NETWORKS

FORM NC6
MICROGENERATION NOTIFICATION

esbnetworks.ie

This form caters for New Microgeneration units proposed for installation and for EN50438 and EN50549 units installed pre- Jan 28th 2022

ESB Networks DAC requires the information requested on this notification form to manage your electricity supply connection. As the Distribution System Operator, this information is also required to enable ESB Networks DAC to manage the electricity network. The data controller is ESB Networks DAC. Please refer to our privacy policy at https://esbnetworks.ie/privacy

FOR OFFICIAL USE ONLY

Date received: _____

Planner group: _____

DUOS group: _____

Supplier: _____

Please fill in ALL sections in BLOCK CAPITALS
Do not leave any section blank; N/A to be used if it doesn't apply.

1. Customer's full name and site address for Microgeneration installation

Landline: Mobile number:

The Customer's email address is required to send a confirmation email regarding this application

Email:

2. MPRN number for Microgeneration installation

Please provide 11 digit MPRN no: Eircode:

MPRN must be registered in Applicant's Name. If not please contact your supplier to change.

Is this the first Microgenerator connection at these premises? Yes ☐ No ☐

If No please do not connect any Microgeneration until confirmation received from ESB Networks.

3. Installer/Consultant name and correspondence details

Landline: Mobile number:

Email:

4. Site microgeneration data

Please tick the box applicable to your Installation and continue as outlined

New Microgeneration unit proposed for installation – EN50549.
Please complete Section 5 & 5A, attaching the Type Test Cert and Manufacturers Data Sheet relating to each inverter ☐

Microgeneration installed prior to January 28th, 2022 – EN 50549 (Settings set by Installer).
Please complete Section 5 & 5B, attaching the Type Test Cert and Manufacturers Data Sheet relating to each inverter ☐

Microgeneration installed prior to Jan 28th, 2022 – EN 50438 (Settings set by Manufacturer)
Please complete Section 5 and 5C, attaching the Type Test Cert and Manufacturers Data Sheet relating to each inverter ☐

5. Microgeneration details

	Existing Installation (Where Applicable)		New Installation	
	Total Installed Capacity (TIC) kVA (TIC = MEC kVA)		Unit 1	Unit 2
Single Phase / 3 Phase	1PH ☐ 3PH ☐	1PH ☐ 3PH ☐	1PH ☐ 3PH ☐	1PH ☐ 3PH ☐
Energy Source (Wind (W)/ PV (P) / Hydro (H) / CHP (C) / Battery (B) / Other (O))				
Manufacturer				
Manufacturer's Reference No. / Model				
Inverter Capacity (kVA)				
Rated Current (Amps) as per Type Test (not to exceed 25A on Single Phase equipment or 16A/phase on three phase equipment)				
Generator (kVA) installed behind each inverter				
Storage (kVA) installed behind each inverter				
Will interface have type test certification as per Conditions Governing the Connection and Operation of Microgeneration – DTIS-230206-BRL?	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐
Will interface have settings* installed as per Conditions Governing the Connection and Operation of Microgeneration – DTIS-230206-BRL?	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐	Yes ☐ No ☐

*See Table 1 for units installed after Jan 28th 2022 and Table 2 for units installed prior to Jan 28th 2022

5A. Microgeneration proposed for installation after January 28th, 2022 – EN 50549
see Table 1 for Protection Settings). Please attach Type Test Cert

Microgenerator Manufacturer:

Model No:

Corresponding Type Test Certificate Referencing above Unit:

Single/Three Phase: Single: ☐ Three: ☐

The Protection Settings listed should be set on the unit either **prior to installation** or **on installation**, and should be as confirmed by the Safe Electric Installer.

TABLE 1: Protection settings for EN 50549 post- January 28th, 2022

Parameter		Trip setting	Clearance time	Confirm Settings Applied (Y/N)
Over Voltage				
Pre I.S EN 50549-1 Single Stage Voltage Setting		269 V / 468 V	0.7 s	
I.S. EN 50549-1 Two Stage Voltage Settings	Stage 1	269 V / 468 V	70 s	
	Stage 2	281 V / 488 V	0.7 s	
Under voltage		191 V / 332 V	0.7 s	
Over frequency*		52 Hz	0.5 s	
Under frequency*		47 Hz	0.5 s	
An explicit Loss of Mains functionality shall be included. Established methods such as, but not limited to, Rate of Change of Frequency, or Source Impedance Measurement may be used. Where Source Impedance is measured, this shall be achieved by purely passive means. Any implementation which involves the injection of pulses onto the DSO network, shall not be permitted.				
ROCOF (**)		1.0 Hz/s	0.6 s	
Vector Shift		Not permitted		

(*) For relays that have a setting step of 0.1Hz then the frequency should be set to 52.1Hz and 46.9Hz receptively.

(**) Reset interval should be set to >0.6 seconds to detect step change

Important Note:

- **No deviations from the protection settings in the above Table shall be allowed without permission in writing from ESB Networks.**
- **If a deviation exists, please provide correspondence from ESB Networks confirming acceptance of this deviation to networkservicesbureau@esb.ie**

Details of the Generator interface protection settings installed are as per those applicable in the Conditions Governing the Connection and Operation of Microgeneration (DTIS-230206-BRL) current at date of application, and the actual settings installed on the Microgenerator are as listed above.

If a deviation exists for which no permission from ESB Networks had been granted, the installation shall be disconnected immediately, and contact made with ESB Networks to regularise the situation.

Installer Details

I confirm that the above information is accurate:	
Installer Name:	**Installer SafeElectric No.**
Installer Mobile No.	**Installer email:**
Installer Address [inc. Eircode]:	
Signature:	
Date:	

5B. Microgeneration installed pre- January 28th 2022 – EN 50549

Protection Settings set by Installer in compliance with applicable ESBN "Conditions Governing the Connection and Operation of Microgeneration (See Table 2 for applicable Protection Settings) Please attach Type Test Cert.

Microgenerator Manufacturer:

Model No:

Corresponding Type Test Certificate Referencing above Unit:

Single/Three Phase: Single: ☐ Three: ☐

I confirm that the Microgenerator installed at the above address was installed in compliance with applicable ESBN '*Conditions Governing the Connections and Operation of Micro-Generation*', wired in accordance with applicable NSAI Wiring Regulations by Safe Electric Installer, has the above Serial Number, has been Type Tested as per the attached Type Test Cert and that I have verified that the Protection Settings installed on the Unit are as per the settings for pre- 2022 installations detailed in Table 2 below.	
Installer Name:	**Installer SafeElectric No.**
Installer Mobile No.	**Installer email:**
Installer Address [inc. Eircode]:	
Signature:	
Date:	

5C. Microgeneration installed pre- January 28th 2022 – EN 50438

Protection Settings installed by Manufacturer. (See Table 2 below for applicable Protection Settings) Please attach Type Test Cert.

Microgenerator Manufacturer:

Model No:

Corresponding Type Test Certificate Referencing above Unit:

Single/Three Phase: Single: ☐ Three: ☐

I confirm that the Microgenerator installed at the above address was installed in compliance with applicable ESB '*Conditions Governing the Connection and Operation of Micro-Generation*', wired in accordance with applicable NSAI Wiring Regulations by Safe Electric Installer, has the above Serial Number, has been Type Tested as per attached Type Test Cert and that I have verified that the Type Test for the Model installed confirms it was programmed with the Irish Settings Protection Settings as detailed in Table 2 below.	
Installer Name:	**Installer SafeElectric No.**
Installer Mobile No.	**Installer email:**
Installer Address [inc. Eircode]:	
Signature:	
Date:	

TABLE 2: Protection settings for EN 50549 pre- January 28th 2022 (set by Installer) and EN 50438 (pre-set by Manufacturer)

Parameter	Trip setting	Clearance time
Over voltage	230 V + 10%	0.5 s
Under voltage	230V – 10%	0.5 s
Over frequency (*)	52 Hz	0.5 s
Under frequency (*)	47 Hz	20 s
An explicit Loss of Mains functionality must be included. Established methods such as, but not limited to, Rate of Change of Frequency (ROCOF), Vector Shift or Source Impedance Measurement may be used. Where Source Impedance is measured, this must be achieved by purely passive means. Any implementation which involves the injection of pulses onto the DSO network, shall not be permitted.		
ROCOF (where used) (**)	1.0 Hz/s	0.6 s
Vector Shift (where used)	6 degrees	0.5 s

Where available:

(*) For relays that have a setting step of 0.1Hz then the frequency should be set to 52.1Hz and 46.9Hz respectively.

(**) Reset interval should be set to >0.6 seconds to detect step change

Important Note:

- **No deviations from the protection settings in the above Table shall be allowed without permission in writing from ESB Networks.**
- **If a deviation exists, please provide correspondence from ESB Networks confirming acceptance of this deviation to networkservicesbureau@esb.ie**

Details of the Generator interface protection settings installed are as per those applicable in the Conditions Governing the Connection and Operation of Microgeneration (DTIS-230206-BRL) current at date of application, and the actual settings installed on the Microgenerator are as listed above.

6. Data protection

ESB Networks DAC may use your personal data to the extent necessary (a) to set up and manage your connection agreement (b) for compliance with its licence and other legal obligations; and/or (c) for its legitimate interests (provided those interests do not conflict with your fundamental rights and freedoms) Personal data provided by you in this application form may be disclosed to other parties in the following circumstances:

- In performing its functions, ESB Networks DAC may utilise the services of contractors or other suppliers. ESB Networks DAC may disclose your data to these parties to the extent necessary to perform their functions and provided they are only permitted to use your data as instructed by ESB Networks DAC. They are also required to keep your data safe and secure.
- ESB Networks DAC may make available the existence, location and/or technical aspects of your connection to licensed electricity supply companies and other parties involved in your electricity supply. In the case of new connections, ESB Networks DAC will make available your telephone contact number to licensed electricity supply companies in order to facilitate energisation of the connection.
- ESB Networks DAC may be required by law, or our license obligations, to provide data that ESB Networks DAC holds about you, your electricity supply or connection, to government agencies or departments, the Commission for Regulation of Utilities or other third parties.
- Contact details may also be provided to a professional third party market research company for the purposes of researching your satisfaction with the services provided by ESB Networks DAC. This information may also be used to enhance our services as the Distribution System Operator.

Please return form to

networkservicesbureau@esb.ie or
ESB Networks DAC, NC6 Microgen Notifications,
New Connections, Sarsfield Road, Wilton,
Cork T12E 367

PLEASE REMEMBER!

DON'T BUILD UNDER OR NEAR ELECTRICITY WIRES

STAY SAFE STAY CLEAR OF ELECTRICITY WIRES

ESB NETWORKS DAC

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Registered in Ireland No. 465172

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