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# Call for an action plan for future proofed grids

A change of pace will be needed in the governance of European power grids. For Europe's energy transition to be successful, and to be able to integrate a vast amount of renewable energy, grid operators and the whole power networks ecosystem must become significantly more agile and responsive<sup>1</sup>.

We believe the upcoming grid action plan needs to address at least the following issues:

### Streamline grid connections

### 1. Optimise grid connections for energy transition projects

Lengthy grid connection procedures and existing and looming grid congestion could significantly slow down the uptake of renewables and other applications, such as charging infrastructure for electric vehicles. Their timely connection is, however, crucial to uphold the pace of the EU's energy transition. The Commission should assess alternatives to the 'first come, first served' approach that most grid connection procedures are still following.

### 2. Speed up and harmonise grid connection and permitting procedures

A successful energy transition requires grid connection procedures to become:

- Standardised
  - having standardised rules and digitalised procedures when requesting a new grid connection, e.g. one set of rules for all Charge Point Operators (CPOs), with easy check lists online & pre qualification processes
- Harmonised
   Ideally permitting procedures should be harmonised within countries but also within the EU as a whole, as many stakeholders that depend on the grid operate EU-wide
- Faster

<sup>&</sup>lt;sup>1</sup> We thank Regulatory Assistance Project (RAP) for technical input.

The EU should set maximum time limits for Transmission- and Distribution System Operators (TSOs and DSOs) to respond to grid connection requests. There should also be a time limit for the maximum duration it can take to get a new grid connection established

Detailed examples of how to implement can be found in DG MOVE's STF Sub-group on best practices of public authorities to support the deployment of recharging infrastructure's report Best practices guide for permitting & grid connection procedures (publication is pending) that outlines several detailed ideas on how to improve permitting.

#### 3. Improve transparency on networks

- Ensure TSOs/DSOs furnish comprehensive details about their network capacity, including dynamic information such as hosting capacity, anticipated connection timelines, estimated connection costs, and options for consolidating/pooling projects at shared connection points. The Commission should define specific minimum requirements for the content of these capacity maps.
- Mandate TSOs and DSOs to enhance transparency with National Regulatory Authorities (NRAs) by clearly outlining the least-cost solutions for serving grid users. The existing Electricity Market Directive (EMD) mandates biannual public disclosure of DSO network development plans, but lacks specificity on essential contents, such as the inclusion of Cost-Benefit Analyses for evaluating non-wire solutions. NRAs should stipulate that DSOs incorporate a net-zero-compliant future grid scenario with cost estimates. Additionally, reassess exemptions for small DSOs, particularly in countries with numerous small network operators like Germany, to expedite implementation.

### **Enhance flexibility - integrate renewables**

### 1. Strengthen demand side flexibility

The Commission should explore regulatory avenues to reinforce demand-side flexibility measures to ensure an optimised and more efficient use of the network. This includes ensuring that all EU countries permit smart and bidirectional energy flows, contingent on network efficiency considerations. This also means implementing without delays existing measures of the Electricity Market Design regarding dynamic price signals, setting cost-reflective network charges, as well as developing local flexibility markets and ancillary services open to all decentralised energy resources.

#### 2. Bidirectional charging act

The EV market is rapidly growing and millions of EVs will have a cost-efficient option to store energy and provide flexibility to the grid and the larger energy system, enabling more efficient usage of the first. However, to fully unlock the potential it is necessary to change relevant regulatory frameworks and to make sure all EVs are bidirectional-ready. The Commission should present a bidirectional charging act, changing the relevant provisions in several regulations/directives in one go, including mandating the bidirectional charging capability for all new EVs and catalysing the deployment of bidirectional charging (e.g. type approval regulation, Electricity Regulation, technical standards for smooth data flow along the value chain etc.)

### Speed up implementation and improve governance

#### 1. More cost-reflective network pricing

Smart network tariff design is key to activate demand-side flexibility e.g. from EVs, integrate prosumers (users who both consume and produce energy) and optimise utilisation of networks. Currently, the majority of EU countries recover costs for grid usage primarily through demand charges, based on the annual peak demand capacity (demand charges), rather than on the

amount of electricity used (volumetric charges). This makes high-capacity charging unnecessarily expensive for users and society as a whole, and impedes a business case for public charging services to develop. More guidance and monitoring by ACER would be a first step towards a more harmonised and future-proof network pricing.

### 2. Extending National Regulatory Authorities (NRA) mandate

Currently the mandate of NRAs varies widely in Europe. Most often it targets any or a mix of competitiveness, consumer protection and environmental protection/sustainability. NRAs should be empowered to have a clear mandate to steer energy regulation towards the politically agreed (both EU and national level) climate goals such as decarbonisation by 2050 or net zero power system. Electrification of transport and other sectors means fuel switch not only at supply level but also for the respective networks. Power distribution network development needs to be planned in a locally coordinated way. This process requires an institution capable and mandated for this coordination. Regulatory authorities (NRAs) should ensure that TSOs and DSOs plan their grids in alignment with current requirements, giving full consideration to significant future energy consumers, including infrastructure for charging light and heavy-duty vehicles. Additionally, NRAs must guarantee that grid operators include flexibility solutions in their network expansion or reinforcement planning.

### 3. Digitalisation

- Smart Meter Rollout. This was not binding but conditioned to a cost-benefit-analysis. In effect, MS could show based on a CBA that a roll out isn't beneficial (See EMD 2019 art. 21). Germany did so for instance, resulting in much slower roll-out.
- facilitate the activation of flexibilities from individual assets through dedicated measurement devices as foreseen in the EMD revision.

### 4. Stronger performance incentives for network operators

The investment incentives for network companies including any biases (CAPEX) should be revised, as well as the overall incentive level to invest (both in new built but also in non-wire solutions) and the definition of KPI-based incentives and penalties. The Electricity Market Directive recommends performance-based regulation, but this hasn't been put into practice yet. There should be a stronger push on NRAs for more innovation, for example by implementing performance-based regulation approaches, and being exposed to the cost of inaction.

Yours sincerely,

ChargeUpEurope

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