

# 'Plug & play' devices soon to be allowed on the Belgian electricity distribution grids

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Small 'mobile' solar panels and household batteries, (the so called 'plug & play' devices), have received a lot of attention in Belgium in recent months.

Synergrid, the federation of Belgian electricity and gas transmission and distribution system operators, is keeping a close eye on the situation.

Synergrid is in the process of adapting the technical prescription C10/11, enabling these devices to be deployed. The proposed adaptations include the technical specifications that the equipment will have to meet to be able to obtain a Synergrid homologation.

## **So, what is this about?**

'Plug & play' devices refer to compact, mobile power generation units, equipped with solar panels or household batteries that can be connected via cord and socket to the grid user's electrical installation, just as any other electrical appliance (such as a coffee machine or a television set).

Mobile solar panels can be purchased easily, mainly through the well-known retail websites. Today, they are authorised in the neighbouring countries on their respective terms.

## **Synergrid prescription C10/11 is the reference framework for all power-generating installations**

[The Synergrid technical prescription C10/11](#) sets out the specific technical requirements to be met by electricity generation installations operating in parallel with the distribution grid. Its goal is to guarantee the safety and stability of the electricity grid.

This prescription, which is legally binding, applies to anyone who wishes to install this type of production installations. To this day, it stipulates that production installations should be connected via fixed connections. Plugged-in devices, the so-called 'plug & play' devices, are explicitly prohibited.

This restriction not only applies to small plug & play devices, but to other applications such as 'on-board chargers' for electric vehicles and mobile battery containers as used on festivals as well.

## **Belgium adapts**

The Belgian authorities, Synergrid and the grid operators have therefore decided to re-evaluate the matter.

For the distribution system operators, members of Synergrid, these 'plug & play' devices can be authorised provided they comply with the same rules as those that apply to fixed generation installations. The main concern of the system operators is to ensure that these mobile devices do not impact negatively on the electricity grid. Stability and security of the electricity grid are at the heart of the system operators' approach.

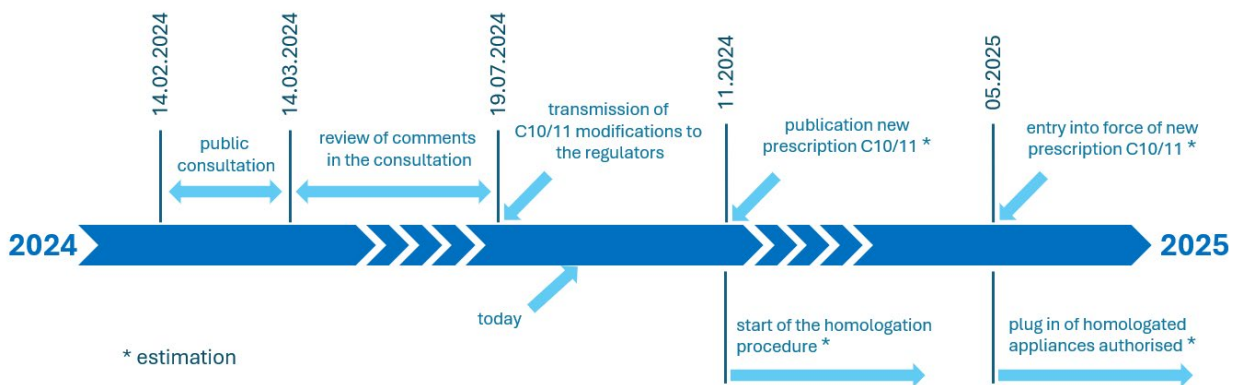
## The different stages involved in authorising ‘plug & play’ installations

A public consultation on the modification of prescription C10/11 was launched early 2024. The feedback Synergrid received has been fully considered to update the prescription proposal.

On 19 July 2024, the amended prescription was submitted to the three regional energy regulators in Flanders, Wallonia and Brussels (VREG, CWaPE and Brugel) for approval, as required by the technical regulations on electricity distribution.

As soon as the amendment has been approved by the regulators, the amended prescription will be published.

This is the scheduled timing: publication of the new prescription C10/11 by November, entry into force 6 months later.



From the publication date of the prescription, manufacturers of such mobile devices can start to have their equipment (mainly inverters) homologated by Synergrid. Six months later, the homologated equipment will be ready to be connected (‘plugged in’) in accordance with Belgian regulations.

As with fixed installations, the owner of this equipment will have to notify the system operator following a well-defined procedure.

## The security of the grid and the security of the equipment owner's domestic installation: two elements managed separately under separate rules

During the Synergrid public consultation, there were many concerns regarding the internal security of these installations.

The question whether the system user's electrical installation (after the meter) needs to be modified to accommodate this type of device, is a matter of compliance with the GREI (General Regulation for Electric Installations). Given the importance of safeguarding the internal security of installations, Synergrid has held talks on the subject with the Federal Public Service Economy and has passed on to them the questions that fall within their competence.

In requiring compliance with the prescription C10/11, Synergrid is ensuring the stability and safety of the electricity distribution grid, not the internal safety of the installation of the owner of these devices. This is the purpose of the homologation of the equipment referred to in this prescription. However, Synergrid approved equipment does provide security for the owner of the equipment with regard to its internal

installation. Indeed, in case of a power cut, the equipment homologated according to the Synergrid technical requirements will be disconnected automatically.

Manufacturers, importers and distributors of these devices for their part must put safe devices on the market, with clear instructions on how to operate them, including instructions on how to connect them to the customer's electrical system. The equipment owner needs to be informed of the risks involved, particularly if several appliances are plugged into the same socket.

**Synergrid will inform manufacturers, installers and other stakeholders in due time. An announcement will also be made on our website.**

**For further information: [CE10@synergrid.be](mailto:CE10@synergrid.be)**

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### **About Synergrid, *The Voice of the Belgian Energy Network***

Synergrid, the Belgian federation of electricity and gas grid operators, has as its mission to represent the common interests of its members, both transmission system operators (TSOs: Elia, Fluxys) and distribution system operators (DSOs: Aieg, Aiesh, Fluvius, ORES, RESA, REW and Sibelga).

Synergrid is the voice of the Belgian electricity and gas grid operators and, as such, the sector's point of contact to the Belgian and European authorities or any other body that calls on it.

Synergrid represents nine companies that supply gas and electricity to companies and the public throughout Belgium. Together with our members and by means of innovative projects, we help customers with the energy transition to meet the climate objectives and improve the quality of life for everyone.

Synergrid also develops technical and environmental standards to ensure reliable networks that meet the strictest security criteria. These standards are meant for its members, but also for third parties. Depending on the context, they are legally binding or constitute best practices to be followed.

Synergrid supports its members in setting up new platforms for flexibility, such as FlexHub (the sole platform in Belgium for flexibility management) and the RTCP ('Real time communication platform').

Finally, Synergrid is the reference for its members on labour law, social relations and sectoral pension funds, and acts as the sector's spokesperson within social consultation bodies at national level.