

Distribution Code Consultation Response Proforma

DCRP/25/04A/PC: Engineering Recommendation (EREC) G12 - Issue 5 Amendment 1 *Requirements for the Application of Protective Multiple Earthing to Low Voltage Networks*

Stakeholders are invited to respond to this consultation, expressing their views or providing any further evidence on any of the matters contained within the consultation document. Stakeholders are invited to supply the rationale for their responses to the set questions.

Please send your responses and comments by **17:00 Monday 12 January 2026** to dcode@energynetworks.org and please title your email '**Consultation Response DCRP/25/04A/PC EREC G12/5-1**' Please note that any responses received after the deadline may not receive due consideration by the Working Group.

Any queries on the content of the consultation pro-forma should be addressed to DCode Administrator on 020 7706 5105, or to dcode@energynetworks.org

Respondent	Matt Adams
Company Name	BEAMA
No. of DCode Stakeholders Represented	BEAMA has over 180 members, 40 of which are in the EV sector where our response focuses
Stakeholders represented	<i>Please list all Stakeholder names responding on behalf of (including the respondent company if relevant).</i>
Role of Respondent	<i>Trade Association representing Manufacturers, Distributors, Installers, Charge Point Operators</i>
We intend to publish the consultation responses on the DCode website. Do you agree to this response being published on the DCode website? [Y/N]	Yes

Distribution Code Consultation Response Proforma

	Question	Response
Q1	Do you agree with the exclusion of IET01 Method M1a, and the requirement that only non-M1a methods (e.g. M1b) be used for OPDD voltage protection? <i>If not, please explain why</i>	BEAMA do not agree with the removal of method 1a and would strongly prefer all options are kept on the table, to enable fair market conditions, minimise market disruption and see exclusive references to IET 01 as concerning due to its relative immaturity vs full British Standards and lack of pathway for updates at present, leaving G12 open to requiring further work to reverse this proposal as IET 01 becomes out of date. Indeed, this would if a British Standard conflict with BS 0 as it would block future innovation as currently drafted. This is particularly important as the proposed statutory voltage changes could have unintended consequences in regard to tripping frequency. Greater choice will enable manufacturers to innovate more quickly and respond should the proposed statutory voltage limit changes take place. Method 1a provides a safe way for manufacturers to build PME fault detection into the charge point. If method 1a is removed the decision will ultimately make driveway installations significantly harder, if not impossible, particularly where a cross-pavement installation is installed alongside it. For areas like driveways or covered car parks where there is concrete the alternative to Method 1a is inserting a copper rod into the ground which is labour intensive and would require CAT scanning the area for underground services. This suggestion will significantly increase costs and is clearly not written with EV charging in mind. We would be deeply concerned that such a decision has been reached without due consideration for safety or charge point adoption. There is no safety justification to remove Method 1a and would urge the D Code group to reverse this decision. The wider voltage limits provided by M1a (compared to BS 7671 722.411.4.1 indent iv) were the justification for requiring IET 01 compliance in the first place. IET 01 is not fit for purpose because it does not allow for the fact that every installation operates over a different range of voltages and therefore OPDDs have to intelligently adapt to their install location to avoid nuisance tripping and to minimise the risk that come with having a larger (fixed) voltage range which will fail to detect some PEN faults. If IET 01 is to be specified as a route to compliance, option M1a must be allowed. However, we do not feel G12 should make explicit reference to IET 01 at all. We therefore ask that IET 01 is not exclusively referenced as a method of compliance, otherwise it will stifle innovation, particularly as IET 01 has no clear scheduled pathway for updates/changes. With changes to other British standards IET 01 will become quickly out of date and require G12 to be updated sooner than otherwise necessary. Manufacturers have an obligation to ensure their products conform with legislation. The long-established industry recognised way to do this is it ensure their products conform to Standards published by BSI, for example, BS EN IEC 61851-1. Conforming to British Standards enables conformity with BS 7671 (Requirements for Electrical Installations). While IET-01 offers a framework for addressing specific issues within the UK context, it remains a voluntary reference point and should not be confused as a legal requirement¹. Making reference to a voluntary measure like IET 01 that is

¹ <https://www.beama.org.uk/resourceLibrary/beama-statement-on-iet-01-standard.html>

Distribution Code Consultation Response Proforma

	Question	Response
		in itself not fit for purpose and is in need of updating will make the installation of electrical appliances a legal battle with interpretation of and compliance with different standards and guidance documents like IET 01 being at the centre of it. There is an opportunity to achieve a greater degree of alignment that benefits both industry and the consumer by removing references that infer exclusivity to IET 01. We also observe that this may be confusing as currently worded if the ENA wish to say that Method 1a of IET 01 is not compatible yet want compliance with IET 01. This will result in confusion. For effective and consistent implementation, IET 01 would need to become a formally recognised standard, before being able to incorporate into the Wiring Regulations (BS 7671), rather than what is currently proposed, being referenced solely within an ENA recommendation. Installers require clear regulatory direction within the principal wiring standard to ensure compliance and consistency. This proposal as drafted would also result in international manufacturers having to build more bespoke products for the UK market. Method 1a currently allows for an easier, lower cost solution of the inbuilt PME fault detection device. Without this manufacturer would need to build a more expensive new product for the UK market. This would ultimately rise prices for consumers at the very moment the Government is mandating EV sales through the ZEV mandate. Any policy or regulatory decision that makes EV adoption more costly is not the right one given this policy context. Overall, this proposal is not fit for the wider policy and regulatory context we are in, will result in higher unit and installation costs and will slow down the transition to EV's and may make installations in areas with concrete flooring like driveways and covered car parks harder or not possible to achieve. It would be helpful to see the justification for this proposal given the above. Is the voltage that M1a stated accepted by ENA the cause for this change? Furthermore, PME devices at present are built to last through 'x' number of trips. We are concerned that some of the products that would be brought into scope are not transparent at present about the resilience of their products and may result in devices needing to be serviced more frequently to replace their PME devices with a new one. While the PME device is nonfunctional the risk of an incident is also greater, so there must be some clear expectations lined out as to the resilience of the products now being brought into scope. We are also concerned the timelines presented are simply not sufficient to allow products conforming with these new requirements to enter the market on time. Ultimately it can take 2-3 years for manufacturers to develop and bring about new products, less than 12 months is simply not enough. What it will do is halt the sale of charge points impacted by these changes in the UK during this period. Ultimately going against every policy objective set by the UK

Distribution Code Consultation Response Proforma

	Question	Response
		government to transition drivers into EVs and increase the flexibility on the system through the deployment of energy smart appliances like charge points. Method 1A is currently defined in IET-01 and is based on the foundations in the BS 7671 regulations. BEAMA members estimate that 90% of all charging stations with inbuilt PEN fault detection functionality are based around Method 1A. If Method 1A is excluded, then 90% of all charging stations will need to be removed from the market as these proposals exclude them. And it follows that 90% of charge points could no longer be supplied to the UK market. Such scarcity in supply while manufacturers aim to catch up, would result in rising prices for those remaining, meaning the price the consumer pays is higher, which would likely put off some people from buying an EV if they have to wait 18-24 months for a charge point to be sourced and that charge point will be 'x' more expensive than previously. Of course, some organisations do achieve compliance with relevant standards and IET 01 through method M1b and method 3. We would suggest that where possible the root cause of tripping is addressed ahead of being prescriptive on method to detect it to allow manufacturers to compete fairly, enable innovation and provide more consumer choice. Members have significant data, and research they would happily share with the ENA signalling common trends on causes of tripping, how they have innovated to reduce instances and ultimately what they need to see from the ENA to support them in doing so further down the line. We would welcome a follow up with the ENA to allow members to do this in an open setting, such as a workshop.
Q2	Do you support the clarified expectations for independent type testing and certification of OPDDs? <i>If not, what alternative approach should be considered?</i>	No. The ENA are requiring that every product sold will be tested by an external test house. Under current EU and UK legislation this is not a legal requirement and would be a conflict. However, many manufacturers will voluntarily already use UKAS approved test houses for certification. This will add cost to each EVSE. Are there enough test houses that can support testing against IET01? We would be interested to understand if the ENA have checked this. There is probably a limited number of test houses with limited capacity – therefore if this is mandated then the products time to market will be limited by the number / capacity of the test houses, meaning compliance in the already unfeasibly narrow time window will certainly not be achievable even if manufacturers were able to design a completely new product in that time. Indeed, BEAMA members report that EVCP manufacturers who have asked their 3rd party test houses to test according to IET-01 have been told that that is not possible because it is not a standard. Given that important safety apparatus in the UK such as MCBs and RCDs do not have to have 3rd party certification (self-declaration is allowed) it

Distribution Code Consultation Response Proforma

	Question	Response
		seems odd that it should be required for OPDDs. Compliance should be able to be self-declared, not least because IET-01 is self-contradictory in several places and getting a credible 3rd party to give a pass result will not be possible. (More details in Q6).
Q3	Do the refinements to Sections 6.2.14 - 6.2.16 improve clarity regarding PME application to street electrical fixtures and EVCP installations?	The refinements although providing some clarity leave many questions. For 6.2.16 it would be helpful to understand how to deploy such solutions given lack of pavement space, how they may interfere with mobility on the pavement for pedestrians for example. We would be concerned that at present such suggestions could be misinterpreted by for example a local authority and lead to a de facto ban for onstreet charging like lamp post charge points for example. We have seen similar instances throughout the LEVI process where guidance documents have been misinterpreted and led to tenders that were uncommercial and contradictory to best practice. At present the changes to 6.2.16 risk an equivalent. For 6.2.16 the changes create significant issues that will cause confusion, and potentially market failure. 1) IET-01 is not a standard, therefore cannot be complied with and is not fit for purpose with many critical flaws (see Q6) 2) These changes disregard fully compliant (with BS 7671 722.411.4.1) implementations by EVCP manufacturers 3) The requirement to “...not falsely operate under expected network conditions...” is not achievable or provable given that network conditions are so variable. Furthermore, this is not demanded of e.g. RCDs which are known to false trip under expected conditions. EVCP manufacturers continue to develop new techniques to reduce the number of false trips. 4) “...Locks out on detection of a fault scenario.” Is not adequately defined. What is the required reset behaviour? IET-01 itself is inconsistent e.g. in Table 9.8 where the allowed reset behaviour is different for circumstances presenting the same hazard level (steps 11 & 21). Furthermore, with clarification that Method 1a may be used until 1st Jan 2027, it would be good to understand why Method 1a cannot be used after. Guidance stating it can be used, must be there because it is a safe and effective product, so we would benefit from being given justification for why it is unsafe after the 1st Jan 2027 but not before.
Q4	Are there any additional technologies or installation types that future versions of EREC G12 should consider?	This version of EREC G12 should recognise that Most EVCPs on the UK market have properly functioning PEN fault protection built in, mostly using BS 7671 722.411.4.1 indent iv) or indent v). With BSI reportedly confirming compliance of members who use this method. Because EVCPs have to collect voltage and current information to perform their function and the data is stored in the Charge Point Management System (CPMS), are in a unique position to create algorithms that successfully detect PEN faults and minimise nuisance tripping. They also have the advantage that manufacturers can explain to the customer what has happened and that they need to contact their DNO to get it rectified. These functionalities are not available in the vast majority of stand-alone OPDDs. For this

Distribution Code Consultation Response Proforma

	Question	Response
		reason, alternative solutions to IET-01 must be allowed as long as they meet one of the indents of BS 7671 section 722.411.4.1. In addition, the latest edition of IEC 61851 (the standard that governs charging stations) enables the opening of the protective conductor.
Q5	Do you agree with the proposed Distribution Code text changes?	Any additional changes not highlighted above as impractical or inconsistent with exiting best practice, standards, policy or regulation we would in principle support.
Q6	Do you have any other relevant comments?	This proposal should not move forward, referencing exclusively a guidance document, instead of standards, it will have significant unintended consequences and signal to businesses to exit the UK market as policy, regulation and standards are increasingly at odds with each other, making compliance increasingly costly, difficult and in some cases unfeasible. IET-01 should not be the only method allowed to comply with the requirements for PEN fault protection because: 1. EVCP manufacturers have invested an enormous amount of research and design effort into implementing successful PEN fault protection into their EVCPs. One member says “We have over 200,000 EVCPs in the field with PEN fault protection and we know of no cases where it has failed to detect a PEN fault. We and other EVCP manufacturers have used 722.411.4.1 indent v) to enable various innovative approaches to reducing false alarms whilst maintaining the level of protection afforded by indent iv) as required. We and other EVCP manufacturers continue to develop our systems to improve detection and reduce false alarms. All this work will be redundant if complying with IET-01 is the only way to comply with EREC G12. “ 2. IET-01 was not developed using a proper process with adequate stakeholders representation and is neither a national standard nor an international standard. BEAMA did make this well known at the time of drafting. 3. IET-01 is not technology neutral and gives the appearance of benefitting manufacturers of stand-alone OPDDs: any prescriptive measure such as this always limits innovation and prevent better approaches to from being implemented. 4. IET-01 is written in a way which makes it impossible to fully integrate the OPDD into the EVCP – again appearing to benefit manufacturers of one technology type (stand-alone OPDDs). Had IET-01 been developed as a British Standard, this would have passed through the standardisation process itself. 5. There is no formal maintenance procedure for IET-01 so it will likely stay in its current immature state for the foreseeable future. 6. EVCP manufacturers in the BEAMA membership have collected an enormous amount of data on mains voltages and currents, and have conducted signature analysis on many real PEN faults (confirmed by the respective DNOs) to determine the key features of a real PEN fault as against a supply that runs at too high

Distribution Code Consultation Response Proforma

	Question	Response
		or too low a voltage due to local supply conditions. In contrast, stand-alone OPDDs (and the requirements of IET-01) are designed on the basis of very little real-world data. 7. The problem of nuisance tripping with the PEN fault detection in EVCPs comes from the 207 V to 253 V detection range set by 722.411.4.1 indent iv) and the fact that local supplies often go out of these ranges without there being a PEN fault. The problem is usually with too high a supply voltage, but on particular sites it is also because of too low a supply voltage. BEAMA members have reported nearly all incidents to occur from too high a supply voltage. 8. IET-01 is not self-consistent and has too many significant flaws to be fit for use as a standard for OPDDs (detailed comments have been provided to BEAMA by various members). We would welcome the opportunity to share these with the ENA, should they feel more evidence is required. 9. There is no provision in IET-01 to ensure that the customer understands what has happened and knows that they have to contact their DNO. This will lead to frustration and potentially put customers at risk if they continually try to reset the OPDD because they do not understand what has happened. 10. The response time required by IET-01 is short enough that transients on the LV supply (BEAMA members have this data available) which are not associated with a real PEN fault could trigger a false fail so IET-01 does not meet the “...not falsely operate under expected network conditions...” requirement in G12. In fact, it cannot. 11. IET-01 does not make it clear whether method M1b and method M3 have a logical AND relationship or a logical OR relationship so two test labs could demand very different performance from an OPDD. 12. The current edition of IET01 specifies a 5kV overvoltage category requirement for EVSE. This exceeds the requirement defined in EN IEC 61851-1, which specifies OVC III (4kV). The increased requirement necessitates larger creepage and clearance distances, exceeding values referenced in internationally harmonised standards without clear technical justification. 13. Reference is made to BS IEC 62955:2018, which is widely regarded within the industry as overly onerous and insufficiently clear, particularly in relation to the requirement for the PE switching device to meet the short-circuit withstand test level defined in that standard. Further clarification and refinement of this requirement would be beneficial.

Please provide comments relating to the specific technical content of the proposed modifications²

(See below)

² Add more rows if required

Distribution Code Consultation Response Proforma

Page / line No	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
39	6.2.16.2	1 st para	Technical	OPDDs integrated into the EVCP must be explicitly allowed	“For EVCP installations one of two additional forms of protection should be considered: i) the use of a supplementary electrode or ii) the use of an OPDD.” <i>To read:</i> “For EVCP installations one of two additional forms of protection should be considered: i) the use of a supplementary electrode or ii) the use of an OPDD (which can be an integral part of the EVCP or a stand-alone device).”	See comments above.
40	6.2.16.2	5 th para (second para after “Additional Option 2”)	Technical	1) Mandating compliance with IET 01 only will stifle innovation cost customers more and lead to worse outcomes in terms of protection and nuisance tripping. 2)	“As a minimum requirement, any OPDD shall be designed to comply with IET01...” <i>To read:</i> “As a minimum requirement, any OPDD (whether integrated in the EVCP or separate) shall be designed to comply with BS 7671 Section 722.411.4.1. Note: IET-01 provides a specification for OPDDs which may be used for guidance, but does not directly provide evidence of compliance with BS 7671 Section 722.411.4.1”	

Distribution Code Consultation Response Proforma

Page / line No	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
40	6.2.16.2	5 th para (second para after "Additional Option 2")	Technical	Disallowing Method of operation M1a further limits the approaches that can be used and method of operation M3 makes PEN fault protection more expensive and more prone to false fails.	<i>Delete:</i> "...noting that method of operation M1a shall not be used."	
40	6.2.16.2	5 th para (second para after "Additional Option 2")	Technical	The requirement for 3 rd party testing as at odds with the requirements for all other pieces of electrical equipment (e.g. RCDs and MCBs) which are acceptable on the basis of self-declaration and UKCA marking. Some test houses have already refused to test to it because it is not a standard.	<i>The design shall be verified by type testing and certification at an independent test center to ensure that it:"</i> <i>To read:</i> "The design shall ensure that:"	
41	6.2.16.2	1 st bullet	Technical	This is not testable or provable. EVCP manufacturers are using the data to continually identify new scenarios and create algorithms to deal with them so that the solutions provided by EVCPs are more effective and nuisance trip-free than an OPDD designed according to IET 01.	"responds to all likely fault scenarios, under typical system and environmental conditions." <i>To read:</i> "responds to all known likely fault scenarios, under typical system and environmental conditions."	

Distribution Code Consultation Response Proforma

Page / line No	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
41	6.2.16.2	2 nd bullet	Technical	The requirement does not provide adequate information.	“locks out on detection of a fault scenario.” <i>To read:</i> “ on detection of a PEN fault, isolate the supply and not reconnect it unless the fault conditions are resolved.”	
41	6.2.16.2	3 rd bullet	Technical	Compliance with IET-01 guarantees that there will be nuisance tripping so this requirement is not possible. It is also not provable. EVCPs are in a much better position because each time a source of false tripping is identified, the information can be built into the algorithms to reduce the likelihood of nuisance tripping due to this cause.	“Does not falsely operate under expected network operating conditions.” <i>To read:</i> “nuisance tripping is minimised.”	

Distribution Code Consultation Response Proforma

41	6.2.16.2	Penultima te para	Technical	Remove all references to IET-01	“To allow manufacturers time to develop OPDDs that comply with IET-01 and the requirements above, for connection applications received before 1st January 2027 individual DNOs have discretion to provide a PME earth terminal where an installation includes an OPDD that does not comply with IET-01, uses method of operation M1a or which has not been appropriately be verified by type testing and certification at an independent test center. For connection applications received on or after 1st January 2027 DNOs shall only provide a PME earth terminal where an installation includes an OPDD that complies with the requirements of EREC G12.” <i>To read:</i> “To allow manufacturers time to develop OPDDs (either integrated with the EVCP or separate) that comply with these requirement and the requirements above, for connection applications received before 1st January 2027 individual DNOs have discretion to provide a PME earth terminal where an installation includes an OPDD that does not comply. For connection applications received on or after 1st January 2027 DNOs shall only	
----	----------	----------------------	-----------	---------------------------------	---	--

Distribution Code Consultation Response Proforma

Page / line No	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editorial)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
					provide a PME earth terminal where an installation includes an OPDD that complies with the requirements of EREC G12.”	