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Defining the Model for CSO functioning and financing in Ukraine

**Chairman of State Reserves
Agency of Ukraine
Vadym Mosiichuk**

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Association Agreement

Main requirements:

- *Article 338 states that the joint cooperation includes, in particular, the implementation of energy strategies and policies (Annex XXVII to Chapter 1 of Section V “Economic and Sectoral Cooperation”).*
- *Ukraine is aware of the commitments to progressively approximate its legislation to the EU law within the required period:*
 - *the legal and regulatory framework of Ukraine should be brought in compliance with the Agreement commitments within 3 years from the date of coming this Agreement into force,*
 - *the period of implementation is envisaged within 11 years from the date of coming this Agreement into force.*
- *The date of coming this Agreement into force is 1st September 2017.*



Energy Community Treaty

Main requirements:

- *Since February 2011 Ukraine has been a full-fledged member of the EnCT*
- *EnCT provisions should lead legislative and regulatory reforms, including market organization, competition, regulatory principles and transparency.*
- *First set of EnCT deadlines (1st January 2012), were focusing on electricity and gas market opening for non-household customers, unbundling and third party access.*
- *The 3rd EU Energy Legislative Package became also a part of EnCT obligations (Decision 2011/02/MC-EnCT) and in 2014 Ukraine confirmed its commitment.*
- *In October 2012 the package of EnCT commitments was extended to cover the Council Directive 2009/119/EC of 14 September 2009 imposing an obligation on Member States to maintain minimum stocks of crude oil and/or petroleum products.*



Council Directive 2009/119/EC

Main requirements:

- *Establishment of a **CSO** including a minimum level (90 days) as **Emergency Stocks** based on net imports (Article 3). Plus an additional 10% of stocks (as technically unavailable) to apply on all stocks under **CSO** - except **Specific Stocks** - (Annex III).*
- *At least 1/3 of the **CSO** should be held in the form of products*
- *The establishment of a **CSE** (Article 7) as well as holding **Specific Stocks** (Article 9) is voluntary.*
- ***Emergency Stocks** may be held commingled with **Commercial Stocks**, under the condition that these are available and physically accessible (Articles 5, 6, and 10).*
- ***Monthly reporting of CSO** - through Monthly Oil Statistics (MOS). (Articles 6, 13, 14, 15)*
- *Establishment of **contingency plans** for the case of emergency. (Recital 26, Articles 18 & 21)*

Stakeholders WG Meeting on 16 June 2017

Main points agreed may be summarized as follows:

- *As the basis for the establishment of the CSO Model in Ukraine may be used the CSO model established in Slovak Republic;*
- *Approval of the updated Implementation Action Plan of the Project;*
- *Address the CMU with an appeal to facilitate the approval of a Decree to reappoint the responsible authority for implementation of the Directive;*
- *Stakeholders WG to cooperate with Project Team (PT) and offer assistance to experts/representatives in gathering necessary information;*
- *State Reserve to support the PT effort and facilitate gathering necessary information;*
- *SR with the PT in cooperation with the WG participants may also organize working sessions for exchanging views in with the Governmental Office and the relevant Ministries and governmental bodies*



Definition of the CSO Model in Ukraine (1)

Possible outline of the CSO model in Ukraine (based on the Slovak CSO model due to similarities of the 2 markets)

Initial Assumptions:

- *CSE may be established under the supervision of the state authority SR and is a state-owned or partially state-owned company*
- *Stock financing may be separated from state budget, if the CSE establishment is supported by a strong legal framework ensuring administrative and operational independence (ESA95 European Accounting Standard)*
- *CSE may own or rent storage capacities/services from EO (SCo, Industry, Importers, etc.) under a relevant storage contract*
- *CSE may use stock–tickets to comply with CSO and reduce the stock acquisition costs*
- *Stockholding costs may be covered by imposing a fee to EO (Industry/ Importers, etc.), for volumes released for internal consumption and may be collected within the fiscal system.*
- *EO (SCo, Industry, Importers, etc.) may participate in the CSE’s open tenders on oil and oil products, storage, refreshment, stock-tickets, etc.*
- *SR as state supervision authority may determine CSO levels, monitor fulfillment of the obligations, impose sanctions, manage the actions required in the context of Emergency Action Plan, etc.*



Definition of the CSO Model in Ukraine (2)

Legal Analysis of the basic issues for the establishment of CSO model in Ukraine

- **Council Directive 2009/119/EC may be implemented in 2 stages:**
 - *Adoption of the model of crude oil and petroleum products stocks, by the Cabinet of Ministers of Ukraine.*
 - *Adoption of the Law on minimum stocks of crude oil and/or petroleum products, by Verkhovna Rada of Ukraine.*
- **To ensure the implementation Council Directive 2009/119/EC, both new laws & regulations as well as amendments in current legislation are required, including:**
 - *New Law on minimum crude oil and/or petroleum products stocks;*
 - *Regulation on CSE establishment to be adopted by the CMU*
 - *Ministerial Decision on Emergency Response Plan*
 - *other laws and regulations required for the full implementation of Directive 2009/119/EC*
- **Legal form of the CSE:**
 - *CSE shall be established as non-profit Legal Entity managed by CSE Members or shareholders in case of a mixed structure (state and private sector)*
 - *The legal framework should ensure CSE's administrative and operational independence from the State Mechanism.*
 - *Economic Operators (oil industry, importers, etc.) may be CSE members (on voluntary basis).*
 - *The state may keep enhanced majority & non-blocking minority may be shared proportionally among Economic Operators.*

Definition of the CSO Model in Ukraine (3)

Analysis of the suggested options for the establishment of the CSE

Option 1: CSE is 100% state-owned.

- *All stocks are created from the state budget and are property of the state.*
- *Full state management and control, on stocks (acquisition, sale, storage, renewal, usage, etc.)*
- *Stocks acquisition may be financed through long – term loan(s) from international financial markets.*
- *Stock financing may be separated from state budget, if the CSE establishment is supported by a strong legal framework ensuring administrative and operational independence (ESA95 European Accounting Standard)*
- *Stockholding costs may be covered through excise tax or by imposing a fee (that may be collected within fiscal system) to EO (Industry/Importers, etc.) for volumes released for internal consumption*
- *The level of the fee may be decided by CSE Member's meeting every year.*
- *The charges may not exceed the real CSO cost and may include operational and financial costs*
- *CSE may use stock- tickets to reduce the stock acquisition costs*



Definition of the CSO Model in Ukraine (4)

Analysis of the suggested options for the establishment of the CSE

Option 2: CSE is partially owned by the state and market operators.

- *Stocks may be created on proportional basis (the state and market operators).*
- *CSE management may be exercised on proportional basis (by the state and market operators)*
- *Stocks acquisition may be financed through long – term loan(s) from international financial markets on proportional basis (the state and market operators)*
- *Storage facilities of market participants may also be used.*
- *Stockholding costs may be covered through excise tax or by imposing a fee (that may be collected within fiscal system) to EO (Industry/Importers, etc.) for volumes released for internal consumption*
- *The charges may not exceed the real CSO cost and may include operational and financial costs*
- *CSE may use stock- tickets to reduce the stock acquisition costs*

Definition of the CSO Model in Ukraine (5)

Technical Analysis of the examined options for the establishment of the CSE

Import and Export of Oil and Oil Products for 2012-2016*

Commodity Foreign Economic Activity Class	2012		2013		2014		2015		2016	
	import	export	import	export	import	export	import	export	import	export
Oil	1616	62	843	34	192	68	236	21	516	0
Oil products	8180	1548	7067	973	7887	759	7696	91	8554	233

* According to the Customs Service and the State Statistics Service of Ukraine

**Excluding temporary occupied territory of the Autonomous Republic of Crimea and ATO zone

- During the period 2012 – 2016, the share of oil products imports increased due to a drop in domestic refining production.
- In 2016, the import of basic petroleum products was counting of 65% for gasoline and of more than 88% for diesel. At the same time export of oil products was only about 3%.

Definition of the CSO Model in Ukraine (6)

Technical Analysis of the examined options for the establishment of the CSE

Crude Oil and Oil Products Consumption 2012-2016

'000 tons

	2012	2013	2014	2015	2016	2012 - 2016	2015 - 2016
Total oil products	11169	9537	10423	10556	10711	-1.04%	1.47%
LPG	802	859	883	931	1363	14.18%	46.40%
Oil	5005	3974	3051	2769	2661	-14.61%	-3.90%
Motor gasoline	3246	2509	2837	2396	2229	-8.97%	-6.97%
Jet fuel			21	111	123	142.02%	10.81%
Other jet fuels		14	12	12	4	-34.14%	-66.67%
Gasoline/diesel	5726	5178	5808	5610	5772	0.02%	2.89%
Fuel oil	394	52	108	675	669	0.19%	-0.89%
Other oil products	1001	925	754	821	551	0.13%	-32.84%

* According to energy balances (product)

1. According to Statistical Bulletin of 2016 (to be clarified)

2. 2014 -2016, excluding temporary occupied territory of the Autonomous Republic of Crimea and ATO zone

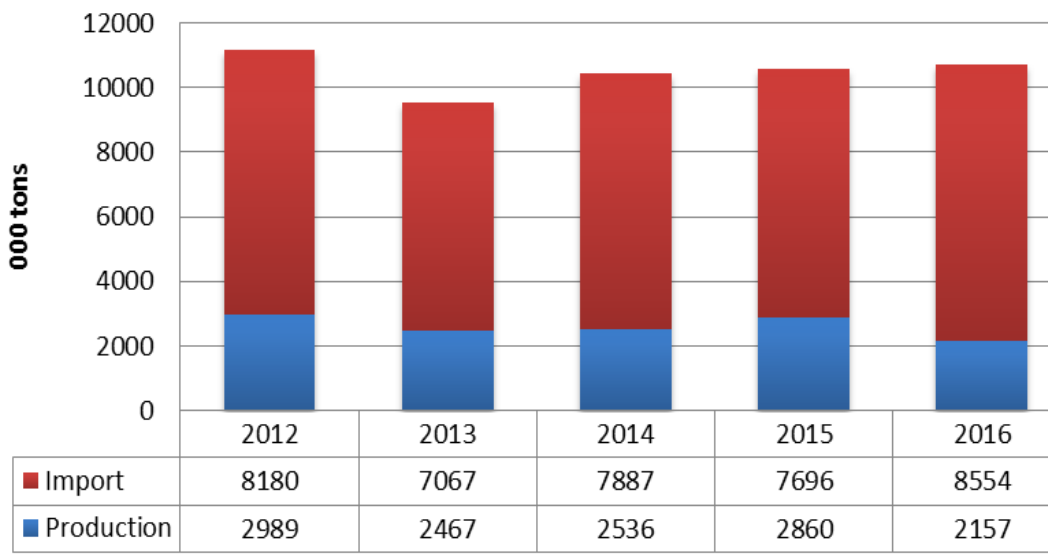


Definition of the CSO Model in Ukraine (7)

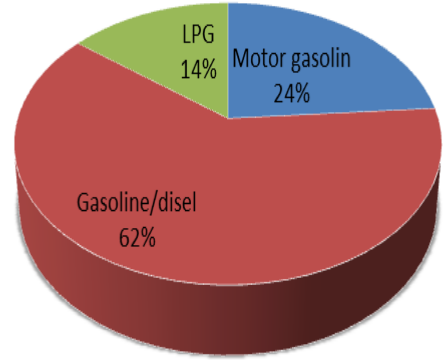
Technical Analysis of the proposed options for the establishment of the CSE

Domestic consumption of Petroleum Products

Mix of Domestic Oil Products



Share of motor fuels consumption in 2016 (%)



- Small share of the domestic consumption (up to 22-25%), was covered by the domestic refining production. The remaining demand of petroleum products was covered by imports

Definition of the CSO Model in Ukraine (8)

Technical Analysis of the examined options for the establishment of the CSE

Capacities of domestic Refineries (2016)

	Refinery	Design capacity (1990)	Technical feasibility (2016)	Refining and production volumes				Used capacity %
				refining	motor gas	Diesel	Fuel oil	
1	PJSC "LINIK", Lisichansk	16,00	8,00	-----	-----	-----	-----	Phased out in 2012
2	PJSC "Ukrtatnafta" Kremenчук	18,50	8,00	2,16	0,62	0,51	0,41	11,7
3	PJSC "Khersonnaftopererobka" Kherson	7,10	-----	-----	-----	-----	-----	Phased out in 2005
4	PJSC "Lucoil-Odesa Refinery" Odesa	2,80	2,80	-----	-----	-----	-----	Phased out in 2010
5	PJSC "Galichina Refinery" Drogobych	3,50	1,80	-----	-----	-----	-----	Since 2008 it is unable to ensure quality of motor gasoline under DSTU
6	PJSC "Naftohimik Prykarpattya" Nadvirna	2,60	2,00	-----	-----	-----	-----	
7	Shebelinsky Refinery		1,05	0,50	0,16	0,12	0,05	47,3

* According to the Ministry of Energy and Coal Industry of Ukraine.

- During 2016, out of six existing refineries in Ukraine, only Kremenчук plant was in operation (12% of its capacity), while the others were shut down.



Definition of the CSO Model in Ukraine (9)

Technical Analysis of the examined options for the establishment of the CSE

Calculation of minimum levels of Emergency Stocks (CSO) *

	Equivalent in crude oil (toe)	ES Levels
		000 tons
Average daily import	22,26	-
90 days of average daily import	2003,57	1994,29
Structure of MZNN levels:		
Crude Oil 30%	601,07	695,68
Petroleum products 70%, including:	1402,5	1298,61
Motor Gasoline 38%		493,47
Gasoil / diesel 62%		805,14

- *CSO mix includes: 30% of crude oil (minimum 25%) and 70% of oil products.*
- *Two types of oil products are selected for storage: motor gasoline and diesel (38:62).*

Definition of the CSO Model in Ukraine (10)

Technical Analysis of the examined options for the establishment of the CSE

Storage Capacities required for holding the CSO*

Product, Enterprise	Levels of CSO 000 tons	Designed capacity m3	Existing capacities, m3*		Required new construction m3
			Operational	To be modernised	
Oil (Ukrtransnafta)	695,68	951.688	404.000		547.688
Diesel, including State Reserve WOG network	805,14	1.141.231	654.700	459.000	27.531
Motor gasoline, includi State Reserve WOG network	493,47	774.074	184.950	163.000	426.124
Total	1994,29	2.866.993	1.243.650	622.000	1.001.343

*Reference: Effective tank volume - factor 0,85

*Specific weight, t/m3: oil -0,86, diesel - 0,83, motor gasoline -0,75

- Less than 40% capacity required for CSO is imminently available.
- Both modernization of existing as well as new construction of storage facilities is necessary

Definition of the CSO Model in Ukraine (11)

Economic and financial analysis of the examined options for the establishment of CSE

Option 1: CSE is 100% state-owned

- *CSO system costs are supported entirely by state budget and stocks are property of the state.*
- *Full state management and control, on stocks (acquisition, sale, storage, renewal, etc.)*
- *Baseline, 100% state-owned, collecting fees or excise duty from petroleum products being purchased for reserve;*
- *EU & IEA members have the choice of meeting CSO either by owning physical stocks or through arranging leasing agreements “tickets” for part of their CSO.*
- *Use of “Tickets” (for about 12% of CSO) offer a flexible and cost-effective way to comply with CSO by reducing CSO acquisition costs.*
- *“The table illustrates both possibilities (with and without tickets) and relevant estimated costs respectively.*

Indicators	90 days Physical Stock	With 12% CSO in Tickets	Decrease due to Tickets contracts
1.Total expenses	2.077,3	1.810,6	266,7
Including:			
- acquisition of oil and oil products	1.756,1	1.545,4	210,7
- Investment costs in reconstruction and construction	181,3	140,6	40,7
- operating costs for storage at base rates	95,2	83,7	11,5
- refreshment of oil products	32,3	28,5	3,8
- operational costs of the Agency	12,4	12,4	0,0
2.Extra excise duty per 1 ton of motor gasoline, diesel and LPG , US Dollars/ton	44,37	38,67	
Excise tax provided that the excise tax is withdrawn from the stock products, 1 ton / dollar.	33,93	29,49	
Excise tax on the condition of withdrawn the excise tax and financing through a 15-year loan, 1 ton / dollar.	17,31	15,07	

Definition of the CSO Model in Ukraine (12)

Economic and financial analysis of the examined options for the establishment of CSE

Option 2: CSE is partially owned by the state and market operators.

- *Mixed form of CSE, 70% state-owned, 30% owned by EO;*
- *Baseline, 70% state-owned, 30% owned by market operators, collecting fees or excise duty from petroleum products being purchased for reserve;*
- *CSO system costs are supported on proportional basis (70%state, 30% EO).*
- *CSE management may be exercised on proportional basis (by the state and EO)*
- *Use of leasing agreements “Tickets” (for about 12% of CSO). offer a flexible and cost-effective way to comply with CSO by reducing CSO acquisition costs*
- *“The table illustrates both possibilities (with and without tickets) and relevant estimated costs respectively.*

Indicators	70% State, 30% EO	58% State, 30% EO, With 12% CSO in Tickets	Decrease due to Tickets contracts
1.Total expenses	1.414,7	1.150,7	264,0
Including:			
- acquisition of oil and oil products	1.229,3	1.018,5	210,8
- Investment costs in reconstruction and construction	83,8	45,9	37,9
- operating costs for storage at base rates	66,6	55,2	11,4
- refreshment of oil products	22,6	18,7	3,9
- operational costs of the Agency	12,4	12,4	0,0
2.Extra excise duty per 1 ton of motor gasoline, diesel and LPG , US Dollars/ton	30,22	24,58	
Excise tax provided that the excise tax is withdrawn from the stock products, 1 ton / dollar.	22,91	18,52	
Excise tax on the condition of withdrawn the excise tax and financing through a 15-year loan, 1 ton / dollar.	11,76	9,57	



Definition of the CSO Model in Ukraine (13)

Economic and financial analysis of the examined options for the establishment of CSE

Evolution of CSO Costs under Option 1 (5 Years period)

Costs	1 year	2 year	3 year	4 year	5 year	Total for 5 years
1. Oil products acquisition for ES	351,22	351,22	351,22	351,22	351,22	1.756,10
2. Investment costs in reconstruction and construction	0,00	6,23	45,94	63,19	65,94	181,30
3. Operating costs for ES storage at base rates	6,34	12,69	19,03	25,38	31,73	95,17
4. Refreshment of oil and oil products	0,00	0,00	0,00	14,78	17,56	32,34
5. Operation costs of the Agency	3,79	2,68	2,13	1,91	1,91	12,42
TOTAL	361,35	372,82	418,32	456,48	468,36	2.077,33
<i>Excise tax for ES creation</i>		44,37	<i>USD per 1 ton of diesel, motor gasoline and LPG</i>			

Note: Application of 12% Tickets would reduce total expenses by USD 266,7 mln. (out of which; for products acquisition: USD 210,7 mln., for investments in infrastructure: USD 40,7 mln., for operating costs: USD 11,5 mln. and refreshment costs: USD 3,8 mln.). Additional excise duty is collected for CSO creation USD 5,7/1 ton (44,37 – 38,67).

Definition of the CSO Model in Ukraine (14)

Economic and financial analysis of the examined options for the establishment of CSE

Evolution of CSO Costs under Option 2 (5 Years period)

Costs	1 year	2 year	3 year	4 year	5 year	Total for 5 years
1. Oil products acquisition for ES	245,85	245,86	245,85	245,86	245,86	1.229,28
2. Investment costs in reconstruction and construction	0,00	0,00	2,36	22,43	58,98	83,77
3. Operating costs for ES storage at base rates	4,44	8,88	13,32	17,77	22,21	66,62
4. Refreshment of oil and oil products	0,00	0,00	0,00	10,34	12,29	22,63
5. Operation costs of the Agency	3,79	2,68	2,13	1,91	1,91	12,42
TOTAL	254,08	257,42	263,66	298,31	341,25	1.414,72
<i>Excise tax for ES creation</i>		30,22	<i>USD per 1 ton of diesel, motor gasoline and LPG</i>			

Note: Application of 12% Tickets agreements would reduce total expenses by USD 264,0 mln. (out of which; for oil products acquisition: USD 210,8 mln., for investments USD 37,9 mln., for operating costs; USD 11,4 mln. and for refreshment costs; USD 3,9 mln.). Additional excise duty is collected for CSO creation USD 5,64/1 ton (30,22 – 24,58).



Definition of the CSO Model in Ukraine (15)

Main Conclusions

- Directive 2009/119 EC, is envisaged to create, on a constant basis, a minimum level of oil stocks (CSO), which would equal either to 90 days of average daily value of net imports or to 61 days of average domestic daily consumption.
- CSE establishment may ensure security of supply, physical access, technical and operational reliability.
- EU & IEA members have the choice of meeting CSO either by owning physical stocks or through arranging leasing agreements “tickets” for part of their CSO.
- CSE may use various possibilities allowing to reduce budget costs for the creation of reserves (i.e. use the storage capacities of EO, attract long-term loans on privileged conditions, consider the possibility of covering stockholding costs through collection of duties/taxes and other tools.
- Involvement of EO (Importers/market operators, etc), in the ownership structure of CSE is possible and feasible and all EO active in oil market may participate (mixed form).
- Considering the actual capacity of Ukrainian refineries, the structure of CSO may include: 60% of crude oil and 40% of oil products. However, taking into account the fact that from the six existing oil refineries only Kremenchuk (43% of state ownership) is operational, the ratio of oil may be decreased.
- Both options analyzed are feasible from legal point of view. To introduce them it is necessary to approve the relevant laws, regulations and amendments required to ensure functioning of such options for the full implementation of the Directive 2009/119 EC.



Second Stakeholders Meeting on 8 November 2017

The main points agreed during the second Stakeholders Meeting include:

- *Unanimous Agreement on the recommendations made by the Project Team concerning the establishment of a CSO Model in Ukraine.*
- *Immediate submission of the CSO Model to CMU for approval.*



Thank you for attention!



www.rezerv.gov.ua

Kyiv, Pushkinska st. 28

tel: +38 (044) 226-22-64

e-mail: document@gosrezerv.gov.ua