The sole responsibility for the content of this document lies with the authors. It does not necessarily reflect the opinion of the European Union. The European Commission is not responsible for any use that may be made of the information contained therein.

ECORailS –
Energy efficiency and environmental criteria in the awarding of regional rail transport vehicles and services

Deliverable 5: Organisation of the half yearly project meetings including minutes in M6, 12, 18, 24: Project meeting M6 (5th of October 2009) in Copenhagen

Version:
1
Status:
Draft version

Draft:	**Function**	**Approval**
Martin Schipper	**Name**	
FAV	**Organisation**	
+49-30-46 302 577	**Phone**	

+49-30-46 302 588 **Fax**
mschipper@fav.de **E-Mail**

Acronym:

ECORailS

Title:

Energy efficiency and environmental criteria in the awarding of regional rail transport vehicles and services

Distribution:

Partic N°	Participant name	Participant short name	Country code
CO	TSB Innovation Agency Berlin GmbH FAV – Transport Technology Systems Network	TSB FAV	DE
CB 2	Senate Department for Urban Development	SenStadt	DE
CB 3	Pro Rail Alliance	ApS	DE
CB 4	KCW GmbH	KCW	DE
CB 5	Berlin University of Technology	TUB	DE
CB 6	Trafikstyrelsen	TSY	DK
CB 7	Transportforskningsgruppen I Borlänge AB	TFK	SE
CB 8	Province administration of Brescia	PoB	IT
CB 9	Università Commerciale "L. Bocconi"	CBO	IT
CB 10	Università di Roma "La Sapienza"	ULS	IT
CB 11	Integral Consulting RD	IRD	RO
CB 12	Universitatea POLITEHNICA din Timisoara	PUT	RO
CB 13	CFR Timisoara – National Society of Railway Transport	CFR	RO
CB 14	Budapest University of Technology and Economics	BME	HU

Change Control Datasheet

Document version	Changes	Chapters	Pages	Released by
0.1	Initial draft	All	All	Martin Schipper
0.2	Inclusion of management summary, press release and Progress Report content/deadlines	1	7-10, 17-20	Martin Schipper
0.3	Inclusion of partner comments into "results, topics, to-do's"	2	11-16	All
0.4	Updated draft of the Guidelines structure, inclusion of further comments into "results, topics, to-do's"	2, Annex I	17-18	ApS (Guidelines structure); all
1	First final draft delivery	All	All	Martin Schipper

Content

0 Agenda 6
1 Summary of the meeting 8
2 Results, topics, to-do's 12
Annex I: First draft on the Guidelines structure 18
Annex II: Press release for the kick-off ECORailS 28
Annex III: Progress Report content 30
Annex IV: Participants list 32

0 Agenda

Location:
Trafikstyrelsen
Room No. 6 & 7
Gammel Mønt 4
1117 Copenhagen K
DENMARK

5th of October 2009

Time	Topic	Responsible
10:00-10:15	Welcome & Introduction	TSB FAV, TSY
10:15-10:45	WP1 "Management": - Status of the work, Expectations and work structure / deliveries - Steps towards the pilot applications in M11, March 2010 - Progress report (M7, November 2009): Input	Martin Schipper, TSB FAV
10:45-12:00	The ECORailS webpage	TSB FAV / id praxis
12:00-13:00	WP5 "Evaluation and Validation": D15 "Validation strategy including validation exercise plan" (M7, November 2009) - Current status - Next steps / input needed - Discussion	Dan Caramann, IRD
13:00-14:00	*Lunch break*	
14:00-15:00	WP6 "Communication and Dissemination": D19 "1st draft version of Guidelines" (preliminary version in M7, November 2009) - Coverage - Structure - Discussion	Matthias Pippert, ApS
15:00-15:15	*Coffee break*	
15:15-15:45	WP4 "Pilot applications": Way ahead to the applications: - Test site description: Objectives, contents, intended lessons learned, organisations involved - Steps / needed input until the kick-off meeting WP4 on 9th-11th of December 2009 in Brescia	Guido Piccoli, PoB/ALOT; Matthias Pippert, ApS

Time	Topic	Responsible
	- Methodology for the pilot applications	
15:45-16:30	WP2 "Technologies": D6 "Technological overview with regard to energy efficiency and environmental performance, ready to be integrated into the Guidelines" (M6, October 2009) - Coverage: Technological checklist, options for service and rolling stock awarding - Environmental potentials of the technologies: Baselines for the pilot applications - Inclusion into the Guidelines - Discussion	Stefano Ricci, Emilio Cosciotti, ULS
16:30-17:15	WP3 "Legal frames and awarding procedures": D9 "Legal and economical overview incl. legal text modules for awarding ready to be integrated into the Guidelines" (M7, November 2009) - Coverage: Political and legal frameworks at EU level, political and legal situation in the pilot regions - Preparation of legally-secure text modules for energy efficient and environmental-friendly awarding - Inclusion into the Guidelines - Discussion	Oskar Jonsson, TFK
17:15	End of meeting	

Evening reception 19:30

6th of October 2009

Time	Topic	Responsible
9:00	Start of the meeting	TSB FAV
9:00-11:30	The ECORailS Guidelines: Results from the ECORailS User Platform, needs of the consortium PTA's – elaboration status, inputs needed, steps towards the 1st internal Guidelines version	Editorial Group
11:30-12:00	*Lunch break*	
12:00-14:00	Workshop on future scenarios	Editorial Group
14:00	Conclusions	TSB FAV

1 Summary of the meeting

Topics:

The topics of the project meeting covered the results for the first six project months (May 2009 – October 2009) and the identification of the next steps for M6-12 (October 2009 – April 2010). The discussion points have been as follows:

a) The Deliverables/Outputs and the time plan until the pilot application, starting in M11, 1st of March 2010. By the applications the four Public Transport Administrations (PTA's) of the consortium will test the use of the ECORailS Guidelines for a duration of 12 months until M22, 28th of February 2011. The Guidelines will be delivered before the applications in two versions: D19 "1st draft version of Guidelines", scheduled for M8, 31st of December 2009; and D20 "2nd draft version of the guidelines", scheduled for M10, 28th of February 2010.
The discussions included the logical approach of the Guidelines, the relevant contents for the applications, and the steps for feedback from the consortium PTA's and the ECORailS User Platform, for the two pre-application drafts in the time frame M6-11.

b) The definition of a baseline for the Level 1 Performance Indicators "Quantitative energy and emission savings" as stated by Annex I (page 8-9):
   - Final energy consumption (kWh or L diesel) per seatkm or
   - Final energy consumption (kWh or L diesel) per person-km (pkm)
   - Primary energy consumption per seat-km or pkm combined with electricity mix
   - CO2 emission (gram) per seat km or per person km

c) Management:
   - Input and timelines for the Progress Report, to be delivered in M7, 30th of November 2009
   - Presentation of the company ALOT ""Agency of East Lombardy for Transports and Logistics", which is proposed by the consortium member Province of Brescia (PoB) as new party for the ECORailS consortium

Results:

a) Time plan until pilot application start, structure and content of the ECORailS Guidelines version for the pilot applications

- The partners agreed on the delivery of a preliminary D19 version, which will be already available in M7, 30th of November 2009. The following content will be included:
  - A general description of the indicators (technology, operational measures) based on a preliminary technological checklist, including a selection of technologies which has been made by the PTA's
  - The state of the art, ecological effects
  - The pros and cons, potentials and limits
    - Definition
    - Methodology and technology
    - Legal and economic framework
  - Legally secure text modules including comments on use
  - Advices and comments of evaluating awarding
  - Advices and comments of monitoring the performance
- In M8, December 2009, WP4 "Pilot applications" will start with a kick-off meeting on 9th-10th of December 2009. The preliminary D19 version will

enable user-oriented feedback from the consortium PTA's and the ECORailS User Platform, to be included into D20.
- In order to establish a basis for the implementation of the pilot applications, the consortium agreed on a logical approach for the Guidelines (See the guidelines structure in Appendix I, page 17-18).

b) Baseline for the Level 1 Performance Indicators "Quantitative energy and emission savings"

- The partners discussed the necessary data input for showing the energy and emission improvements by the pilot applications. The Performance Indicators defined in Annex I, as agreed indicators from a railway system level, have to be balanced with the data availabilities at the four test sites, which are differing from each other.
- Each site will deliver the available data sources which will be examined for the potential of aggregating to the PI's.

c) Management

The needed input and timelines for the Progress Report has been presented by the coordinator TSB FAV to the consortium (See Annex III Progress Report content, including responsibilities for contributions and deadlines, pp. 19-20).
Additionally, the company ALOT has been introduced to the partners. In 2008, the Province of Brescia, with the three neighbour Provinces of Mantova, Bergamo and Cremona (the East part of Lombardy Region), has funded the new Agency ALOT for project development, analysis and marketing actions related to services and infrastructures of transports and logistics. In ALOT the four Provinces have transferred the knowledge and competence of their past EU and national projects and analysis. In this sense ALOT was established in order to act as a controlled department of the four Provinces, instrument for the mentioned matters. The Province of Brescia intends to transfer the competences and expertises for the project ECORailS, whereas ALOT is expected to act in ECORailS project under PoB coordination. Furthermore, ALOT would be the instrument to enlarge the panel of experts and stakeholders and disseminate ECORailS results on a large territory of the all East Lombardy.
No reservations against a partnership of ALOT were expressed. The consortium partners have been asked to send a confirmation letter agreeing to the entry of the new party.

Besides the topics described, the project partners highlighted in several presentations the dissemination and information activities with target group and key actor stakeholders. Within M1-6, interviews have been made with seven PTA's, four Train Operating Companies (TOC's), and one consulting company which manages awarding projects on behalf of PTA's. The interviews consisted of the following topics:

- Introduction of the project
- Identification of technological and operational measures
- Legal and economical information on the European framework and on regional contracts
- The political and system-wide framework – current situation and expectations for 2020/2030

Furthermore, already eight PTA's (besides the four PTA's taking part in the project) have expressed their interest for participation in the ECORailS User Platform, and the evaluation of the project results. A first Platform meeting has already taken place on 10th-11th of September 2009, where nine PTA's evaluated the interview results. The list below comprises the PTA and TOC interviews and interest expressions which have been made:

Organisation	Type	Country	Contribution
CFR Calatori	TOC	Romania	Interview, participation 1st User Platform
RTFC – Timisoara	TOC	Romania	Consortium member; interview
Ministry of Transport, Telecommunication and Energy, Department of Public Services	PTA	Hungary	Interview, interest expression for User Platform
MAV-Trakció Co.	TOC	Hungary	Interview
Federmobilità	PTA (Italian framework association)	Italy	Interest expression for User Platform
Province of Brescia / ALOT	PTA	Italy	Consortium member; interview
Regione Veneto	PTA	Italy	Interview
Ferrovie Nord Milano Group	TOC	Italy	Interview
Brandenburg Ministry for Infrastructure	PTA	Germany	Participation 1st User Platform
SenStadt	PTA	Germany	Consortium member; interview
VBB (Public Transport Association Berlin Brandenburg)	PTA consulting		Interview
Nahverkehrsgesellschaft Baden-Württemberg mbH	PTA	Germany	Interest expression for User Platform
Trafikstyrelsen	PTA	Denmark	Consortium member; interview
Skånetrafiken	PTA	Sweden	Interview
SLTF	PTA (Swedish framework association)	Sweden	Interest expression for User Platform
Government of Wielkopolskie Province, Department for Transport	PTA	Poland	Participation 1st User Platform
Government of Dolnośląskie Province, Department for Infrastructure	PTA	Poland	Participation 1st User Platform
UITP	a. o. PTA (Global association)	Global	Interest expression for User Platform

Activities for further interviews and the seeking of Platform participation will be made by the consortium.
Besides conducting interviews and organising the ECORailS User Platform, further introductions of the project have been made to the following stakeholders:

- Nordic PTA's
- Deutsche Bahn
- Bombardier
- SenterNovem (coordinator of the TRAINER project, on which the EACI requested active interfacing)

All presentations of the project meeting in Copenhagen have been made available to the members of the consortium.

2 Results, topics, to-do's

WP1 Management (Martin Schipper, TSB FAV)

I. Information of partners on the new ECORailS EC officer, Mr. Olav Luyckx

II. Deliveries of WP1 in the project months M1-6:
- D1 Organisation of the kick-off meeting including minutes of the meeting (Month 1)
- D2 Project management handbook incl. quality management procedures (Month 2)
- D3 Project website and flyer; update in M 8, 15, 22 (Month 3)
- D4 Risk management report, update in the interim report (Month 3)

III. ECORailS webpage www.ecorails.eu:
- Access data for the internal area will be sent (**By 16th of October 2009, TSB FAV)**
- All partners are asked to give feedback to the content and layout of the webpage **(Ongoing, all)**
- All project documents produced so far and during the project are to be uploaded **(By 23rd of October 2009 and ongoing; partners: All)**

IV. Contract amendment PoB-ALOT:
- The company ALOT has been presented by Guido Piccoli. The presentation on the company will be sent to the consortium for further information.
- All partners are asked to send an email confirming the agreement to the entry of ALOT. TSB FAV will prepare a model mail which can be used for confirmation **(By 16th of October 2009; partners: All)**

V. Quality management
- For the elaboration and storage of documents and information, all partners have to be aware of the quality management according to D2 "Project management handbook incl. quality management procedures" (M2)

VI. Project communication:
- Information should be sent to all relevant partners or to the overall consortium, in order to guarantee a seamless communication and update flow

WP2 Technologies (Stefano Ricci, Emilio Cosciotti, ULS)
- D6 "Technological overview with regard to energy efficiency and environmental performance, ready to be integrated into the Guidelines": Last inputs available by 6th of October 2009, compilation of the document for internal review **(By 16th of October 2009 available for internal review, ULS, WP2)**
- The assignment of D6 and the Guidelines structure is to be done **(By 23rd of October 2009, ULS, ApS)**
- The use of UIC leaflet 345 "Environmental specifications for new rolling stock", as standard for the procurement by Train Operating Companies, will be referred to and explained in the Guidelines, with respect to the use, and effects/conclusions for the awarding of PTA's
    - Purchase and clarification of the common project use of the leaflet by TSB FAV **(By 9th of October 2009, TSB FAV)**
    - To be discussed are the aspects of the leaflet which will be analysed, as well as its assignment to the different modes of awarding **(By 20th of November 2009, ULS, WP2, TSY, ApS)**
- Use of the UIC/UNIFE "Draft standard service profiles" for the evaluation/validation, and calculation of the energy performance and energy improvements. The documents have been provided by the Railenergy coordinator UNIFE **(7th of October 2009)**

    - The concrete use of the service profiles in ECORailS will be proposed, basing on the project needs and the available resources **(By 12th of October 2009, TUB)**
- The Key Performance Indicators defined by Railenergy will be sent to WP2 for further analysis **(By 9th of October 2009, TSY)**
- The measurement of the Performance Indicators regarding quantitative energy and emission savings, as defined in Annex I, page 8-9, has to be enabled:
    - Final energy consumption (kWh or L diesel) per seatkm or
    - Final energy consumption (kWh or L diesel) per person-km (pkm)
    - Primary energy consumption per seat-km or person-km (pkm) combined with electricity mix (EU statistics) leads to this CO2 indicator:
    - CO2 emission (gram) per seat km or per person km

    Therefore the data availability is to be clarified **(By 23rd of October 2009. CFR, IRD, PoB/ALOT, TSY, SenStadt, TSB FAV)**
- Level of technological inclusion: The consortium PTA's intend to give feedback which technologies/operational measures or technology/operational clusters they will cover in the pilot applications. The PTA's will select in a flexible approach either single solutions or clusters **(By 20th of October 2009, WP4)**
    - The consortium agreed to focus not on specific technologies, but on technological areas for improvement
    - A first selection of relevant indicators and single solutions/clusters has been made. Furthermore, the inclusion of system-wide indicators, used by the PTA's when measuring the performances achieved by the Guidelines in the pilot applications, has been discussed:
        - Direct indicators (kWh/trainkm)
        - Weight per seat a. o. indirect indicators
        - Eco-Driving
        - Parked trains (stand-by functions)
        - Cluster energy recovery (both diesel and electric)
        - Energy storage
    - WP2 will qualify the technological selection as follows:
        - Energy saving potential **(Technologies: PUT; operational measures: ULS)**
        - Emissions saving potential **(TUB)**
        - Economic potential (on LCC basis) **(TUB, ULS)**
        - Implementation time **(Technologies: PUT; operational measures: BME) (All inputs by 20th of November 2009)**
    - The PTA's defined amortisation as the relevant economic factor (driven by additional payments for advanced energy solutions, and the technical life)
- The LCC/CBA calculation is to be continued. The appropriate position in the Guidelines structure has been discussed and proposed after Part III, chapter 4 (due to the restructuring and renumbering of the chapters in part III, the LCC/CBA calculation has been included as chapter 7 in the revised version of the Guidelines structure)
- The results of the technology assessments of Railenergy will be available in 2010. They are to be included into the final version of the Guidelines **(to be delivered in M24, April 2011, ApS, TSY)**
- The steps and milestones for the inclusion should be clarified **(to be done by M12, April 2010; ApS, TSY)**

<u>WP3 Legal frames and awarding procedures (Oskar Jonsson, TFK)</u>

- D9 "Legal and economical overview incl. legal text modules for awarding ready to be integrated into the Guidelines" **(By 16th of November 2009 available for internal review, TFK, WP3)** – timeline:
    - Allocation of resources for feedback process **(Calendar Week 45-46 (starting from 2nd of November 2009))**
    - All necessary input from WP3-partners to be delivered to TFK **(15th of November 2009)**
    - Finalization of the Guidelines **(16th-20th of November 2009)**
    - Editing process together with WP6 **(20th-30th of November 2009) (TFK, WP3)**
- The definition of legally-secure text modules has been discussed
    - Legally secure – The "secureness" will be tested in the pilots, for the 1st and 2nd draft – are the required technology/measure in compliance with European and national law regarding:
        - Non discriminative
        - Transparency
        - Relevance for the subject
        - Compliance to different awarding systems
    - 1st draft will provide examples of text modules – but the "real" text module should be a result from the pilot to be included as examples in the final version
    - The legal security should be commented with examples and court decisions. Additionally, it has to be kept in mind that the definition of legal security may be different from country to country
    - Furthermore, the text modules could be available in two levels: High-level (how to manage the dynamic aspects of contracts – legal security is here to be included) and concrete level (how to write modules correctly for specific technological items **(By M10, February 2010, and ongoing by M23, March 2011; partner: TFK)**

<u>WP4 Pilot applications (Guido Piccoli, Ferdinando Stanta, PoB, ALOT)</u>

- Definition of pilot site scope and application milestones (Work Breakdown Structure) ongoing. It is intended to have the scope and milestones available for the WP4 kick-off meeting in Brescia on 9th-11th of December 2009 **(By 30th of November 2009, SenStadt, TSB FAV, ApS, TSY, PoB/ALOT, IRD, CFR)**
    - Sending the proposals of Work Breakdown Structure and selection of pilot application relevant technologies/measures to TSY as structure information for pilot description **(By 30th of October 2009, SenStadt, TSB FAV, ApS, TSY, PoB/ALOT, IRD, CFR)**
- The collaborative and parallel approach between WP4 and WP5 has been discussed: WP5 details out the measurement of the Performance Indicators on the basis of the available data showing the current energy performance

<u>WP5 Evaluation and Validation (Dan Caraman, IRD)</u>

- D15 "Validation strategy including validation exercise plan" **(By 18th of November 2009 available for internal review, IRD, WP5, all)**:
    - A first version has been sent out by IRD on 2nd of October 2009.
    - Input by WP5 partners asked for the respective pilot application sites according to the chapters defined by IRD
    - Additionally, overall check of the first draft. All consortium partners are asked to give feedback **(IRD, TFK, PoB/ALOT, TSB FAV; further input by remaining consortium partners asked):**

Name	Responsible	Milestone
D15- Presentation Copenhagen - Structure - First Draft	IRD	05.10.2009
Partner feedback and contributions	WP5 partners ECORailS partners	23.10.2009
D15 First version	IRD	10.11.2009
Partner Points of view	WP5 partners, ECORailS partners	18.11.2009
D15 Final Version	IRD	27.11.2009

- The consortium agreed that the baseline for the pilot applications has to be covered by D15.
    - The respective pilot application sites will provide the vehicle related data (fleet type, standard number, etc.) and the current energy performance according to the Performance Indicators showing the quantitative energy emission and CO2 reduction savings:
    - Final energy consumption (kWh or L diesel) per seatkm or
    - Final energy consumption (kWh or L diesel) per person-km (pkm)
    - Primary energy consumption per seat-km or person-km (pkm) combined with electricity mix (EU statistics) leads to this CO2 indicator:
    - CO2 emission (gram) per seat km or per person km **(By 31st of October 2009; partners: SenStadt, TSB FAV, ApS, TSY, PoB/ALOT, IRD, CFR)**
    - The data baseline should be built for the respective four pilot application sites. In a collaborative work between WP2, WP3 and WP5, the use of the baseline and the improvements measured by the applications have to be analysed regarding the informative value to show a European wide application of the Guidelines
    - This task is in the scope of D16 “Result analysis report”, to be delivered in M23 **(By March 2011, IRD, ULS, TFK, ApS)**

<u>WP6 Communication and Dissemination (Matthias Pippert, ApS)</u>

- The logic of the Guidelines approach and the relevant topics, have been agreed by the consortium. The logic basis on the basic steps as shown:
    - PTA (awarding), main approach, using direct (or indirect) indicators: kwh/train-km → Bidders (xy kwh/train km) → Contract → monitoring
    - The analysis of technologies has merely complementary functions in the ECORailS context: 1) to forecast which achievements can be reached by the PTA when using the Guidelines in their awarding; 2) as base for proving that ECORailS will achieve its KPI’s (e.g. 5%/10%/15% reduction of energy consumption); 3) for the definition of criteria which cannot be described sufficiently by general direct or indirect indicators.

    - The achievements have to follow the PTA perspectives and the Performance Indicators of ECORailS
    - A new draft of the Guidelines structure will be prepared **(By 16th of October 2009, ApS)**
- The ECORailS User Platform should be actively involved for feedback to the Guidelines logic and content. The Guidelines structure and content, presented as an outline in the first ECORailS User Platform in Berlin on 10th-11th of September 2009, will be explained in the second Platform on 21st-22nd of January 2010 for agreement of the Guidelines version which will be used for the pilot applications **(By January 2010 and ongoing, ApS)**
- Comprehensiveness of the Guidelines: The consortium agreed that the Guidelines should focus on the core aspects for including energy criteria into awarding, with a short and clear approach. Explanations on the different awarding procedures and on arguments for energy efficient awarding should be streamlined, further information given by the Guidelines annexes. The relevant aspects should be:
    - Pages number (according to Annex I 30 pages for the core text, 80 pages for the annexes)
    - Design of information
    - Criteria scope to be included
    - Logic of the Guidelines structure **(By M10, February 2010; ApS)**
- The core parts relevant for the pilot applications will be elaborated for pre-test feedback by the consortium PTA's and the ECORailS User Platform and accordingly updated for the applications, which will start on 1st of March 2010.
    - A preliminary version will be made available for the consortium PTA's, which will meet for the kick-off of WP4 on 9th-11th of December 2009 **(By 30th of November 2009, ApS)**
- The Guidelines will focus on energy criteria. Information on the use of noise and exhaust emissions will be given, by explaining the relevance and by introducing the existing methodologies **(By M10, February 2010, ApS)**
- Dissemination events in M1-6:
    - 1st ECORailS User Platform
    - Introduction to PTA's which announced interest in the project evaluation and Platform participation (No.: 14)
    - Nordic PTA's
    - Deutsche Bahn
    - Bombardier
    - 4th UIC Energy efficiency days (also interface management with the TRAINER project)
    - Please report all ECORailS-relevant dissemination activities **(Ongoing; ApS, TSB FAV)**
- The process of decision-making for awarding will be raised in the Guidelines by Part III, Chapter 1 **(By 30th of November2009, ApS)**
- Future scenario(s):
    - The future scenario(s) focus on the objective of ECORailS to achieve, with the Guidelines use, a system-wide improvement of energy efficiency for regional railway by 15% by 2020 (see Annex I).
    - Starting on the baseline of the tests, the different clusters or single solutions for technologies and operational measures will be used for showing the reachability of the objective This will be measured by the pilot applications
    - The number of scenarios (e. g. business-as-usual, realistic, optimistic, a. o.) is to be discussed

A first approach to the future scenarios will be prepared for the WP4 kick-off meeting in Brescia on 9th-11th of December 2009 **(By 8th of December 2009, ApS, TSB FAV, all).** A more detailed discussion shall be part of the training session in Brescia on 18th/19th Feb. 2010.

Annex I: First draft on the Guidelines structure

The structure below is a draft based on the input from the Copenhagen, provided by the responsible project partner ApS. The draft will be further updated according to the input from the ECORailS consortium and the ECORailS User Platform until the pilot application start in M11, 1st of March 2010:

Part I: General considerations (c. 20 pages)

Chap-ter	Sub-chap-ter	Title, keywords	Responsible for contribution/ elaboration (proposed)	Necessary for 1st and 2nd draft?
0		**Introduction** *(short, c1 page)* • Purpose to which the Guidelines were elaborated • Context (IEE – ECORailS – other European projects) • Work methodology (WPs structure and role, the users' co-operation and feedback, User platform, pilot applications , etc.)	**WP 6** (WP 1, WP 5)	yes
1		**Environmental, political and economical relevance of saving energy in passenger rail transport**	**WP 6**	yes
2		**General conceptual decisions of PTA which could influence the energy efficiency and other environmental effects of the services to be awarded** (one paragraph: Energy efficiency and passengers' needs)	**WP 6**	yes
3		**Discussion: different methods of awarding services by the PTA** *(2-3 pages)* • general description (and definition) of different methods • pros and cons (very general, possibly including a SWOT • general description how environmental criteria could be used in the different methods • Extract / comprehension of chapter 5 in part III *(This chapter will be an extract of part II and should also comprise definitions of wording like "awarding", "tendering" etc.)*	**WP 3: Tasks 3.2 (KCW), 3.3 (TFK) and 3.6 (TFK)**	yes (at least those methods which are relevant for the site studies)
4		**State of the art, present and foreseen trends** *(c5*	**WP 2:**	**yes**

		pages) *(Including short descriptions and references to PROSPER (UIC Leaflet 345) and Railenergy)*		
	4.1	Technology (rolling stock, traction technology etc.) *Including: Main issues of ee technologies can be mentioned and explained (only examples like the 11 technological clusters)*	WP 2 (tasks 2.1.1, 2.1.3)	yes
	4.2	energy-efficient operation *Including: Main issues of ee operation can be mentioned and explained (only examples like the 8 operational clusters)*	WP 2	yes
	4.3	State of the art in terms of procuring environmentally friendly railway rolling stock *Mainly including: the approach of UIC Leaflet 345 and similar projects*	TSY	yes
	4.4	Methodology to describe / to define energy consumption in terms of regional passenger transport *Including: why it is so difficult to describe the energy consumption of a train, what is the state-of-the-art* *Including: Target value: The potential is different from region to region. It should be only a description on why target values are important*	WP 2	yes
	4.5	Inclusion of energy efficiency criteria/requirements in the awarding of regional passenger services or in the procurement of vehicles for this kind of operation *Including: explaining the main ways/solutions to reach ee and eco objectives including target values (and why it is better to describe target values instead of solutions)*	WP2 (WP3, WP3.5 and 3.6 KCW contribution: The financial aspects to be taken into account for each solution)	yes
	4.6	Noise emission and pollutants	WP6	yes
5		**New rolling stock vs. old /modernised or second-hand**	**WP3 KCW (ApS)**	no
6		**Rolling stock and infrastructure** (general remarks) • showing the technological potential • showing how PTA's can act on this	**WP2 / WP3 (ULS, TFK)**	no

7		**Good-practice examples for energy-efficient and environment-friendly regional rail passenger transport**	**WP 2 / WP 6 (ULS, KCW, ApS)**	yes (1st compilation)

8		**Further considerations (future development including technological and legal aspects; noise, pollutants, other rail transport segments)** *Including: New vehicle concepts, renewable energy and alternative fuels*	**WP 6 (ApS; ULS, TFK, TSB FAV)**	no
9		**General advices: How to include environmental criteria in an awarding project**	**WP 4 (?)**	yes, but may be provisionally a part of D 13

Part II: Legal and economical framework (c. 20 pages)

Chap-ter	Sub-chap-ter	Title, keywords	Responsible for contribution /elaboration	Necessary for 1st and 2nd draft?
1		**European law relevant for awarding and tendering** • *Not only 1370/2007* • *what does competitive tendering mean in concreteness for using ee and eco criteria* *WP 3 will propose how to split the explanations of different ways of awarding as well as the pros and cons for the respective methods between Chapters 1 and 4*	**WP3 (KCW)**	yes
2		**National law for awarding and tendering in the participating countries** *Comment: Main approaches of national law in EU member states concerning awarding procedures for regional passenger rail services*	**WP3 (TFK)**	yes
3		**Relevant European and national law concerning energy efficiency and environment**	**WP3 (TFK, KCW) (WP6, ApS, will assist)**	yes
4		**Consequences for the use of energy-efficiency criteria in the awarding process** **a) Awarding train services (TOC)** **b) Procuring vehicles by the PTA** **Relation to the Infrastructure managers**	**WP3 (TFK, KCW)**	yes
5		**Considerations about energy efficiency and different legal frameworks and / or awarding methods** • *Can EE and EF criteria be used in all relevant methods of awarding?* • *To discuss whether certain awarding methods have advantages compared to other awarding methods* • *Finally an assessment is intended (deepening the pro's and cons' see Part I Chapter 4)*	**WP3**	no
6		**General advices for the use of the guidelines under the legal framework in other than the participating countries**	**WP 3**	No
7		**Considerations for the adjustment of European and national law in terms of energy-efficiency criteria** (Addendum by IRD: Considerations referring to the application or adaptation to the European and national legislation with a view to supporting and developing the railway transport which meets the energetic and environmental criteria, as compared with other means of transport.)	**WP 3**	No (here, all partners should agree e. g. on the basis of a workshop)

Part III: Core part of the guidelines (c. 40 pages)

Chap-ter	Sub-chap-ter	Title, keywords	Responsible for contribution /elaboration (proposed)	Necessary for 1st and 2nd draft?
1		**General comments on the use of the criteria described below** *(I.a.: what does "legally secure" mean? General considerations about indicators, equipment, operational measures etc.)*	**WP 3, WP 4, WP 6**	yes
2		**Application to different types of contracts** • Operation, rolling stock provided by TOC • Operation, rolling stock provided by PTA • Direct Procurement of rolling stock by PTA • Direct procurement of rolling stock by TOC • Procurement of rolling stock via leasing companies • Modernisation paths Comments: • *reference to criteria which can be applied in the methods* • *In general: Introduction for chapter 3-8* • *First 5 bullet points are most important types of contract. Chapter should give a roadmap whether one of these types should be chosen, and in which steps one can include ee/eco criteria* • *Modernisation path is a UK model. The state or leasing companies own old vehicles. TOC's can use it, but has to use a new fleet after a timeframe of some years*	**WP3 (TFK), (WP2)**	yes
3		**Application to different types of operation** • Diesel operation, loco-hauled / DMU's • Electric operation, loco-hauled / EMU's • Different service profiles (acceleration, speed) *(introduction on for chapter 3-8)*	**WP2**	yes

4		**Direct indicators (traction energy consumption)** *E.g.:* • *kWh per passenger km* • *kWh per seat km* • *kWh per train km* • *kWh per gross tonne km* • *potentials and limits of all indicators should be discussed*	**WP 2 (ULS, TUB) (WP 3: complete text modules)** **WP 6 (ApS): general comments**	yes (high priority)
5		**Indirect indicators** *(e.g. weight per seat km)*	**WP 2 (ULS, TUB) (WP 3: complete text modules)** **WP 6 (ApS): general comments**	yes (high priority)
6		**Life Cycle Costs (LCC) and Cost-Benefit-Analysis (CBA)**	**WP 3**	yes
7		**Features and equipment of the vehicles to be used** *(Third best option)*	**WP 2 (ULS, TUB) (WP 3 complete text modules)**	yes
	7.1	Energy recovery (electric traction)		yes (high priority)
	7.2	Energy recovery (diesel traction)		yes (high priority)
	7.3	Storage of energy		yes (high priority)
	7.4 sqq.	*(further criteria)*		

8		**Stand-by and comfort functions**	**WP 2 (ULS, TUB) (WP 3 complete text modules)**	yes
	8.1	Stand-by functions ("parked trains")		yes (high priority)
	8.2 sqq.	*further criteria*		
9		**Energy-efficient driving and driver training**	**WP 2 (ULS, TUB) (WP 3 complete text modules)**	yes (high priority)
10		**Further operational measures**	**WP 2 (ULS, TUB) (WP 3 complete text modules)**	yes
11		**The use of renewable energy or "alternative" fuels**	**WP6 / WP 2**	no

Additional comments:

(1) Chapters 1, 4 – 10 are the "core" core part of the Guidelines in terms of indicators and technology to be described. A more detailed list and structure will be elaborated mainly by WP 2. For each criterion (indicator / solution / feature etc.) the following structure is proposed:

1) General description of the criterion ***WP 2***
2) State of the art concerning this criterion including potentials and limits in terms of the positive ecological effects ***WP 2***
3) Pros and cons, potentials and limits of the criterion in terms of methodology and technology (including relevant negative side effects) ***WP 2***
4) Pros and cons, potentials and limits of the criterion in terms of legal and economic framework (including relevant side effects) ***WP 3***
5) Performance indicator(s) if the criterion refers to a specific technology, cluster, feature etc. and is not an indicator in itself ***WP 2***
6) Detailed and exact definition ***WP 2***
7) Legally secure text module ***WP 3***
8) Comments on the use of the text module ***WP 3***

9) Advices and comments of evaluating the offers in terms of the criterion in question; including the weighting compared to other criteria of awarding ***WP 2+WP 3***
10) Advices and comments of monitoring the performance of the TOC/vehicles in terms of the criterion in question. ***WP 2+WP 3***

(2) It has yet to be decided where and how the problem of weighting the different criteria will be discussed. The most appropriate seems to be at the end of part III. WP 2 and WP 3, in coordination with WP 5, will make further proposals.

(3) A general overview on technologies and state of the art will be given in chapter 5 of part I. Maybe we need additionally a (very short) introductory chapter for part III with this respect.

Part IV: Results of the case studies, further background information (c. 40 pages)

Chap-ter	Sub-chap-ter	Title, keywords	Responsible for contribution /elaboration (proposed)	Necessary for 1st and 2nd draft?
1		**General concept of the case studies**	**WP 4**	No, but see comments below
2		**Case study Denmark / Sweden**	**WP 4**	
3		**Case study Germany**	**WP 4**	
4		**Case study Italy**	**WP 4**	
5		**Case study Romania**	**WP 4**	
6		**Conclusions and recommendations** *(based on the case studies)*	**WP 4**	
7		**Further good-practice examples for energy-efficient regional rail passenger transport**	**WP 2 / WP 6**	no
8		**Further innovations being developed or considered by the railways and the rail supply industry**	**WP 2 / WP 6**	no

The Chapters 1 – 6 correspond with Deliverables D 12 – D 14. These chapters will not be part of the 1st and 2nd draft of the Guidelines, but may be integrated in the final version.

The way of publication still has to be discussed – either integral part of the Guidelines (with translation into other languages) or online in English only. Nevertheless, it was agreed that at least a summary should be an integral part of the Guidelines thus showing that and how we tested and validated the draft Guidelines in our pilot applications.

Annex II: Press release for the kick-off ECORailS

First preliminary results of the EU-project ECORailS presented in the ECORailS project meeting on 5th of October 2009: Checklist for energy-efficient technologies, useable for regional administrations in rail awarding; first structure of the ECORailS guidelines for the inclusion of ecologic criteria into regional awarding. Strong interest gained by railway target groups

The European regions embody living centres for work, daily life and leisure activities of citizens. Regional rail transport for passengers, establishing almost half of the overall railway transport in Europe, possesses inherent advantages for an efficient energy use and high eco friendliness. However, the last decades showed a decline in these environmental advantages vis-à-vis other transport modes – caused by low information on available advanced technologies, insecurity in the use of legal requirements, and the perception of high investment costs.

The project ECORailS – "Energy efficiency and environmental criteria in the awarding of regional rail transport vehicles and services" (duration: 1st of May 2009 – 30th of June 2011) – targets at the inclusion of ecological criteria by regional Public Transport Administrations (PTA's). PTA's are usually responsible to set the overall frame for the technologies and services used by railway operators, infrastructure managers and the industry. The focus of ECORailS will be therefore on procurement by awarding, the increasingly used instrument for operations competitive offers of railway applications.

The ECORailS core product will be Guidelines supporting regional decision maker in the awarding process. Among others the Guidelines will provide legally secure text modules for environmental awarding, which can be applied Europe-wide. Furthermore, the economical and social benefits of green criteria will be shown and best practice examples presented.

The four regional administrations of ECORailS from Berlin, Øresund (Copenhagen-Malmo-region), Brescia and Timisoara will simulate the Guidelines. The project aims at the following results:

- Improvement of energy efficiency: 5% in comparison to current awarding, 10% with regard to the currently used rolling stock, and in the long term system-wide improvement of energy efficiency for regional railway by 15% by 2020.
- Simultaneously to the energy efficiency improvements, ECORailS targets on a reduction of CO2 emissions by 5% in comparison to current awarding, 10% with regard to the currently used rolling stock, and in the long term a system-wide reduction of CO2 for regional railway by 15% by 2020.

On 5th of October 2009, the ECORailS partners met in Copenhagen for the regular half-yearly project meeting. First preliminary results of the project could be already presented, including a checklist for energy-efficient technologies useable in regional rail awarding and a first structure of the ECORailS Guidelines. The consortium feels delighted about the strong interest and participation, which ECORailS has gained from the target groups and key actors of the project. 12 regional Public Transport Administrations and Train Operating Companies defined their requirements, needs and expectations on the Guidelines in interviews. Additionally, 14 Public Transport Administrations have declared their participation in the advisory board of the project, the ECORailS User Platform. The platform has already met for the first time on 10th-11th of September 2009 for the evaluation the interview results. The

User Platform will regularly meet during the project, in order to achieve the project results in a user-oriented approach.
Besides the Administrations and Operators, Infrastructure Managers and respective associations have expressed their interest, such as UIC – International Union of Railways, UITP – International Association of Public Transport and the CER – Community of European Railway and Infrastructure Companies.

The ECORailS consortium consists of the following partners:

1. TSB Innovation Agency Berlin GmbH FAV – Transport Technology Systems Network – Germany (coordinator)
2. Senate Department for Urban Development - Germany
3. Pro Rail Alliance - Germany
4. KCW GmbH - Germany
5. Berlin University of Technology - Germany
6. Trafikstyrelsen - Denmark
7. Transportforskningsgruppen I Borlänge AB - Sweden
8. Province administration of Brescia - Italy
9. Università Commerciale "L. Bocconi“ - Italy
10. Università di Roma "La Sapienza" - Italy
11. Integral Consulting RD - Romania
12. Universitatea POLITEHNICA din Timisoara - Romania
13. CFR Timisoara – National Society of Railway Transport - Romania
14. Budapest University of Technology and Economics - Hungary

The work plan for the project contains the following Work Packages (WP’s):

- WP1 Management
- WP2 Technologies
- WP3 Legal frames and awarding procedures
- WP4 Pilot applications
- WP5 Evaluation and Validation
- WP6 Communication and Dissemination
- WP7 IEE Dissemination Activities

Contact:
Martin Schipper
Phone: +49-30-46 30 25 77
Email: mschipper@fav.de

Annex III: Progress Report content

- 1. Progress Report Summary (1-2 pages)
  - 1.1 Objectives of the period
  - 1.2 Achieved results of the period
  - 1.3 Identified problems and corrective actions taken in the period
  - 1.4 Main activities in the next period
- 2. Consortium management in the period (1-2 pages)
- 3. Progress of work plan in the period (max. 4-5 pages in total)
  - 3.1 Progress on work packages against initial objectives: *Compare in a few lines the activities planned (based on Annex I of the grant agreement) to the progress made, work package by work package; identify partners involved, including their roles, especially if they have different roles in the work packages; describe major subcontractors, advisory committee, market players, etc. involved.*

  -> max. 1/2 pages per WP; WP managers by 6th of November 2009
  - 3.2 Deviations from the project work plan (3.2.1. – 3.2.7: Work Package 1 – Work Package 7): *If any, identify the nature and the reason for the deviation, identify partners involved, clarify impacts on the activities and deliverables planned, present the strategy to get back on the track, give comments on deviations in appendix table 2 of the technical progress report; in case of deviations described in the last report describe how you have managed to get back on the track; up-date of time schedule.*

  -> Max. 1/4 pages per WP (if applicable); WP managers by 6th of November 2009
  - 3.3 Progress regarding deliverables (3.3.1. – 3.3.7: Work Package 1 – Work Package 7): *Assess deliverables listed in Annex I of the grant agreement against results achieved so far; give reference to appendix table 1 of the technical progress report.*

  -> Deliverable leaders by 6th of November 2009
  - 3.4 Progress regarding performance indicators

  ->1/2 pages; TSB FAV, WP5 by 6th of November 2009
- 4. Work plan for the next period (1-2 pages)
  - 4.1 Planned activities in the next period
  - 4.2 Planned meetings and dissemination activities: *Give an overview on your planned project meetings (date, location, main topic, etc.) and dissemination activities (date, location and main topics of workshops, seminars, conferences etc.), at least for the period until the next report.*

  -> All by 6th of November 2009
- Appendices to the Technical Progress Report
  - Table 1: First/updated list of submitted deliverables since starting date
  - Table 2: First/updated indicative state of advancement of hours spent (in %) since starting date per partner and per work package
    - *For "actual achievement" you indicate the hours that you and your partners have actually spent on the respective work package from the beginning of the work package until the end of the reporting period.*
    - *For "planned achievement" you indicate the hours that you had planned to spend on the respective work package from the beginning of the work package until the end of the reporting period.*

- *Of course, your "planning" needs to be in line with the tasks and the efforts stipulated in the work programme (Annex I) and in the budget (Annex II).*

Work package	**Actual/Planned Achievement**	**Total Partners**	Partner 1	Partner 2	Partner 3	…..
WP 1: Management	Actual Planned	% %	% %	% %	% %	
WP 2: Technologies	Actual Planned	% %	% %	% %	% %	
WP 3: Legal frames and awarding procedures	Actual Planned	% %	% %	% %	% %	
WP 4: Pilot applications	Actual Planned					
WP 5: Evaluation and Validation	Actual Planned					
WP 6: Communication and Dissemination	Actual Planned					
WP 7: IEE Dissemination Activities	Actual Planned					
Total Action		%	%	%	%	

- **Delivery date to be discussed with EACI; TSB FAV provides planned achievement numbers**

- Table 3: Updated list of main persons in charge of the action
- Updated version of the publishable summary slides and project fact sheet
- Copy of the deliverables produced during the reporting period

Annex IV: Participants list

1	Università di Roma "La Sapienza	ULS	Cosciotti	Emilo
2	Università di Roma "La Sapienza	ULS	Ricci	Stefano
3	Politehnica University of Timisoara	PUT	Mocuta	Georgeta Emilia
4	Politehnica University of Timisoara	PUT	Ostoia	Daniel
6	TSB Innovation Agency Berlin GmbH FAV - Transport Technology Systems Network	TSB FAV	Schipper	Martin
7	TSB Innovation Agency Berlin GmbH FAV - Transport Technology Systems Network	TSB FAV	Heinrich	Christian
9	Pro Rail Alliance	ApS	Pippert	Matthias
11	KCW GmbH	KCW	Naumann	René
14	Trafikstyrelsen	TSY	Brok	Morten
15	Trafikstyrelsen	TSY	Petersen	Jakob Møldrup
16	Trafikstyrelsen	TSY	Bergendorff	Mads
17	Transportforskningsgruppen Borlänge AB	TFK	Jonsson	Oskar
18	Transportforskningsgruppen Borlänge AB	TFK	Elmquist	Anna-Lena
19	Province administration of Brescia / ALOT	PoB / ALOT	Piccoli	Guido
20	Province administration of Brescia / ALOT	PoB / ALOT	Pascal	Nicola
21	Province administration of Brescia / ALOT	PoB	Stanta	Ferdinando
22	Università Commerciale "L. Bocconi	CBO	Vaghi	Carlo
23	Integral Consulting RD	IRD	Caraman	Dan
24	Budapest University of Technology and Economics	BME	Meszaros	Ferenc
25	Id praxis		Schweer	Thomas