

Nordenergi Position Paper on the Future Regulation of DSOs

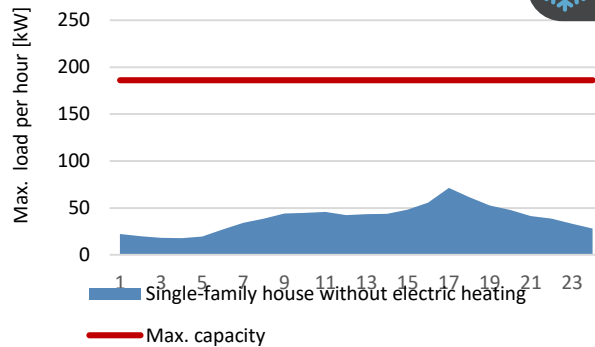
- *National implementation should follow the Clean Energy Package and thus be forward-looking*



Possible scenarios for electricity grid developments

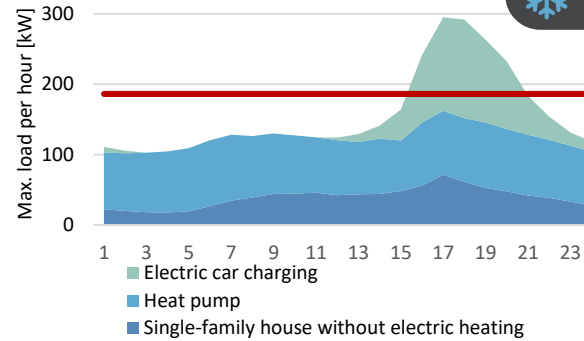
Scenario 1: No changes

Classic electricity consumption (winter)



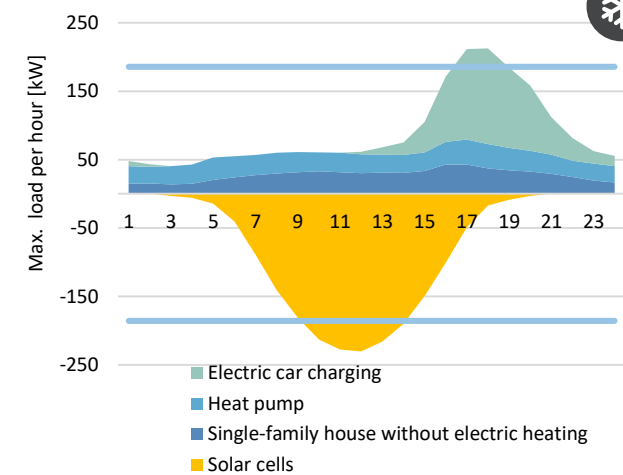
Scenario 2: EVs and heat pumps

New consumption (winter)



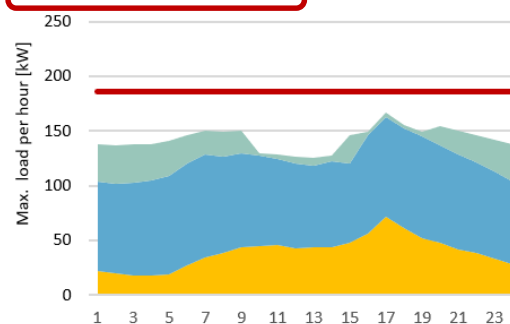
3: EVs, heat pumps and solar panels

New consumption and solar panels (summer)



FLEXIBILITY will be key

Controlled electric car charging (winter)



EU's Clean Energy Package – a forward looking consumer centered DSO regulation

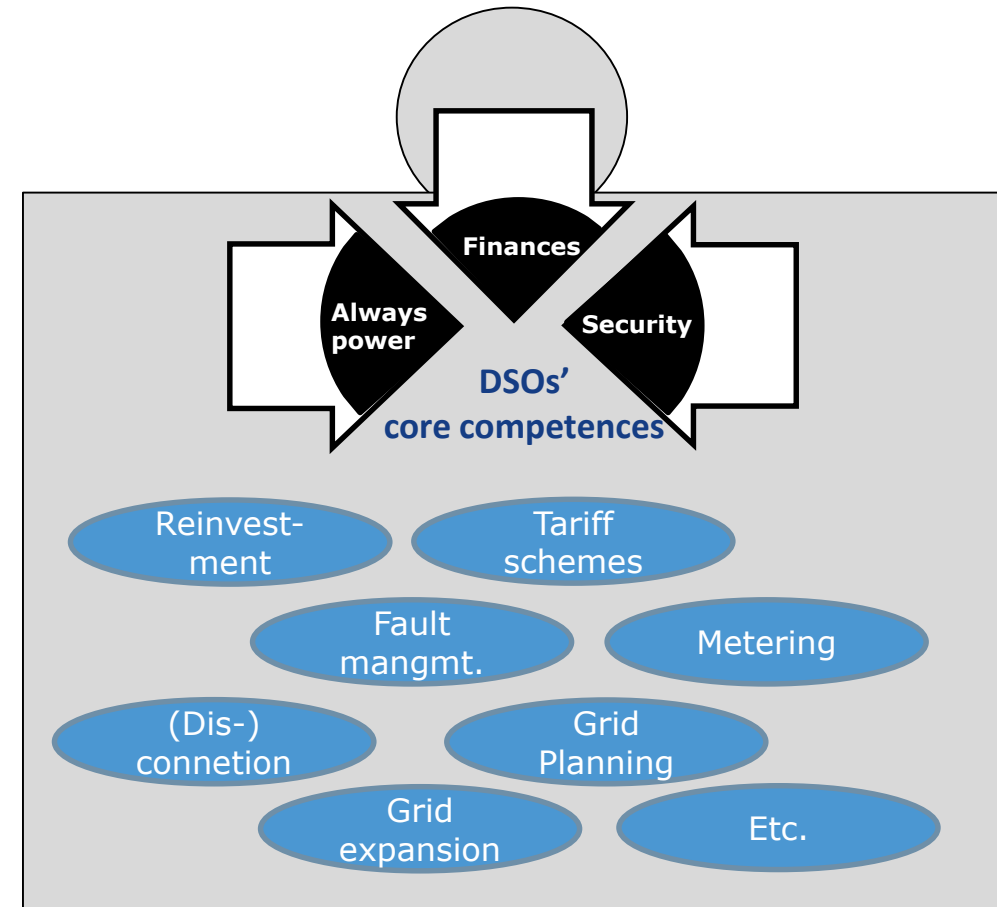
EU's Clean Energy Package – a forward looking consumer centered DSO regulation

Electrification, decentralisation of RES and rapid technological development will result in changes to the entire energy system.

The EU addresses these trends in the "*Clean Energy Package*", which includes a new electricity directive and associated regulation.

The Clean Energy Package thus sets the direction for the entire electricity system and defines the future operating conditions for, among other things, the distribution companies.

It is therefore crucial that national DSO legislation and regulatory framework are adapted accordingly.

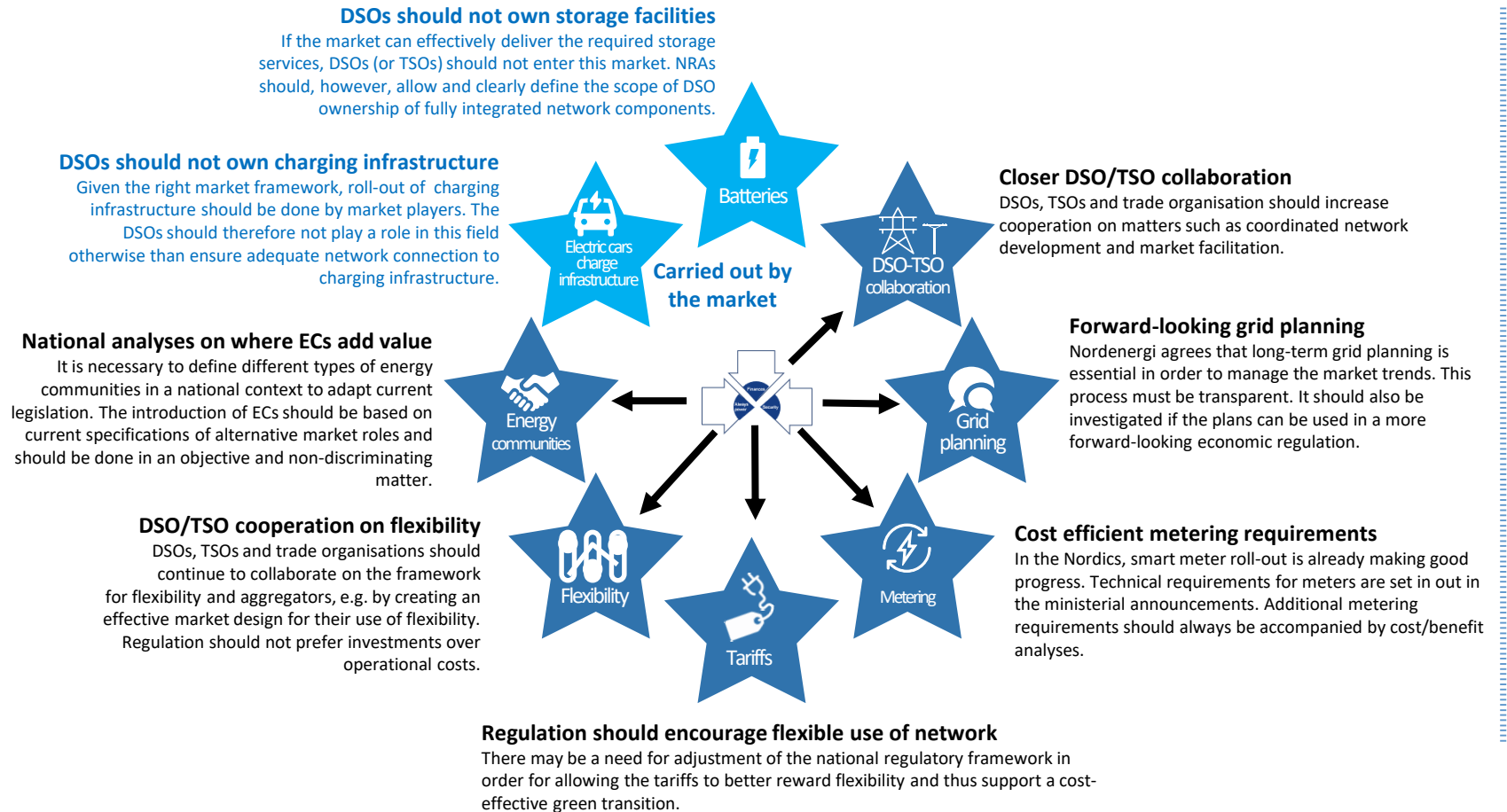


National implementation of the Clean Energy Package – need for a forward looking consumer centered approach

National implementation should build on a forward looking consumer centered DSO regulation

The Clean Energy Package is forward-looking and it is necessary to translate the same forward-looking spirit into national legislation in the implementation process.

To the right are the most important elements in this regard, as seen from the Nordic Energy Associations, Nordenergi.



Recommendations for national regulators – general framework

Economic regulatory frameworks today

The economic regulatory framework for the distribution companies generally consists of revenue caps, benchmarking and a framework for setting customer tariffs.

Today, the economic regulatory framework are **retrospective**. However the regulation should be **prospective** in order to adapt to technological development and consumer needs.

The current revenue caps are calculated on the basis of the individual distribution company's historical costs. The benchmarking uses modern statistical methods but runs mechanically with focus on the assets in which the distribution company has historically invested rather than making a more holistic assessment of future operation of DSOs, e.g. by acknowledging asset management, smart grid costs and a differentiated consumer approach.

Finally, the legislation should make it possible for the tariff schemes to support flexibility so as to optimise the use of the power grid, and it should consider prosumers and other new technologies.

Need for a forward-looking framework

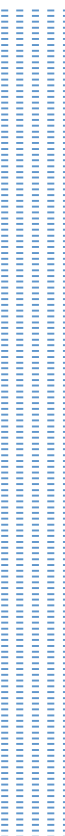
As the regulation sets the framework within which the power grid will be further developed, it is of course important that it is up-to-date and addresses the tasks to be solved by the DSOs in the future.

It is **essential that the regulatory framework for DSOs is adapted continuously**.

This applies to both the economic regulatory framework as well as regulation of the DSOs' interactions with markets.

In relation to the latter, there is a special need for attention to the legislation for batteries, local energy communities and use of flexibility.

As mentioned on the previous page, it would be natural for this to take place in connection with the implementation of the EU's Clean Energy Package in a national context.



Recommendations for national regulators – revenue caps, benchmarking and framework for tariffs

Need for forward-looking revenue caps, ...

With respect to the revenue cap regulation, the main restriction today is that the current regulation is based mainly on yesterday's – rather than tomorrow's – energy system. It does this by **calculating the revenue caps on the basis of historical costs**. When the energy system is undergoing rapid change, 'yesterday' cannot be used to predict 'tomorrow'.

In order to allow the distribution grid to handle future requirements, it is necessary to make the regulation more forward-looking.

This is in line with the EU's Clean Energy Package, which also defines a framework for the future electrical system in the light of relevant market trends.

This can be done specifically by authorities, DSOs and others collaborating to **create a shared picture of the future electricity demand and generation on DSO level**.

Revenue caps should be adjusted so they allow DSOs to invest or otherwise increase network capacity to support electrification.

... benchmarking and tariff regulation

Benchmarking, which compares the performance of DSOs, should also be developed to be more forward-looking.

It can be done e.g. by supplementing the existing benchmarking model with **performance indicators that focus on the customers' needs, i.e. what quality exactly the grid should deliver?** In addition, benchmarking as a tool should be urgently reviewed for the simple reason that the **number of companies is shrinking**.

Finally, there is a need to re-examine legislation on tariff schemes.

The legislation should be updated to accommodate a future-proof tariff design, where the distribution companies use tariffs to give the customer an incentive to display cost-reducing behaviour in connection with the green transition.

The legislation should therefore **make it possible for the tariff schemes to support flexibility**, e.g. by allowing continuously update of time-of-use tariffs and by allowing geographical differentiation according to local network capacity.

