

CEER

**Council of European
Energy Regulators**



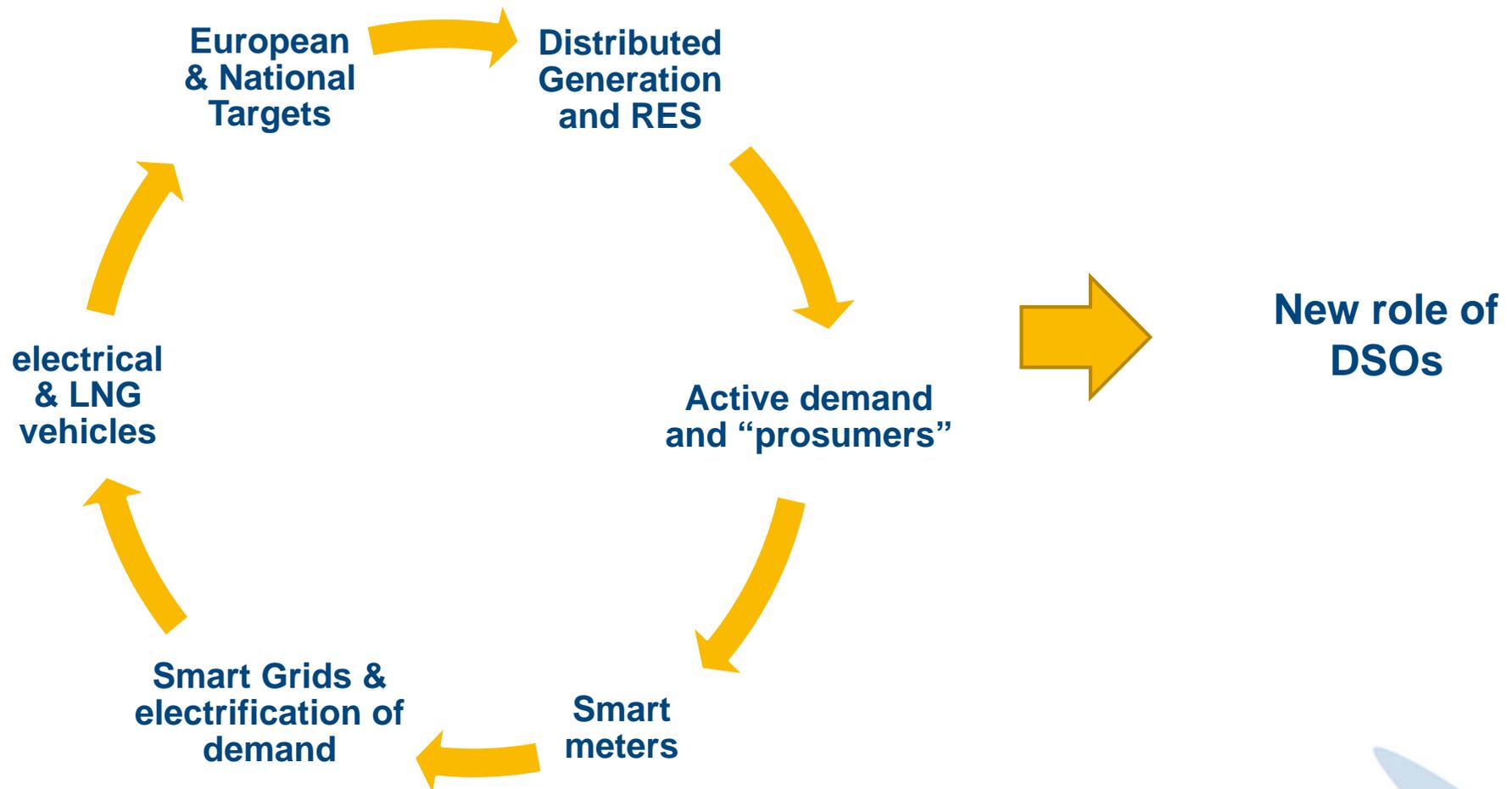
The Future is Distributed: A Regulatory Perspective

Fostering energy markets,
empowering **consumers**.

Valeria Termini, co-Chair of CEER's DSO WG and Vice President of CEER
Brussels, 19th February 2015

Drivers of Change in DSO Regulation

In the framework of the transition to a **Low Carbon Model** energy sector and in the context of a fully **Liberalised Retail Market** DSOs must evolve to address new challenges



Three principles for DSOs

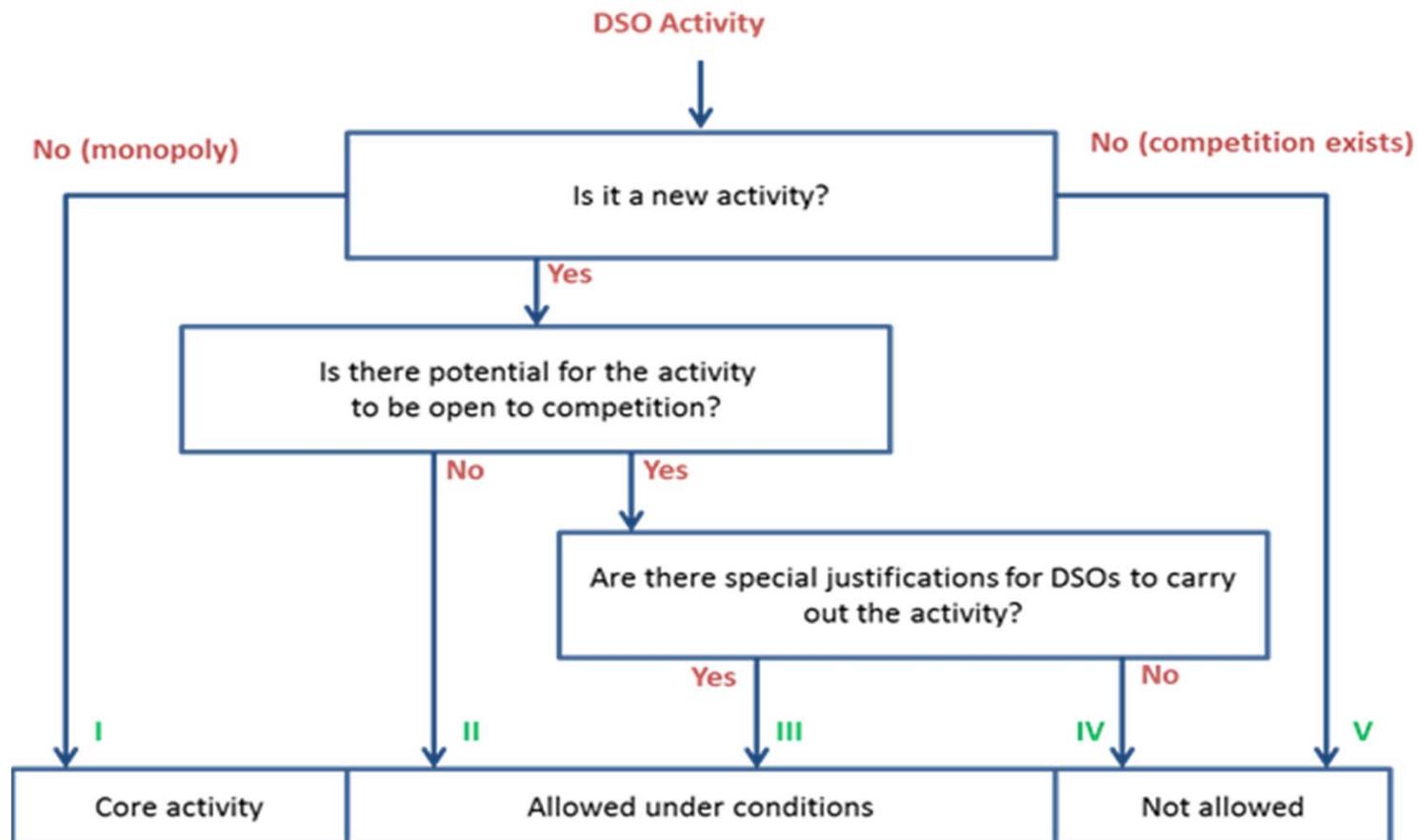
No one size fits all approach → principles and overall framework are needed

1. Meet the **reasonable expectations** of users and stakeholders
2. Act as **neutral market facilitators** in undertaking core functions
3. Act in the **public interest** (CBA analysis)



THE FUTURE ROLE OF THE DSO AND NEED FOR REGULATORY OVERSIGHT

The paper acknowledges the diverse regulatory conditions across Europe and does not seek to impose a single regulatory solution. It also proposes a flexible tool box approach to address the new “grey areas”



DSO-TSO RELATIONSHIP AND RESPONSIBILITIES

New roles:

- Involvement of DSOs in system operation (forecast, operational schedule, real time operations, planning and development)
- Relationship between network operators: TSO-DSO and DSO-DSO

Key issues:

- ▶ Active role in temporary congestion management
- ▶ Importance of data flows between operators
- ▶ New rules for coordination
- ▶ Sharing of telecommunication infrastructures
- ▶ Emergency and restoration protocols enhancement (i.e. load shedding)
- ▶ DSO-DSO coordination

CH3 - ECONOMIC SIGNALS ENCOURAGING DSOs AND CUSTOMERS

Reasons:

- New roles of DSOs call for new and different economic signals

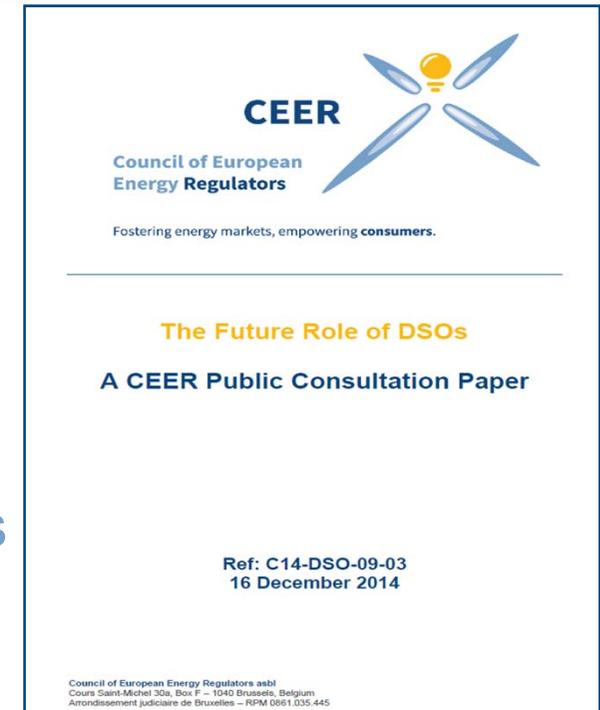
Key issues:

- ▶ Innovative investments and related risks
- ▶ “Total expenditure” approach
- ▶ Output-based incentive regulation for smart grid developments
- ▶ More economic signals for customers but low complexity for retail market
- ▶ Deferral of grid development with Tariff structure (Capacity vs Consumption) and Time-of-use distribution network tariffs (via supplier)
- ▶ Which commercial arrangements for procuring flexibility are needed (further investigation is needed)



NEXT STEPS

- Consultation period – 20th February (TBD)
 - ▶ Consultation ends February 27th
- Public Hearing with stakeholders
 - ▶ March 30th
- Conclusion paper and evaluation of responses
 - ▶ Q2 2015
- Regulatory Initiatives Roadmap





THANK YOU FOR YOUR ATTENTION!

CEER

**Council of European
Energy Regulators**



www.ceer.eu





Back up



FORWARD-LOOKING APPROACH

Main differences among DSOs in EU Member States are related to:

- ▶ **DSO size and number**
(in some countries only one DSO, in other local fragmentation)
- ▶ **DSO activity profile**
(in some countries metering and data management activities are not carried out by DSOs)
- ▶ **Characteristics of distribution networks**
(in some countries high-voltage, meshed electricity networks are not included in distribution)
- ▶ **Level of RES penetration**
(still very different among MSs)
- ▶ **Tariff design**
(in some countries regulator does not approve tariffs applied to customers but only allowed revenues)



NO one-size-fits-all model for the regulation of DSOs



CONSISTENCY WITH PREVIOUS CEER REPORTS AND GUIDELINES

«The Bridge to 2025» Conclusions

- ▶ DSO as Neutral market facilitator
- ▶ Development of smart grids
- ▶ Meeting new type of demands (i.e. EV) and ensuring data privacy

Consistency with CEER's “engagements”

- ▶ Facilitate the development of potentially competitive services
- ▶ Avoid foreclosure of potential competition by incumbent players (i.e. DSOs)
- ▶ Use a “Toolbox approach” to ensure an adequate level of business separation

Consistency with previous CEER/ERGEG reports (i.e. on flexibility services)

- ▶ CEER Advice on Demand-side Flexibility
- ▶ CEER Response to FSR draft report on Flexibility (“Shift not Drift”)
- ▶ CEER draft advice on data management
- ▶ ERGEG Guidelines on good practices for smart metering and retail processes

CONTENTS OF THE CONSULTATION

- **CH1 THE ROLE OF THE DSO AND NEED FOR REGULATORY OVERSIGHT**
 - ▶ Principles for DSOs
 - ▶ Framework
 - ▶ Activities of DSOs
 - ▶ DSO separation
- **CH2 DSO-TSO RELATIONSHIP AND RESPONSIBILITIES**
 - ▶ Real time Grid Operation
 - ▶ Balancing
 - ▶ Forecasting, Network Planning and Development
 - ▶ Emergency and restoration
 - ▶ DSO-DSO coordination
 - ▶ Regulatory changes
- **CH3 ECONOMIC SIGNALS ENCOURAGING DSOS AND CUSTOMERS**
 - ▶ Price control related incentives
 - ▶ Demand Side Response: an alternative to grid development?
 - ▶ Structure of DSO tariff (Capacity Vs Consumption)
 - ▶ Time-of-use distribution network tariffs (via supplier)
 - ▶ Contractual arrangements





Potential DSO Activities

Activity #	Activity Description	Future Category*			
		I	II / III / IV	V	
A	Existing and evolving core activities				
A1	Activities related to the (efficient) energy network infrastructure	X			
A2	System security	X			
A3	Gas quality checks	X			
A4	Technical data management	X			
A5	Managing network losses	X			
B	Activities where DSOs should not be involved				
B1	Energy generation				X
B2	Energy supply				X
B3	Exception to the disallowance of contracting local temporary generation for sake of continuity of supply		X		
B4	Exception on reaching beyond the meter for gas safety issues		X		
B5	Exception to the disallowance of supplying energy being the supplier of last resort		X		
C	Activities related to retail liberalisation				
C1	Commercial activities in respect of retail suppliers	X			
C2	Activities in respect of final customers for revenue protection		X		
C3	Activities performed by DSOs on supplier's request, including customer switching		X		
C4	Activities for commercial data handling		X		
D	Activities related to renewables penetration and new flexibility needs				
D1	Local dispatching for local resources		X		
D2	Energy storage		X		
E	Activities related to infrastructure provision for electric/gas vehicles				
E1	Operate non-discriminately towards any other person who own and operates EV recharge infrastructure	X			
E2	Development of EV recharging points as well as NGV fuelling infrastructure		X		
F	Ownership & management of meter				
F1	Owning and managing of the metering equipment	X			
F2	Market driven approach, where metering activities are carried out by separate, independent meter operators				X
G	Activities related to energy efficiency				
G1	Improving energy efficiency of the network	X			
G2	Activities reaching beyond-the-meter				X
G3	Providing advanced devices and added-value services for energy efficiency		X		
H	Other activities out of the electricity/gas supply chain				
H1	Offering services to telecom companies		X		
H2	Other public electricity-related services like public lighting, traffic light operations, etc		X		
H3	Other energy-related services like district heating etc		X		
H4	Sharing smart metering infrastructures		X		
I	Data Handling				
I.1	Customer data management		X		
I.2	Data collection for system security	X			

Bridge Conclusions on DSOs

- DSOs must be **neutral market facilitators** to enable the development of new market-based services to consumers by third parties and to ensure secure system operation.
- DSOs will need to manage their networks actively; also through **smart grid solutions** and **innovative investments**.
- **Coordination between DSOs and TSOs** for network operational matters. DSOs should increase resilience to new threats, including cyber-security
- Where **data management** is entrusted to them, DSOs should ensure that consumer's **data privacy** is maintained.
- DSOs will need to **adapt their networks to meet new demands**, (e.g. EV recharging stations and compressed natural gas filling stations).

