

Response ID ANON-5TYP-A8VA-1

Submitted to Smart Secure Electricity Systems (SSES) Programme: First Phase Energy Smart Appliances Regulations
Submitted on 2026-02-02 15:50:51

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Comments:

About you

What is your name?

Name:
Damon Hart-Davis

What is your email address?

Email:
d@hd.org

What is your organisation?

Organisation:

What is your address?

Address:

Kingston-upon-Thames, UK

How did you hear about this consultation?

How did you hear about this consultation?:
Email from this department

Other (please specify):

Also discussions at university.

Part 1

1 Do you agree with the changes to the definitions for EVSCPs set out in regulation 2: Interpretation? Please provide further information to support your answer.

Not Answered

Do you agree with the changes to the definitions for EVSCPs set out in regulation 2: Interpretation? Please provide further information to support your answer.:

2 Do you agree with the proposed definition for a heat pump for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

No

Do you agree with the proposed definition for a heat pump for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:

This definition should include cooling (and combinations / bidirectional).

A2A is currently out of scope for SSES, but as GB demand for cooling grows maybe this will prove to contribute to an evening duck-curve / ramping issue (as the sun goes down so PV generation drops away but homes are still hot), so maybe allow scope for larger A2A units to be brought in to scope easily. Also encourage those larger units to provide the functionality ASAP eg to save users money.

A2W ASHP is in scope (as an EHA) but is it still in scope if it can do cooling (as allowed under recent BUS (Boiler Upgrade Scheme) grant changes) or when it is doing cooling if it does both? To avoid the duck-curve / ramping issue above from cooling demand, that mandated grid-friendly operation should also apply to the cooling aspects.

3 Do you agree with the proposed definitions for a hybrid heat pump and hybrid heat pump system for the purposes of the ESA regulations? If not, what elements of the definitions do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Yes

Do you agree with the proposed definitions for a hybrid heat pump and hybrid heat pump system for the purposes of the ESA regulations? If not, what elements of the definitions do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:.

If the heat pump use definition includes cooling per my answer to Q2.

4 Do you agree with the proposed definitions for a fuel boiler for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Not Answered

Do you agree with the proposed definitions for a fuel boiler for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:.

5 Do you agree with the proposed definitions for an air-to-air heat pump and air-based heating system for the purposes of the ESA regulations? If not, what elements of the definitions do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

No

Do you agree with the proposed definitions for an air-to-air heat pump and air-based heating system for the purposes of the ESA regulations? If not, what elements of the definitions do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:.

This definition should include cooling (and combinations / bidirectional).

A2A is currently out of scope for SSES, but as GB demand for cooling grows maybe this will prove to contribute to an evening duck-curve / ramping issue (as the sun goes down so PV generation drops away but homes are still hot), so maybe allow scope for larger A2A units to be brought in to scope easily. Also encourage those larger units to provide the functionality ASAP eg to save users money.

6 Do you agree with the proposed definition for a storage heater for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Yes

Do you agree with the proposed definition for a storage heater for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:.

7 Do you agree with the proposed definition for a heat battery for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Yes

Do you agree with the proposed definition for a heat battery for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:.

8 Do you agree with the proposed definition for a standalone direct electric hot water cylinder for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Yes

8. Do you agree with the proposed definition for a standalone direct electric hot water cylinder for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:.

9 Do you agree with the proposed definition for a centralised space heating device for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

No

Do you agree with the proposed definition for a centralised space heating device for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:.

This definition should be widened to include cooling (and combinations / bidirectional).

See Q2 answer, covering heat pumps with mixed heating and cooling capabilities, eg as now allowed for the BUS grant.

10 Do you agree with the proposed definition for a hot water heat pump for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Yes

Do you agree with the proposed definition for a hot water heat pump for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:

11 Do you agree with the proposed definition for BESS for the purposes of the ESA regulations? If not, what elements of the definitions do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Yes

Do you agree with the proposed definition for BESS for the purposes of the ESA regulations? If not, what elements of the definitions do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:

12 Do you agree that the Phase 1 ESA regulations should only apply to those manufacturers or importers who are placing a relevant ESA on the GB market as set out in regulation 6?

Not Answered

Do you agree that the Phase 1 ESA regulations should only apply to those manufacturers or importers who are placing a relevant ESA on the GB market as set out in regulation 6?:

13 Do you agree with the duty to take corrective action in respect of non-compliant ESAs placed on the market (regulation 7)? Please provide further information to support your answer.

Not Answered

Do you agree with the duty to take corrective action in respect of non-compliant ESAs placed on the market (regulation 7)? Please provide further information to support your answer.:

14 Do you agree with the proposal to require that relevant BESS must have a digital user interface as per regulation 10(3), as is the case for EHAs?

Yes

Do you agree with the proposal to require that relevant BESS must have a digital user interface as per regulation 10(3), as is the case for EHAs?:

And as with other ESA appliance this and any physical UI should have specified basic common element across all products of the same type, eg so that installer set-up expertise and user familiarity is easily transferred across products, to give users agency in particular.

15 Do you have any comments regarding how regulations 9 to 13 are drafted? Please provide further information to support your answer.

Not Answered

Do you have any comments regarding how regulations 9 to 13 are drafted? Please provide further information to support your answer.:

Part 2

16 Do you support the requirement in regulation 14 that manufacturers and importers must ensure relevant ESAs have device meters that are fully compliant with the obligations that MIR places on Class B active electrical energy meters, including conformity assessment (as per regulations 46-52B and Schedules 1A, 1B, 1E and 1K of MIR 2016)? Please give reasons for your answer.

Not Answered

Do you support the requirement in regulation 14 that manufacturers and importers must ensure relevant ESAs have device meters that are fully compliant with the obligations that MIR places on Class B active electrical energy meters, including conformity assessment (as per regulations 46-52B and Schedules 1A, 1B, 1E and 1K of MIR 2016)? Please give reasons for your answer.:

17 If you are a manufacturer or importer, do you currently produce or import ESAs that include a device meter? If so, is this device meter MIR Class B compliant?

Not Answered

If you are a manufacturer or importer, do you currently produce or import ESAs that include a device meter? If so, is this device meter MIR Class B compliant?:

18 If you disagree with Question 16, do you support achieving the metering policy objective by alternative means? Which approach would be preferable? What issues may arise? Please give reasons for your answers and include further approaches as appropriate.

Not Answered

If you disagree with Question 16, do you support achieving the metering policy objective by alternative means? Which approach would be preferable? What issues may arise? Please give reasons for your answers and include further approaches as appropriate.:

19 For EVSCPs, would you recommend that measured consumption excludes the electricity consumed by the charge point itself when in use? Is this in line with current practice?

Not Answered

For EVSCPs, would you recommend that measured consumption excludes the electricity consumed by the charge point itself when in use? Is this in line with current practice?:

20 Do you support this clarification regarding global override? If not, please explain your answer.

Yes

Do you support this clarification regarding global override? If not, please explain your answer.:

Turning off the anti-herding should be single-shot manually, or by deliberate dynamic control for each event. Turning off anti-herding should not be permanent.

21 Do you agree with the clarifications to the randomised delay considerations set out in the draft regulations? If not, please explain your answer.

Yes

Do you agree with the clarifications to the randomised delay considerations set out in the draft regulations? If not, please explain your answer.:

Turning off the anti-herding should be single-shot manually, or by deliberate dynamic control for each event. Turning off anti-herding should not be permanent.

22 Do you support the introduction of the proposed requirements for ESAs in response to interruption to supply or communications as set out in Table 2? If not, please provide a rationale and options for improvement.

Yes

Do you support the introduction of the proposed requirements for ESAs in response to interruption to supply or communications as set out in Table 2? If not, please provide a rationale and options for improvement.:

Though there may be grounds to treat the period immediately after power restoration and/or during comms loss more like an SSES peak period and apply some load reduction tactics to help demand come back up more slowly.

23 Do you agree that the proposed recommendations should be introduced on a voluntary basis alongside Phase 1 regulations and become legal requirements with the introduction of Phase 2 ESA regulations? Please explain your answer.

Yes

Do you agree that the proposed recommendations should be introduced on a voluntary basis alongside Phase 1 regulations and become legal requirements with the introduction of Phase 2 ESA regulations? Please explain your answer.:

24 Do you agree with our proposed approach in regulation 16 to implement the ETSI 303 645 requirements? Please give reasons for your answer.

Not Answered

Do you agree with our proposed approach in regulation 16 to implement the ETSI 303 645 requirements? Please give reasons for your answer.:

25 Do you support the alignment of EVSCP requirements with the ETSI EN 303 645 cyber requirements? Do you have any concerns with this approach?

Not Answered

Do you support the alignment of EVSCP requirements with the ETSI EN 303 645 cyber requirements? Do you have any concerns with this approach? :

26 Do you agree with our proposal to clarify the tamper protection requirements as set out in regulation 17? Please explain your answer.

Not Answered

Do you agree with our proposal to clarify the tamper protection requirements as set out in regulation 17? Please explain your answer. :

27 Do you have any comments regarding how regulation 19: Off-peak usage for charge points is drafted? Please provide further information to support your answer.

Yes

Do you have any comments regarding how regulation 19: Off-peak usage for charge points is drafted? Please provide further information to support your answer.:

Although the issue may be more acute with EHAs, the full 6h evening SSES peak is long enough that end users may be more inclined to turn all peak reduction (eg lower charging power) features off in frustration.

Thus I suggest defining a high-peak or 4pm to 7pm in line with eg common GB DNO practice, within which such grid-friendly aspects are heightened / concentrated.

28 Do you have any comments regarding how regulation 20: Energy smart function for EHAs is drafted? Please provide further information to support your answer.

Yes

Do you have any comments regarding how regulation 20: Energy smart function for EHAs is drafted? Please provide further information to support your answer.:

The proposed evening SSES peak time from 4pm to 10pm is very broad, and likely too long for many homes to coast through thermally if their EHA is throttled back for the full peak, which might encourage householders to turn off all such default limits, so I suggest defining a high-peak or 4pm to 7pm in line with eg common GB DNO practice, within which such grid-friendly aspects are heightened / concentrated. This observation is particularly relevant to such EHAs (Electric Heating Appliances) as heat pumps and heat batteries.

I suggest that for the benefit of homes with domestic batteries (BESS) and EHAs, larger heat pumps such as A2W ASHP should be configurable to operate far as possible within a constrained power limit that is within the power limit of the batteries, to minimise draw from the grid. But such limits might be ignored for critical events such as A2W defrosting, and if target temperatures (eg target DHW and radiator flow) temperatures are not being met within a reasonable time. This soft limit feature does not require any real-time control interaction between the heat pump and the battery.

29 Do you agree with the proposed definition for an 'add-on' module for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.

Not Answered

Do you agree with the proposed definition for an 'add-on' module for the purposes of the ESA regulations? If not, what elements of the definition do you recommend should be changed and why? Please provide evidence or reasoning to support your answer.:

30 Do you have any comments regarding how regulations 21 and 22 relating to Off-peak usage and Responsiveness status for EHAs are drafted? Please provide further information to support your answer.

Yes

Do you have any comments regarding how regulations 21 and 22 relating to off-peak usage and responsiveness status for EHAs are drafted? Please provide further information to support your answer.:

As in the answer to Q28, I think that a high-peak time range should be introduced with more intensive response there, and less in the remainder of the defined peak periods.

31 Do you agree with the proposal to apply the smart functionality requirements set out in Chapter 2 of Part 2 of the regulations to any relevant BESS sold as smart?

Yes

Do you agree with the proposal to apply the smart functionality requirements set out in Chapter 2 of Part 2 of the regulations to any relevant BESS sold as smart?:

32 Do you agree with the Off-peak usage requirement for BESS as set out within regulation 24? Please provide further information to support your answer.

Yes

Do you agree with the Off-peak usage requirement for BESS as set out within regulation 24? Please provide further information to support your answer.:

Again, because the SSES evening peak period is long (6h), and that may not reflect ToU charges well, nor the need to get tasks done in the evening at home, to avoid users cancelling smart response entirely in frustration, I suggest the addition of high-peak 4pm to 7pm which has the strongest grid-friendly actions.

33 Do you agree with the requirement for ESAs as set out within regulation 25: Provision of information regarding security? Please provide further information to support your answer.

Yes

Do you agree with the requirement for ESAs as set out within regulation 25: Provision of information regarding security? Please provide further information to support your answer.:

34 Do you agree that the flexibility guidance pack requirement in regulation 26 should also apply to EVSCPs and BESS?

Yes

Do you agree that the flexibility guidance pack requirement in regulation 26 should also apply to EVSCPs and BESS?:

35 Do you agree that the manufacturer should be responsible for producing the flexibility guidance pack, and that the entity placing the appliance on the market (manufacturer or importer) should ensure it is supplied with the appliance?

Yes

Do you agree that the manufacturer should be responsible for producing the flexibility guidance pack, and that the entity placing the appliance on the market (manufacturer or importer) should ensure it is supplied with the appliance?:

36 Do you agree with the Assurance requirement for ESAs as set out within regulation 27? Please provide further information to support your answer.

Not Answered

Do you agree with the Assurance requirement for ESAs as set out within regulation 27? Please provide further information to support your answer.:

37 Do you agree with the different documentation required (flexibility guidance pack, statement of compliance and technical file) as part of regulations 26 and 27? Please provide further information to support your answer.

Not Answered

Do you agree with the different documentation required (flexibility guidance pack, statement of compliance and technical file) as part of regulations 26 and 27? Please provide further information to support your answer.:

38 Do you agree with clarification of the register requirements? Please provide further information to support your answer.

Not Answered

Do you agree with clarification of the register requirements? Please provide further information to support your answer.:

Part 3

39 Do you have any comments regarding how regulations 30 and 31 on Service and Compliance Notice are drafted? Please provide further information to support your answer.

Not Answered

Do you have any comments regarding how regulations 30 and 31 on Service and Compliance Notice are drafted? Please provide further information to support your answer.:

40 Do you agree that the current powers are sufficient to address non-compliance? Please provide further information to support your answer.

Not Answered

Do you agree that the current powers are sufficient to address non-compliance? Please provide further information to support your answer.:

41 If you do not consider that the current civil penalties are sufficient, do you support the creation of criminal offences as set out in section 242(3)(a) of the Energy Act? Please provide further information to support your answer.

Not Answered

If you do not consider that the current civil penalties are sufficient, do you support the creation of criminal offences as set out in section 242(3)(a) of the Energy Act? Please provide further information to support your answer.:

42 Do you agree with the proposal to align the civil penalty calculation with the Ecodesign for Energy Related Products Regulations 2010?

Not Answered

Do you agree with the proposal to align the civil penalty calculation with the Ecodesign for Energy Related Products Regulations 2010?:

43 Do you agree that the enforcement notices – compliance notice, notice of intent and final notice – follow a clear and logical set of processes and procedures (regulations 31, 33 and 34)? Please provide further information to support your answer.

Not Answered

Do you agree that the enforcement notices – compliance notice, notice of intent and final notice – follow a clear and logical set of processes and procedures (regulations 31, 33 and 34)? Please provide further information to support your answer.:

44 Do you have any comments regarding how regulations 33 on Notice of Intent, 34 Final Notice, 35 Appeals against final notices and 36 Enforcement of a civil penalty are drafted? Please provide further information to support your answer.

Not Answered

Do you have any comments regarding how regulations 33 on Notice of Intent, 34 Final Notice, 35 Appeals against final notices and 36 Enforcement of a civil penalty are drafted? Please provide further information to support your answer.:

45 Do you have any comments regarding how regulations 37 on Enforcement undertaking, 38 on Contents of an enforcement undertaking, 39 on Acceptance of an enforcement undertaking, 40 on Discharge of an enforcement undertaking, 41 on Appeals relating to the discharge of an enforcement undertaking, 42 on Inaccurate, incomplete or misleading information and 43 on Non-compliance with enforcement undertaking are drafted? Please provide further information to support your answer.

Not Answered

Do you have any comments regarding how regulations 37 on Enforcement undertaking, 38 on Contents of an enforcement undertaking, 39 on Acceptance of an enforcement undertaking, 40 on Discharge of an enforcement undertaking, 41 on Appeals relating to the discharge of an enforcement undertaking, 42 on Inaccurate, incomplete or misleading information and 43 on Non-compliance with enforcement undertaking are drafted? Please provide further information to support your answer.:

46 Do you have any comments regarding how regulation 44 on Publication of cases of civil sanctions and enforcement undertakings is drafted? Please provide further information to support your answer.

Not Answered

Do you have any comments regarding how regulation 44 on Publication of cases of civil sanctions and enforcement undertakings is drafted? Please provide further information to support your answer.:

47 Do you agree with the application of the Consumer Rights Act Schedule 5 as set out in regulation 45: Amendment of the Consumer Rights Act 2015? Please provide further information to support your answer.

Not Answered

Do you agree with the application of the Consumer Rights Act Schedule 5 as set out in regulation 45: Amendment of the Consumer Rights Act 2015? Please provide further information to support your answer.:

Part 4

48 Do you have any comments regarding how the regulations (46-49) in Part 4 are drafted? Please provide further information to support your answer.

Not Answered

Do you have any comments regarding how the regulations (46-49) in Part 4 are drafted? Please provide further information to support your answer.:

Analysis

49 Please comment on these data, assumptions, and methodology used in the Initial Impact Assessment. Please also provide further views on distributional impacts, and potential Equality Act considerations.

Please comment on these data, assumptions, and methodology used in the Initial Impact Assessment. Please also provide further views on distributional impacts, and potential Equality Act considerations.: