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 From : Karolien Peeters
 Paul Van Tichelen
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 Annex(es): **Powerpoint presentations of the meeting (<https://www.eco-lifts.eu/eco-lifts-en/content/documents.php>)**
 To : Cesar Santos; Stakeholders
 Copy : Project team

Minutes of stakeholder Meeting for Ecodesign Preparatory Study on Lifts - Second Stakeholder meeting on 17/9/2018

DG Grow: 17/9/2018, Avenue d'Auderghem 45, B-1040 Etterbeek, Brussels

Participants

European Commission

DG GROW Cesar Santos (CS)

Project Team

ISI Fraunhofer	Antoine Durand (AD)
ISI Fraunhofer	Simon Hirzel (SH)
ISI Fraunhofer	Clemens Rohde (CR)
Waide	Paul Waide (PW)
ISR	Joao Fong (JF)
VITO	Paul Van Tichelen (PVT)
VITO	Karolien Peeters (KP)

Registered stakeholders for the meeting

Organization	firstname	lastname	acronym
ANACAM	Luca	Incoronato	ANACAM
ECOS	Gwendoline	Dandoy	ECOS_GD
ECOS	Nerea	Ruiz Fuente	ECOS_NR
European Federation for Elevator Small and Medium-sized Enterprises (EFESME) aisbl	Andrea-Eleonora	Masotto	EFESME_AM
European Federation for Elevator Small and Medium-sized Enterprises (EFESME) aisbl	Luciono	Faletto	EFESME_LF
Hydroware AB	Kjell	Johansson	KJ
Kollmorgen Steuerungstechnik GmbH	Björn	Kollmorgen	BK
Schindler Elevators Ltd.	Roger	Beuret	RB
VDMA	Sascha	Schmel	VDMA_SS

FINLAND Member State	Juha	Toivanen	FIN
ELA	Markus	Wellinger	ELA
OTIS	Harald	Wilhelm	OTIS
KONE	Hanna	Uusitalo	KONE
ThyssenKrupp	Paula	Casares	ThyssenKrupp
ELCA	Luc	Rivet	ELCA
UK	Adrian	Bakker	UK

Objective of the meeting

The meeting was the second stakeholder meeting for the Ecodesign preparatory study for Lifts. The purpose of this meeting was to discuss with stakeholders the implementation of the stakeholder feedback in Tasks 1-3 and the initial findings on Tasks 4 and 5. Stakeholders can share their view on the reports and the following steps of the project. The draft reports of Task 1-5 are available at <https://www.eco-lifts.eu/>.

Note: complementary to this minutes of the meeting the meeting powerpoint presentation can be consulted on <https://www.eco-lifts.eu/>

Agenda

9:45 – 10:00	Arrival of participants
10:00 – 10:20	Welcome and round of introductions Cesar Santos, European Commission
10:20 – 10:50	Updates of Task 1, 2 and 3 Antoine Durand/Simon Hirzel/Paul van Tichelen Fraunhofer ISI/VITO
10:50 – 11:20	Presentation of preliminary results of Task 4: Technologies Joao Fong, ISR-University of Coimbra
11:20 – 11:50	Presentation of preliminary results of Task 5: Environments and Economics Karolien Peeters, Vito
11:50 – 13:00	Discussion of Task 4 and 5 Clemens Rohde, Fraunhofer ISI
13:00 – 14:00	Lunch break
14:00 – 14:15	Wrap-Up on Discussion Clemens Rohde, Fraunhofer ISI
14:15 – 14:30	Outlook on Tasks 6 and 7 Antoine Durand, Fraunhofer ISI
14:30 – 14:45	Further proceeding and schedule, other issues Clemens Rohde, Fraunhofer ISI
14:45	Closing Cesar Santos, European Commission

Minutes

Welcome and Short presentation of participants (all)

The project officers Cesar Santos opened the meeting. He welcomed the stakeholders and explained that the final part of the project now started. The Commission looks at this part with an open mind and will only regulate lifts if good arguments are found to do so. He welcomes stakeholders to benefit from the discussions today by taking the advantage to check the possibilities. He explains that a voluntary agreement is an option as well and asks the stakeholders to think about this option. It is also possible to have different requirements for different technologies. E.g. in lighting regulation the requirements for halogen lamps are not the same as the requirements for LED. Today we can have a discussion and think together what technology neutrality would mean for lift market.

Clemens Rohde welcomes the participants and presented the agenda for today's meeting.

The powerpoint presentations can be downloaded from the project website: <https://www.eco-lifts.eu/eco-lifts-en/content/documents.php>

Antoine Durand (AD) presented Task 1.

Paul Van Tichelen(PVT) presented Task 2

Simon Hirzel (SH) presented Task 3

Afterwards a discussion took place:

abbr.	Comment/answer
Manuf acture rs	There is a general agreement amongst the stakeholders that no new elevators below 320 kg are currently sold. The accessibility requirements for disabled persons in most of the EU Member States make lifts with a minimum load of 450 kg mandatory in practice.
CR	The project team will consider this issues for the base cases
KONE	The speed of the base cases is 0.7 m/s. This is not corresponding to reality. The speed that can be applied in elevators is either 1 m/s or 0.63 m/s, but never 0.7 m/s. This should be reflected in the base cases.
RB	The project team presented on ppt how it dealt with the comments. Can we get feedback before the next stakeholder meeting? Now stakeholders had to compare all the documents.
CR	This will be done for the comments provided for this phase of the project.
EFESM E_LF	The assumptions used to calculate the accelerated renovation rate (task 2) are not clear. If you look at the stock, you see that lifts are not renovated before 50-60 years. Lifts are not renovated apart from when the entire building is renovated. It is not easy to replace the lift. People will never recover the investment even if there is a saving on the energy!
PVT	The figures are based on the EU renovation building strategy according to the EED and EPBD
CR	This might be a sensitivity assessment. Ecodesign will never trigger accelerated exchange. In the later task we will do potential projections on how the market will evolve.
ECOS_ NR	What about the potential significant environmental impact of the exemptions? Is this not a good opportunity to look at the exemptions? Low speed lifts are not considered, because statistics are poor. But can we have at least an aggregated figure on this? This will allow to take a more informed decisions, rather than automatically exclude them.
AD	After the first stakeholder meeting, the project team had a look at this comment and tried to find statistics but almost no statistics could be found. The energy consumption is probably comparably low, both due to individual consumption and the numbers. Therefore, footnote 4 has been added in the report explaining why the scope was restricted.
ECOS_	You are comparing a slow lift with a high-speed lift, but we ask for an aggregated figure of

NR	all low speed lifts in the market (all the lifts, not one single product). And would the current process not be a good moment to ask for better data/statistics?
AD/SH	If we extend the scope we have to deal with additional legislative boundaries. The major issue remains the lack of data. Therefore, we stick to the high-speed lifts.
ELCA	Usage category: the figures are not correct in several tables – table 1-4. ELCA gives several examples. There are discrepancies in all the tables.
CR	Figures/comments in written are welcome.

Joao Fong (JF) presented Task 4: Technologies

Use of more efficient Electric motor:

The team received feedback from stakeholders on this question in the task 4 report and will reformulate the question. The stakeholder feedback was that the efficiency of the electric motor is not listed in product catalogues. The question was however more in terms of efficiency class. Nevertheless, the question will be reformulated and will ask for the efficiency of the base cases.

abbr.	Comment/answer
KONE	There are many BAT in the market regarding the motor: e.g. permanent magnet with high RPMS and low RPMS. They cannot be compared and are not compatible. You cannot draw conclusions directly by stating efficiencies.
SH	As part of task 6 we have to bundle design options. We have to know what is the standard lift sold on the market and how much it can be improved. How can we deal with this if we do not have a reference value?
KONE	A proposal could be to look at the system level energy performance, not at the component. Some components match together, some do not match at all. ISO 25745 describes how running energy performance is made at its best and how the standby energy performance is made at its best and how they then based on the usage category are combined.
SH/CR /AD	We have to look at the specific design options. We define different design options, that for example say: replace the motor, lighting, improve the control system. The motor is maybe the cheapest replacement, so replace this. But control system to expensive. So no replacement. According to the MEERp methodology ¹ we are supposed to follow the component approach. We look at improvement on component level and look at the BAT in terms of system. If stakeholders can deliver improvements at system level and then describe what is influenced at component level, it can be taken into account as well. We note this issue.

Joao Fong (JF) presented Task 4: Technologies (cont. 1)

Regarding the standby power consumption, comments were received that data are outdated. The available set of data from E4 monitoring campaign have been used. We see no relation between the year of installation and stand-by power consumption. Stakeholders may provide evidence for different stand-by power.

abbr.	Comment/answer
KONE	The data are outdated. In Denmark, the elevator performance is regulated: the minimum

¹ see : https://www.eco-lifts.eu/eco-lifts-wAssets/docs/MEERp_Methodology_Part_1.pdf

	requirement is energy class B of the ISO 25745. This is the bare minimum, many customers want better.
AD	This is already mentioned on page 49 in the Task 1 report. However, the B class requirement in Denmark is only for lifts not intended for residential use, therefore, only one part of the market is covered and we need data for the EU-28.
CR/SH	Minimum requirements for lifts are missing in the building code of many of the countries, e.g. Germany. So we have to find the efficiency of new sales. We noted the comment on the outdated data. But how low are they actually and why is the consumption different? Using LED-Lighting certainly made its contribution, but what other measures have been taken? We need more evidence on real consumption values. We would be happy to get better and more recent figures we receive from the participants.
EFESM E_LF	The problem of patents is mentioned by EFESME. As an example the patent on belts has been given. In addition, EFESME_LF mentioned that there are commercial agreements in place as well.
AD	Ecodesign mentions in Art 15. 4) e. "in principle, the setting of an ecodesign requirement shall not have the consequence of imposing proprietary technology on manufacturers"
CS	These types of constraints are typically investigated in the impact assessment before a regulation will be proposed. They are not investigated in this preparatory study.

Joao Fong (JF) presented Task 4: Technologies (cont. 2)

Base cases

abbr.	Comment/answer
KONE	The speed for usage category 2 is automatically 1.0 m/s. This is correctly stated in task 1, but in task 4 some of the parameters are changed. Speed has an impact on the energy consumption.
CR	We will check this and correct the values.
RB	The technology described in task 4 is old technology. Also base cases are not what is currently sold on the market. Why focus on old technologies (e.g. geared technology)?
CR	Even if they some technologies hardly exist, they can be described here and quoted as being outdated. We have to rely on available information. Please provide information and give suggestions.
JF	This section will be improved.
KONE	When you look at the future market, how do you define the right number of floors and travel height, so it is in line with the new buildings sold? You have to ask the building and construction market.
RB	Are the ISO categories fixed for the number of stops? This would be a misinterpretation of the standard. The standard just contains an informative table in an annex which is not binding.
CR	We will check if the figures are fine for the next couple of years.
CS	It is not possible to have dynamic base cases over time. What is possible is to look at static base cases that factor in assumptions on how buildings will change in the future.
CR	The base cases are static, but the market share between the base cases might change, this will be analysed in task 7.
EFESM E_LF	BOM: electric lifts are machine-room-less, variable speed drive... Some progress in improving energy efficiency has already been done in the lift industry. Electric lifts are not less than 450 kg and most of them not geared.
CR	We need specific information from the stakeholders to update the data in the study.

ELA	This information is confidential info. Mutual agreements have to be signed.
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Joao Fong (JF) presented Task 4: Technologies (cont. 3)

Assumptions for energy calculations

abbr.	Comment/answer
KONE	For Denmark you get to the ballpark figures when you consider ISO B as your minimum performance.
AD	What would be very helpful is to know the typical energy class for the base cases
BK	There are two problems with this: <ul style="list-style-type: none"> - The base cases are not defined in a way that we can easily calculate the power consumption, e.g. indicators are not in, signalisation are not defined. - Once installed in the building, lifts have to serve other needs, e.g. building automation -> an interface is needed; in public building signalisation cannot be switched off; in large office buildings you might not be able to run all the lifts on a secondary energy supply... There are a lot of functions for lifts that they have to serve and cannot be defined as a general level of stand-by energy consumption. This also explains the large differences in the table you showed. Differences are probably not due to a very inefficient gear, but due to the fact that the lift serves other functions.

Karolien Peeters (KP) presented Task 5: Environment and economics

abbr.	Comment/answer
KONE	How did you distribute travel distances (road, aircraft...) ? It is different from the PCR?
AD/KP	We used the ecoreport tool for the LCA Assessment. It is different from the PCR. In the ecoreport tool, there are default assumptions for transportation which are linked to the volume of the packaged product.
KJ	If you look at the graph comparing base case 2A and 2B. The impact from production in the impact category climate change is almost the same, while the difference in weight between the two cases is 44%. This is not logical.
PVT/KP	We have to cross check this.
KONE	Remark on slide with EU-totals. The data from E4 are not from 2012, but older. Please also mention the year of measurement, not only the year of publication of the results.
KP	OK, we used default citation style but we will deal with that.
EFESM E_LF	There is a leaflet from industry available, which contains LCC information.

Clemens Rohde (CR): Discussion on Task 4 and 5

abbr.	Comment/answer
BK	Question on the accelerated sales data.
PVT	We can share the calculations.
UK	State-of-the-art changed significantly. More data need to be gathered. Do lifts meet criteria for ecodesign directive? Or should they be considered within EPBD?
CR	The second question is a political questions. Regarding the data we are using, we noted this point and welcome stakeholders to provide better data.

Lunch Break

Clemens Rohde (CR): Wrap up on discussion

- The major issue is data availability. Stakeholders are welcomed to provide better data.
- In addition there is a need for more transparency on the underlying data.
- The definition of the base cases is not representing the market as it is for the moment. This will be updated. It will of course have an impact all the results. The updated base cases will be presented for consultation.
- The bill of materials will be updated.
- Maybe there are issues with the figures that went into the ecoreport tool (impact product stage for base case 2A and 2B very comparable, while difference in weight of 44%). This will be checked.

Antoine Durand (AD) presented an Outlook on Task 6 and Task 7

For task 7, the position of the industry has to be formulated, preferably as concrete policy proposals. We will have a third stakeholder meeting discussing the results of all tasks.

abbr.	Comment/answer
EFESM E_LF	The performance of a lift depends on the type of application. In certain applications certain types perform better, in other applications, other types perform better.
CR / AD	There might be different policy options for different base cases. In a codesign regulation, the aim is usually to have a technology neutral approach. However, in the analysis we can consider different cases. If a certain application can only be achieved with a certain technology, this must be reflected.
CS	A Voluntary Agreement (VA) offers a lot of advantages to the sector, because the manufacturers set their own targets and they are in charge of the VA. The Commission oversees everything, but industry is in charge. There are currently VA in place for following products: imaging equipments, complex set-top boxes, games consoles. As soon as the VA is recognised, the Commission refrains from proposing any regulation. For the industry this can be an attractive proposal. Of course there are minimum requirements to be followed. This has to become clear in the next half year. Is the lift industry interested in a VA?
ELA	ELA cannot answer this question today.
ECOS_ NR	Concerning the Energy labelling regulation: Can you clarify what you mean with 'means of transport are outside'?
AD	In the new Labelling Regulation, there is a specific sentence, which is dedicated to lifts. The text mentions (in the introduction not in the main part of the regulation) that lifts are excluded because they are already regulated, but in fact, there are only two countries having a regulation in place focusing on EE of lifts.
CS	Confirms that means of transport are excluded from Energy Labelling Regulation. Ecodesign excludes means of transport, but it is not mentioned that lifts are a means of transport. We are considering to check this with lawyers.
ECOS_ NR	There are no resource efficiency requirements in your presentation. Can this be considered?
ELA	Concerning input by the manufacturers: An approach for treatment of confidential information has to be set up. ELA offers to draft a non-disclosure agreement (NDA). The consortium will check who has to sign the NDA.
AD	What is the impact of the policy on lift efficiency, which is in place in Portugal and Denmark? How was the market (in terms of EE class) before and after the policy entered into force?
BK	A law was necessary to make the lift requirements effective within the implementation of

	the EPBD, but this law never passed through the Parliament (according to 3-years old information)
RB	Also, France is considering an ecopassport for lift.
KJ	Sweden: LCA will have to be implemented as a part of the construction sector (no rule yet).

Cesar Santos thanked the participants and closed the meeting.

Next steps:

- 01/10/2018: deadline for comments on draft reports task 4 and 5: all comments on inputs are welcome, specially comments, which have an effect on the base cases. Due to the changes that will be made to the base cases, it is not useful to provide comments on the results as results will change. Please also tell us in which direction we have to improve the figures.
- 12/10/2018: New Bases Cases Online
- 31/11/2018: Deadline for Stakeholder Inputs on Task 6-7 (Policy Scenarios and Improvement Options)
- 14/02/2019: Reports Task 1-7 online
- **11/03/2019 (new date confirmed): 3rd stakeholder meeting**

Annex

The powerpoint presentations of the meeting are available at the project website: <https://www.eco-lifts.eu/eco-lifts-en/content/documents.php>