosystem/habitat inventories – information on the shoreline index – long term data on solar PV performance on green roofs, from the German 'green roof gardener association' – list of criteria for green roofs and outdoor green areas that can be used by PA via e.g. planning regulation
Maria Passalacqua	<ul style="list-style-type: none"> – Examples of logistics optimization through consolidation centres – Info on reuse program in Barcelona – Examples on municipalities achieving 100 l/cap day in Catalonia – Info on Barcelona district cooling example
Andrew Fletcher	<ul style="list-style-type: none"> – Data on waste management indicators at Sandwell Homes
Pilar Álvarez	<ul style="list-style-type: none"> – air quality data reported by the OSE for Spanish cities. – Links to EU and Spanish databases on land use and biodiversity inventories (including CORINE and bird monitoring database) – Spanish guidelines from 2007-2008 on the development of blue-green network action plans
Tarja Knudsen	<ul style="list-style-type: none"> – air quality information for Europe.
Koos van Dijken	<ul style="list-style-type: none"> – good practice examples on provision of integrated environmental services (including experimental study where commuters paid not to use car), and on new asphalt that can reduce noise – case study description for Portland – Texel island information (self-sufficient for energy) – Info about a positive energy building of a townhall in the Netherlands

Participant	Commitment
Helene Lindman	<ul style="list-style-type: none"> – Stockholm measures for the reduction of PM air emissions – examples of best practice for reduction of mercury, lead and cadmium in water effluents – Portland and Seattle examples – District cooling examples – Info about Stockholm Royal Seaport positive energy area – Greening events practice in Stockholm
Tomasz Bergier	<ul style="list-style-type: none"> – numbers for benchmarks on leakage loss for water supply in Poland – contact details for Danish expert on GIS connectivity measurement
Raino Winkler	<ul style="list-style-type: none"> – Heidelberg action plan for biodiversity – Info on 60 ha passive house development in Heidelberg (to be completed by 2020).
Gabor Molna	<ul style="list-style-type: none"> – examples of biodiversity action plans from Hungary
Katherina Wallyn	<ul style="list-style-type: none"> – Information on the biotope area factor used in e.g. Berlin