



# // **COMMERCIAL METERING:**

## **DATAHUB & DIRECTIONS OF DEVELOPMENT**

Round table on Electricity Supply and  
Trade in the New Market Model,  
23.09.2021





# ORGANIZATION OF DATA EXCHANGE (MAIN/CMD) DURING THE IMPLEMENTATION OF DATAHAB

Function	Current model	Target model
Physical organization of Accounting Points	CMEO (system operators, independent CMSPs)	CMEO (system operators, independent CMSPs)
Accounting Points Model	32 local AP Registers pertaining to system operators (approx. 18,26 million of APs in total), 1 Register of aggregated AP (pertains to CMA) (approx. 15 thousand of APs)	Uniform AP Register (pertains to CMA) (approx. 18,26 million of APs)
Modelling/support of Accounting Points Model	APA (System Operators)	APA (System Operators)
Meter reading	MRO (users, system operators, independent operators)	MRO (users, system operators, independent operators)
Formation of Commercial Metering Data (CMD)	CMDO (system operators, independent CMSPs)	CMDO (system operators, independent CMSPs)
Formation of estimated Commercial Metering Data	System Operators	CMA (Datahub)
Profiling and application of profile to integral metering data	System Operators	CMA (Datahub)
Aggregation by market participants	System Operators	CMA (Datahub)
Output of Commercial Metering Data for invoicing	System Operators	CMA (Datahub)
Output of Commercial Metering Data for statistical reports	System Operators	CMA (Datahub)

# // STAGES OF IMPLEMENTATION OF THE DATAHUB PLATFORM AND INTERIM RESULTS

2020

## Regulatory framework of Datahub Global project teams on development and implementation

1. Regulatory framework was developed and published;
2. Constant communications with CMSPs (APA) were arranged:
  - 4 training seminars
  - Call-center and mailing groups support
3. A technical working group was set up for developers of automated systems of system operators
4. Statements of work of the Datahub main functionality were developed:
  - AP Register and Bulk upload process
  - Change of Supplier, incl. for SoLR
  - Exchange of CMD time series
5. A separate unit was created, a team of developers was recruited, and the development process was launched

I-III q. 2021

## Filling central managed AP Register

1. Test data collection of sites of households with generating installations with RES (prosumers)
2. Start of filling AP Register - 20.05.2021
3. The filling is performed **with a delay on the part of APA**. As of September 20, 2021, **13.8 million (75.4%)** of accounting sites were uploaded to the AP Register including sites of:
  - Prosumers – **0,03 million (100%)**, as of the date of stage termination **15.06.2021 – 100%**
  - Legal persons – **1,0 million (95,1%)**, as of the date of stage termination 15.07.2021 – **0,6 million (58,7%)**
  - Physical persons – **12,7 million (69,4%)**, as of the date of stage termination 15.09.2021 – **11,2 million (64,8%)**

IV q. 2021

## Processes of AP Register support Processes of CMD exchange

1. Testing and deployment of business processes by the main groups:
  - AP life cycle (creation, editing, connection status, deletion)
  - Change of parties (Supplier, NCP, CMSP, APR)
  - Request of AP main data and Exchange of CMD (including with MMS) with **Digital signature and quality labels**
  - Disputes on Main data and CMD
2. Registration and connection of electricity suppliers
3. Launch of CMD exchange
4. Launch of AP Register as Master register

I-II q. 2022

## Aggregation of data Formation of substitution data

1. Testing and deployment of business processes by the main groups:
  - Aggregation of data by categories
  - Formation of substitution data
2. Collection of historical data (not less than 1 year) of accounting sites
3. Transfer of Aggregation functions from System operators to Datahub
4. Development of enhanced tools of CMD analytics
5. Optimization of AP Register structure for the commercial metering of other types of energy sources

## Main issues of filling central managed AP Register:

1. «Complex» accounting sites of the non-household consumers are not identified - **7 System Operators**
2. There is no identification of the Network Connected Party (NCP); **11,6 million (70,7%)** of the household consumers were identified by RNTRC (former IIN) or passport, including **9,2 million (55, 9%)** of consumers whose identifiers are stored in system operators databases in digital form
3. A significant amount of data on the accounting sites filed in separate accounting systems exist only in paper form or do not exist at all

\* - electrical installation or a set of electrical installations, only between which the flow of electricity is possible limited by two or more Accounting points.

# // DATAHUB: RESULTS OF THE IMPLEMENTATION AND “OPEN” QUESTIONS

- Sole source of certified data for all accounting sites (AP Register and associated CMD)
- Non-discriminatory access to data for stakeholders
- Unified rules for administering the processes of change of parties
- Transparent formation of calculated data (estimated data, or substitution data) according to uniform algorithms
- Acceleration of settlement processes in the electricity market
- Ability to generate industry reports
- Ability to solve problems of related industries

**DATAHUB  
DOES  
provide**

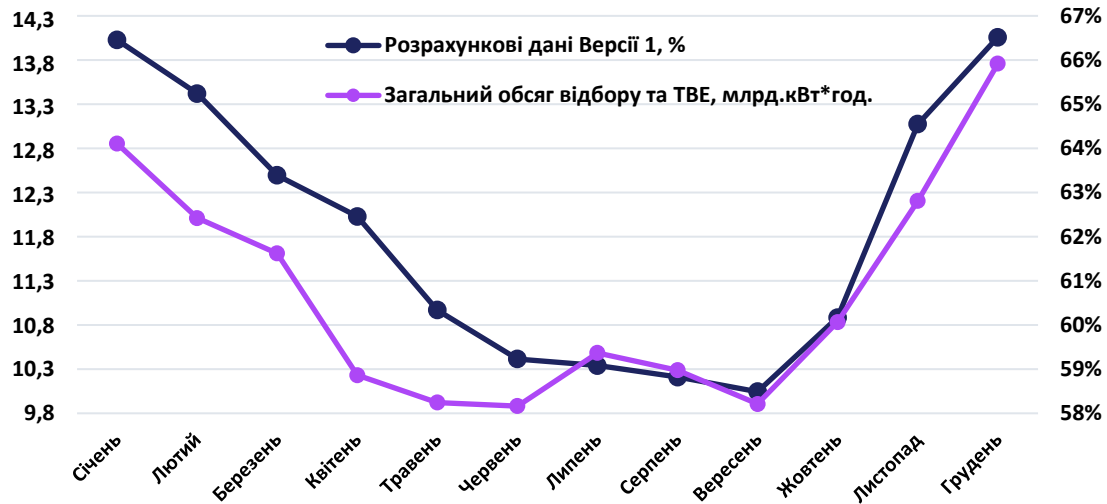
**DATAHUB  
DOES NOT  
provide**

Improving the reliability and timeliness of the provision of commercial metering data from CMSPs to Datahub, which are affected by:

- the state of commercial metering directly at the metering (accounting) sites
- the state of telecommunications between accounting sites and the relevant CMSP
- the state of automation of commercial metering processes directly within CMSP

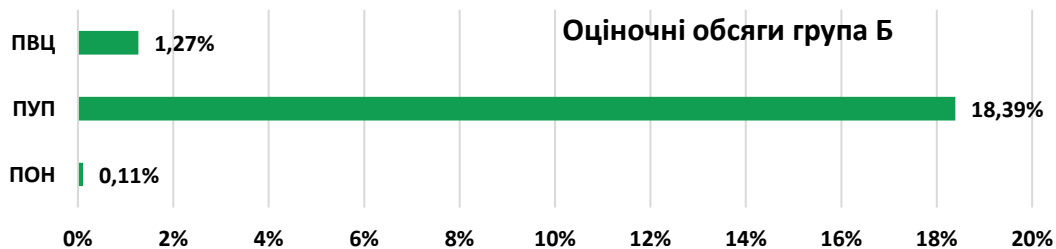
# // ANALYSIS OF COMMERCIAL METERING DATA, 2020

## CMD V.1

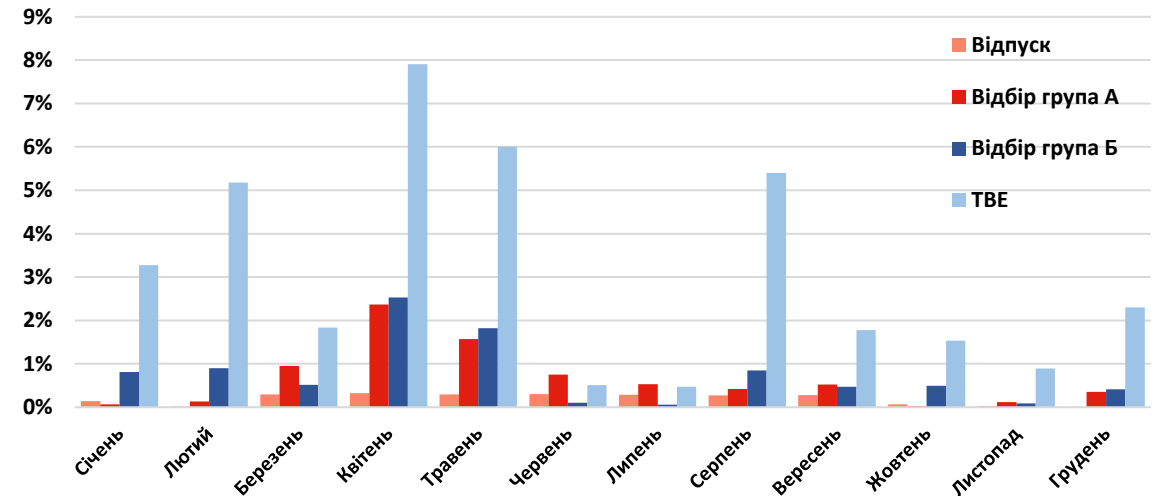


The amount of **calculated data of Version 1**, depending on the month, ranges from **58%** to **67%**, and the average for the year is **62%**.

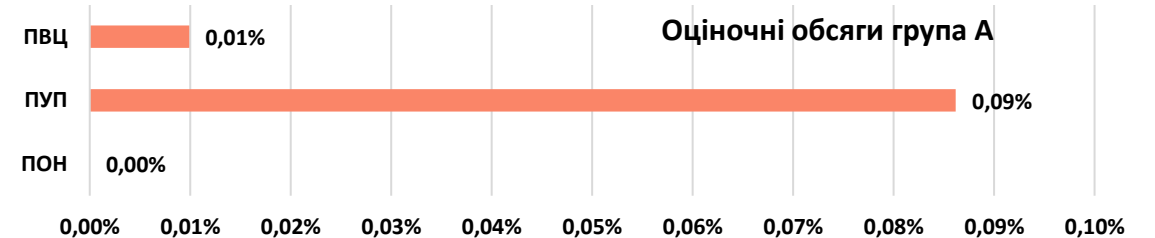
## CMD V.2



CMD of Version 2 contain "**estimated**" data. The main volume of "estimated" data on Group B falls on **Universal Services Providers (USP)** and covers from **15%** to **23%** of the total withdrawal of Group B sites (average **18%** for 10 months of 2020) depending on the month.



Version 1 data shall be adjusted as a result of Version 2 data input. This often **corrects AP data that directly affect the formation of electricity technological expenditure** (on average up to 3% of changes between versions) and the **residual schedule of Group B (0.76%)**.



# // COMMERCIAL METERING: DIRECTIONS OF DEVELOPMENT

	Facts	Directions of development
1 Market of CMSP	<p><b>System operators</b> have historically held a monopoly position in the market of commercial metering services provision:</p> <ul style="list-style-type: none"> <li>• <b>27,29%</b> of the total <b>sites of injection</b></li> <li>• <b>99,99%</b> of the total <b>sites of withdrawal</b></li> </ul>	<ol style="list-style-type: none"> <li>1. Improving consumer awareness of alternatives to choose independent CMSPs: <ul style="list-style-type: none"> <li>• Through suppliers (voluntarily)</li> <li>• Through system operators (regulatory)</li> <li>• Through CMA</li> </ul> </li> <li>2. Formalization and simplification of Change of CMSP procedures</li> </ol>
2 Commercial metering of Group A sites	<p>A significant part of <b>16.8 thousand sites</b> that belong to Group A does not ensure a daily provision of the final hourly commercial metering data to CMA :</p> <ul style="list-style-type: none"> <li>• <b>1.6 thousand sites (9.5%)</b>, with a total annual consumption of <b>17.1 billion kWh (29%)</b> that are currently <b>included in group A</b>, use data from <b>integral meters</b> for calculations (total number of AP - 15.1 thousand)</li> <li>• <b>7,8 thousand sites (46,4%)</b> with a total annual consumption of <b>9,4 billion kWh (15,4%)</b> for any reason are <b>included in Group B</b> (total number of AP - 88.8 thousand)</li> </ul>	<ol style="list-style-type: none"> <li>1. Strengthening the requirements for the inadmissibility of transferring Group A sites to Group B.</li> <li>2. Introduction of requirements for interval commercial metering of Group B sites that are sub-consumers of Group A sites</li> </ol>
3 Commercial metering of Group B sites	<p><b>17.2 million sites of Group B</b> form <b>57.4%</b> of annual consumption.</p> <ul style="list-style-type: none"> <li>• <b>53%</b> of the annual consumption of Group B sites falls on the category of <b>household consumers</b></li> <li>• <b>More than 40%</b> of annual consumption of household consumers falls on the category of <b>apartment buildings (7.6 million consumers in 188.5 thousand apartment buildings)</b></li> </ul>	<ol style="list-style-type: none"> <li>1. For legal consumers: Evaluation and development of a plan for gradual reduction of the requirements for the maximum power threshold of Group B sites</li> <li>2. For household consumers: the program of introduction of the building-level commercial metering of apartment buildings</li> </ol>



**Thank you  
for your  
attention!**

