

ENTSO-E Annual Work Programme

2024 Edition – Draft list of deliverables for Pre-Consultation



ENTSO-E Mission Statement

Who we are

ENTSO-E, the European Network of Transmission System Operators for Electricity, is the **association for the cooperation of the European transmission system operators (TSOs)**. The **39 member TSOs**, representing 35 countries, are responsible for the **secure and coordinated operation** of Europe's electricity system, the largest interconnected electrical grid in the world. In addition to its core, historical role in technical cooperation, ENTSO-E is also the common voice of TSOs.

ENTSO-E **brings together the unique expertise of TSOs for the benefit of European citizens** by keeping the lights on, enabling the energy transition, and promoting the completion and optimal functioning of the internal electricity market, including via the fulfilment of the mandates given to ENTSO-E based on EU legislation.

Our mission

ENTSO-E and its members, as the European TSO community, fulfil a common mission: Ensuring the **security of the interconnected power system in all time frames at pan-European level** and the **optimal functioning and development of the European interconnected electricity markets**, while enabling the integration of electricity generated from renewable energy sources and of emerging technologies.

Our vision

ENTSO-E plays a central role in enabling Europe to become the first **climate-neutral continent by 2050** by creating a system that is secure, sustainable and affordable, and that integrates the expected amount of renewable energy, thereby offering an essential contribution to the European Green Deal. This endeavour requires **sector integration** and close cooperation among all actors.

Europe is moving towards a sustainable, digitalised, integrated and electrified energy system with a combination of centralised and distributed resources.

ENTSO-E acts to ensure that this energy system **keeps consumers at its centre** and is operated and developed with **climate objectives** and **social welfare** in mind.

ENTSO-E is committed to use its unique expertise and system-wide view – supported by a responsibility to maintain the system's security – to deliver a comprehensive roadmap of how a climate-neutral Europe looks.

Our values

ENTSO-E acts in **solidarity** as a community of TSOs united by a shared **responsibility**.

As the professional association of independent and neutral regulated entities acting under a clear legal mandate, ENTSO-E serves the interests of society by **optimising social welfare** in its dimensions of safety, economy, environment, and performance.

ENTSO-E is committed to working with the highest technical rigour as well as developing sustainable and **innovative responses to prepare for the future** and overcoming the challenges of keeping the power system secure in a climate-neutral Europe. In all its activities, ENTSO-E acts with **transparency** and in a trustworthy dialogue with legislative and regulatory decision makers and stakeholders.

Our contributions

ENTSO-E supports the cooperation among its members at European and regional levels. Over the past decades, TSOs have undertaken initiatives to increase their cooperation in network planning, operation and market integration, thereby successfully contributing to meeting EU climate and energy targets.

To carry out its **legally mandated tasks**, ENTSO-E's key responsibilities include the following:

- › Development and implementation of standards, network codes, platforms and tools to ensure secure system and market operation as well as integration of renewable energy;
- › Assessment of the adequacy of the system in different timeframes;
- › Coordination of the planning and development of infrastructures at the European level (**Ten-Year Network Development Plans, TYNDPs**);
- › Coordination of research, development and innovation activities of TSOs;
- › Development of platforms to enable the transparent sharing of data with market participants.

ENTSO-E supports its members in the **implementation and monitoring** of the agreed common rules.

ENTSO-E is the common voice of European TSOs and provides expert contributions and a constructive view to energy debates to support policymakers in making informed decisions.

Draft list of deliverables for Pre-Consultation

The Annual Work Programme list of deliverables 2024

- › covers the period from January to December 2024. It focuses on the legally mandated tasks given to TSOs and ENTSO-E directly by EU Regulations, Directives and Network Codes and Guidelines as well as the related terms and conditions or methodologies;
- › During its 30 March 2023 meeting, the Assembly approved the draft list of deliverables 2024 noting that it is developed in accordance with the legal mandates of ENTSO-E. In line with ENTSO-E's commitment to transparency and engaging with its stakeholders, and last year's 2-step approach regarding the Public Consultation, it was decided that ENTSO-E will publicly pre-consult the list of deliverables with its stakeholders.
- › The Secretariat is closely following the regulatory developments related to the electricity market design reform and will update the list of deliverables accordingly, if needed.

Your comments provide precious input to the Organisation in order to improve the draft list of deliverables presented to you in this Public Pre-Consultation. The received comments will be addressed and the Annual Work Programme team will provide feedback to those who provided comments. The Public Consultation on the Draft Annual Work Programme will run as usual in the summer.

List of deliverables

Topic	Regulation	Article	Level 1 Article content/activity	J	F	M	A	M	J	J	A	S	O	N	D
MARKETS															
BZ	Reg 2019/943	A. 14(6)	Bidding Zone Review												
BZ	Reg 2019/943	A. 14(2)	Bidding Zone technical report												
FCA	Reg. 2016/1719	A. 51	Update of the Forward Capacity Allocation methodologies to introduce Harmonised Allocation Rules (FCA Article 51)												
CACM	Reg 2015/1222	A. 10	Day-to-day management of the single day-ahead and intraday coupling												
CACM	Reg 2019/943	A. 8.4	Implementation of 15 minutes products in ID and DA												
CACM	Reg 2015/1222	A. 49 & A. 56	Review of the Scheduled Exchanges methodologies	The exact timeline of work is to be provided.											
EB	Reg 2017/2195	A. 20.6	Implementation of mFRR Platform												
EB	Reg 2017/2195	A. 21.6	Implementation of aFRR Platform												
EB	Reg 2017/2195	A. 22.5	Implementation of IN Platform												
EB	Reg 2017/2195	A. 23.1	Report on costs of establishing, amending and operating European balancing platforms												
Monitoring CACM	Reg 1222/2015	A. 80.2	Annual CACM cost report												
Monitoring CACM	Reg 1222/2015	A. 82.2	Monitor the implementation of single day-ahead and intraday coupling/ (a) progress and potential problems with the implementation												
		A. 82.4 & A. 82.5	Collect data from TSOs/CCRs based on the list of information agreed between ACER and ENTSO-E. Data is to be submitted following the go live of the methodologies in each CCR and on a six month basis following that. The data will be made available to ACER in order to complete its monitoring activities												
Monitoring CACM	Reg 1222/2015	A.31.2	Capacity Calculation and allocation report												
Monitoring EB	Reg 2017/2195	A. 63.1	Monitoring of the implementation of the EB												
Monitoring FCA	Reg 2016/1719	A. 63.1	Monitor the implementation of forward capacity allocation and the establishment of single allocation platform/(a) the progress and potential problems with the implementation												
		A. 63.3 & A. 63.4	Collect data from TSOs/CCRs based on the list of information agreed between ACER and ENTSO-E. Data is to be submitted following the go live of the methodologies in each CCR and on a six month basis following that. The data will be made available to ACER in order to complete its monitoring activities												
Monitoring FCA	Reg 2016/1719	A. 26.2	Capacity Calculation and allocation report												
TP	Reg 543/2013	-	Continuation of TP back-end architecture and front-end implementation												
TEN-E	Reg 2022/869	A. 15	Preparatory work towards application of the cost-benefit and cost-sharing to the priority offshore grid corridors												
Annual Work Programme	Reg 2019/943	A. 30.1 j	Adopt an Annual Work Programme												
Capacity Mechanisms	Reg 2019/943	A. 26(11)	Annual Report on Cross-Border Participation to Capacity Mechanisms (Technical specifications for cross-border participation in capacity mechanisms Art. 25 ¹)												
CACM	Reg 2019/943	A. 44	Review of the regional fallback procedures	The exact timeline of work is to be provided.											
CACM	Reg 2019/943	A. 15	Assessment of the CCR configuration	The exact timeline of work is to be known later in the year.											

* Market Design reform implementation

1 Technical specifications for cross-border participation in capacity mechanisms: [Microsoft Word – XBP CM – Annex I – technical specifications \(europa.eu\)](#)

- TSO process for developing methodology
- TSO deadline for submitting proposal
- Public Consultation
- w Workshop
- Implementation
- Implementation Deadline
- ACER Decision preparation
- ACER Decision publication

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SYSTEM OPERATION															
SOGL	Reg 2017/1485	A. 114	Operate an ENTSO-E operational planning data environment (OPDE) for the storage, exchange and management of all relevant information for the CGM Business Process												
RCC	Reg 2019/943	A. 30(2)	Report to ACER on shortcomings identified regarding the establishment and performance of regional coordination centres												
RCC	Reg 2019/943	A. 37.1.d	ENTSO-E shall develop proposals for RCC tasks – Consistency defense and restoration plans												
RCC	Reg 2019/943	A. 37.1.e	ENTSO-E shall develop proposals for RCC tasks – Short term adequacy												
RCC	Reg 2019/943	A. 37.1.f	ENTSO-E shall develop proposals for RCC tasks – Outage Planning Coordination												
RCC	Reg 2019/943	A. 41 (2)	ENTSO-E and RCCs shall operate transparently and Publish documents on websites, full transparency towards stakeholders												
RCC	Reg 2019/943	A. 46(3)	ENTSO-E to receive from RCCs the RCC Annual Report												
RPP	Reg 2019/941	A. 6	RPP crisis scenarios identification (update every 4 years)												
SOGL	Reg 2017/1485	A. 65	Common list of year-ahead scenarios against which TSOs assess the operation of the interconnected transmission system for the following year												
SOGL	Reg 2017/1485	A. 14.2	Comprehensive, standardised format, digital data archive of the information required by ACER												
SOGL	Reg 2017/1485	A. 15	Annual incident classification scale report												
SOGL	Reg 2017/1485	A. 16	Annual report on load-frequency control												
SOGL	Reg 2017/1485	A. 17	Annual report on regional coordination assessment												
SOGL Regional	Reg 2017/1485 Reg 2017/2196	SOGL A. 13/A. 118 E&R A.10	Agreement for Future Synchronous Operation between Continental Europe TSOs and Ukrenergo/Moldelectrica												
SOGL Regional	Reg 2017/1485 Reg 2017/2196	SOGL A. 13/A. 118 E&R A.10	Agreement for Synchronous Operation between Continental Europe TSOs and KOSTT												
SOGL Regional	Reg 2017/1485 Reg 2017/2195 Reg 2017/2196	SOGL A. 13/A. 118 EBGL A. 50, 51 E&R A.10	RG CE: Implementation of SAFA methodologies (including FSKar)												
SOGL/CSAM	Reg 2017/1485	A. 75.1/ A.44.1	Report on status on probabilistic risk management approaches and maturity												
NC DR	Reg 2019/943	A. 59.1e (NC DR)	Rules implementing Article 57 of this Regulation and Articles 17, 31, 32, 36, 40 and 54 of Directive (EU) 2019/944 in relation to demand response, including rules on aggregation, energy storage, and demand curtailment rules	The exact timeline of work is to be provided.											
SOGL Regional	Reg 2017/1485	SOGL A. 118	Adherence of Baltic TSOs to SAFA after their synchronization with SA CE	The exact timeline of work is not known yet											

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RESEARCH, DEVELOPMENT & INNOVATION															
RDI			IntNET project work												
RDI	Reg 2019/943	A. 30. 1/i.	RDI Roadmap 2024 – 2034												
RDI	Reg 2019/943	A. 30. 1/i.	Initiation of projects based on the ongoing programmes												
RDI	Reg 2019/943	A. 30. 1/i.	Development of new programmes												
RDI			BD4NRG project work												
RDI			OneNet project work												
RDI			ETIP SNET support (project work)												
RDI			Digital Twin of the European Electricity Grid (DoI implementation)												
RDI			Digital Twin of the European Electricity Grid (project)												
RDI			Digitalisation of Energy Action Plan (DoESAP)												
SYSTEM DEVELOPMENT															
Adequacy	Reg 2019/943	A. 23	ERAA (European Resource Adequacy Assessment)												
Adequacy	Reg 2019/943	A. 30.1m	Summer Outlook												
Adequacy	Reg 2019/943	A. 30.1m	Winter Outlook												
DC	Reg 2016/1388	A. 56	Non-binding guidance on implementation of DC NC, explaining technical issues, conditions and interdependencies												
HVDC	Reg 2016/1447	A. 75	Non-binding guidance on implementation of HVDC NC, explaining technical issues, conditions and interdependencies												
HVDC	Reg. 2016/1447	A. 76.2	HVDC List of information to ACER												
RfG	Reg 2016/631	A. 58	Non-binding guidance on implementation of RfG NC, explaining technical issues, conditions and interdependencies												
RfG	Reg 2016/631	A. 59.2	RfG List of information to ACER												
RfG, DC, HVDC	Reg 2016/631, 2016/1388, 2016/1447	A. 59.1, A. 57.1, A. 76.1	Monitoring (analysis and preparation of report) – joint CNCs report												
RfG, DC, HVDC	Reg 2016/631, 2016/1388, 2016/1447	A. 7.3.f & preamble 27, A. 6.3.f & preamble 17, A. 5.3.f & preamble 13	Monitoring of existing and under development standards												
TYNDP	Reg 2022/869	Recital 25	CBA methodology												
TYNDP	Reg 2022/869	Recital 46	TYNDP scenarios												
TYNDP	Reg 2022/869		TYNDP gap analysis/system needs												
TYNDP	Reg 2022/869	A. 11.1	TYNDP CBA												
TYNDP	Reg 2022/869	A. 15.2	Offshore Network Development Plans												
TYNDP	Reg 2022/869	A. 11.10 11.11	Interlinked model												
TEN-E	Reg 2022/869	A. 15	Application of the cost-benefit and cost-sharing to the priority offshore grid corridors												

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ICTC															
Interoperability	Reg 2019/944	A. 23 & 24	Draft Implementing acts on data access and data interoperability												
Cybersecurity	NCCS	A. 12(1&5)	Support ACER to determine performance indicators that allow assessing operational reliability that can be related to cybersecurity aspects of cross-border electricity flows and in carrying out monitoring activities												
Interoperability	Reg 2019/944	A. 23 & 24	Mandate from the implementing act on interoperability requirements (JWG with EU DSO)												
Cybersecurity	NCCS	A. 15 (1a & 1b)	Establish Cybersecurity Risk Working Group												
Cybersecurity	NCCS	A. 17(1)	Develop proposals for the cybersecurity risk assessment methodologies												
Cybersecurity	NCCS	A. 37(1)	Develop sets of cybersecurity procurement recommendations												
Cybersecurity	NCCS	A. 40(7)	Perform feasibility study to develop common tool												
Cybersecurity	NCCS	A. 40(6)	Develop a cybersecurity incidents classification scale methodology												
Cybersecurity	NCCS	A. 50(4)	Develop a transitional list of Union-wide high-impact and critical-impact processes												
Cybersecurity	NCCS	A. 50(5)	Develop a transitional list of European and international standards and controls												
Cybersecurity	NCCS	A. 50(1)	Develop transitional ECII												

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List of Abbreviations

A.	Article	EB GL	Regulation (EU) 2017/2195 establishing a guideline on electricity balancing
ACER	Agency for the Cooperation of Energy Regulators	ECCo SP	ENTSO-E's Communication and Connectivity Service Platform
AFIR	Alternative Fuel Infrastructure Regulation	EDI	Electronic Data Interchange
aFRR	automatic Frequency Restoration Reserves	EED	Energy Efficiency Directive
AWP	Annual Work Programme	EG	Expert Group
BZ	Bidding zone	EMS	Energy Management Systems
BZR	Bidding Zone Review	EnC	Energy Community
CACM	Capacity allocation and congestion management	ENTSO-E	European Network of Transmission System Operators
CBA	Cost Benefit Analysis	ENTSOG	European Network of Transmission System Operators for Gas
CC	Capacity Calculation	ERAA	European resource adequacy assessment
CCC	Coordinated Capacity Calculation	ETIP SNET	European Technology & Innovation Platforms on Smart Networks for Energy Transition Platform
CCR	Capacity Calculation Region	EU	European Union
Cfd	Contracts for Difference	FCA Regulation	Regulation (EU) 2016/1719 establishing a guideline on forward capacity allocation
CGM	Common Grid Model	FSKar	Financial Settlement of KΔf, ACE and ramping period
CGMES	Common Grid Model Exchange Standard	GUI	Graphical User Interface
CID	Congestion Income Distribution	HVDC	Regulation (EU) 2016/1447 establishing a network code on requirements for the grid connection of high voltage direct current systems and direct current-connected power park modules
CIM	Common Information Model	IEM Directive	Directive (EU) 2019/944 on the internal market for electricity
CM	Capacity Mechanism	IEM Regulation	Regulation (EU) 2019/943 on the internal market for electricity
CMM	Capacity Management module	IGD	Implementation Guidance Document
CNC	Connection Network Code		
CSA	Coordinated Security Analysis		
CSAM	Coordinated Security Analysis Methodology		
CZC	Cross-zonal capacity		
DSF	Demand Side Flexibility		
DSO	Distribution System Operator		
EAS	European Awareness System		

IGM	Individual Grid Model	RfG	Regulation (EU) 2016/631 establishing a network code on requirements for grid connection of generators
IFs	Implementation Frameworks		
IGDs	Implementation Guidance Documents	RG CE	Regional Group Continental Europe
IN	Imbalance netting		
ITC	Inter Transmission System Operator Compensation	Risk Preparedness Regulation	Regulation (EU) 2019/941 on risk-preparedness in the electricity sector
KPI	Key Performance Indicator	RPP	Risk Preparedness Plan
LMP	Local Marginal Pricing	RSC	Regional Security Coordinator
mFRR	manual Frequency Restoration Reserves	SAFA	Synchronous Area Framework Agreement
MoP	Manual of Procedures	SAP	Single Allocation Platform
MoU	Memorandum of Understanding	SCADA	Supervisory Control and Data Acquisition
NC DSR	Network Code on Demand Side Response	SET	Strategic Energy Technology
NC ER	Regulation (EU) 2017/2196 establishing a network code on electricity emergency and restoration	SOGL	Regulation (EU) 2017/1485 establishing a guideline on electricity transmission system operation
NCCS	Network Code on Cybersecurity	SOR	System Operation Region
NEMO	Nominated Electricity Market Operators	STA	Short-term Adequacy
NRA	National Regulatory Authority	StG ReC	Steering Group Regional Coordination
NTC	Net Transfer capacities	TEN-E Regulation	Regulation (EU) 2022/869 on guidelines for trans-European energy infrastructure
OPC	Outage Planning Coordination	TP	Transparency Platform
OPDE	Operational Planning Data Environment	Transparency Regulation	Regulation (EU) No 543/2013 on the submission and publication of data in electricity markets
PCN	Physical Communication Network	TSOs	Transmission System Operators
PPAs	Power Purchase Agreements	TYNDP	Ten-Year Network Development Plan
RCC	Regional Coordination Centre	WAMS	Wide Area Metering System
RDI	Research, Development and Innovation		
RED III	Renewable Energy Sources Directive		

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