Ukrainian Geological Survey:
Modern Upstream Regulation

Annual report 2020
Restoring Trust and Confidence

Eliminating subjectivity and selectivity in work

Reorganization

HR policy reboot
optimization of the structure of geological enterprises

One-stop shop

comprehensive consultations for license holders
one center for purchase of geological data and license cost calculation
e-cabinet of the subsoil user

Objectivity

new transparent method of a license cost calculation
automatic calculation of geological information cost
standardized calculation of license cost without reserves
Modernization of legal environment

- transparent rules of mineral resources and geodata for use (specified in six updated Government resolutions)
- two laws adopted to simplify production of amber and other minerals
- assistance in elaboration of draft laws:
  - support for domestic E&P industries (#4187)
  - strengthening liability for illegal mining (#3576)
  - updating the National Plan for Development of Mineral Resources by 2030
  - the new Subsoil Code of Ukraine

Inspection measures
Conducting e-auctions and PSA bidding

- Investment Atlas of Subsoil User launched (> 300 opportunities)
- 8 auctions held, 58 licenses sold for UAH 826 million
- the Black Sea offshore unlocked and Yuzivska PSA relaunched
- PSAs signed with winners of tenders

Simplifying access to geological data

- data-room opened for PSA tenders
- partnerships with USGS, USAID, Schlumberger, EuroGeoSurveys, CEEC ScoutmGroup, Duff & Phelps, Institute of Geology of KNU Taras Shevchenko
- open register for reserves and resources launched, digital versions of geological reports compilation started
- online interactive map of minerals updated
- public catalog of geological information created
Result-oriented Approach

New investment projects are being implemented despite the world crisis and pandemic.

An oil and gas field sold for a record-breaking $23 million.

Lithium ore and gold deposits offered for auction.

National infrastructure projects supported.

>40 amber promising areas for e-auction prepared.
2020: A Year of Oil and Gas
Large Greenfield Projects

Despite the global oil prices collapse, the Government started to launch mid and large-scale projects for the future energy independence of Ukraine

- **Seven PSAs** for $350 million signed to explore onshore acreage with over 6400 sq.km

- **Yuzivska PSA** with an acreage of 7800 sq km unlocked, able to provide early production in 2021

- Concession licenses acquired by Naftogaz of Ukraine to explore **offshore blocks** with an area of 30 000 sq km located in the deep and shallow waters of the Black Sea
From September, 2021, the authorities will not have the right to claim paper documents – Diia program.

- Electronic auctions
- Interactive map of minerals
- E-cabinet of Subsoil user
Investment Atlas of Subsoil User

The online platform contains >300 proposals for licenses with deposits of strategic and critical minerals, which can be acquired via e-auctions.
Minerals Online

_Geoinformation and information on land plots is displayed on the National Geospatial Data Portal of Ukraine*

- contours of current licenses (3 thousand)
- information on land plots and parks
- oil and gas wells (> 10 thousand)
- contours of mineral deposits (~ 9 thousand)
- geological structure of the subsoil
- artesian wells (> 100 thousand)
- areas of natural risk: landslides, karsts, disturbed lands
- prospective areas and mineralization zones

Big Data is to ensure the placement of relevant information, geological enterprises of SGSSU maintain 43 registers

*According to the Law on National Infrastructure of Geospatial Data, which enters into force on 01 January 2021*
E-cabinet

Obtaining an e-license

- License holders can apply for extension, boundaries expansion, introduction of changes to a license
- Reporting and registration of geological works
- Work with the Interactive map of minerals

Three stages of implementation (2021):
1. Development of system modules – Quarter I
2. Launch of beta version and testing – Quarter II
3. Launch of e-cabinet – Quarter III
The Draft Law #4187 and the new Subsoil Code

Progressive and Predictable Regulation of the Upstream Industry

- Digital approach
  - online auctions on Prozorro electronic system – Interactive map of mineral deposits
  - submission of documents and reports in e-cabinet

- Transparent rules of access to mineral resources
  - standardized calculation of license cost
  - automated calculation of geological information cost
  - evaluation of mineral reserves in compliance with international standards

- Small Subsoil Use Support
  - simplified issuance of licenses for local minerals for landowners up to 25 hectares

- Increasing the attractiveness of E&P
  - combined licenses for exploration and production for up to 20 years
  - installment payment for a license

- Liberalization of license circulation
  - open market for license sale
Dormant License Fee

*Preventing emergence of inactive licenses and strengthening subsoil users’ responsibility*

**Current geological inspection procedure:**
- Inspection (every 2–5 years) and giving time to eliminate violations, if any
- Suspension of a license in case of non-compliance with the Procedure
- Cancellation of a license in a court

**Proposal:** introduction of the ‘use or drop’ principle will become a mechanism for ‘dormant’ licenses phenomenon counteraction

The fee shall be charged:
- for new licenses issued after 01 January 2021
- for current licenses after 01 January 2023/25
Annexes
E-auctions

A convenient way for investors access to minerals

- The Survey created the Investment Atlas of Subsoil User – an online platform with more than 300 proposals to be initiated for e-auctions
- This year 58 lots sold for over UAH 810.5 million – a 7-fold increase in the starting price
- The permanent procedure for conducting e-auctions through Prozorro approved

### Sold blocks via auctions

<table>
<thead>
<tr>
<th>Year</th>
<th>Licenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>12</td>
</tr>
<tr>
<td>2017</td>
<td>10</td>
</tr>
<tr>
<td>2018</td>
<td>10</td>
</tr>
<tr>
<td>2019</td>
<td>36</td>
</tr>
<tr>
<td>2020</td>
<td>58</td>
</tr>
</tbody>
</table>

### Revenues to the state budget

<table>
<thead>
<tr>
<th>Year</th>
<th>UAH million</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>13</td>
</tr>
<tr>
<td>2017</td>
<td>2.5</td>
</tr>
<tr>
<td>2018</td>
<td>1.8</td>
</tr>
<tr>
<td>2019</td>
<td>504 [×1.6]</td>
</tr>
<tr>
<td>2020</td>
<td>810.5 [×7]</td>
</tr>
</tbody>
</table>
An Oil and Gas Field Sold Online for a Record-breaking $23 million

This is the highest cost of a license in the history of auctions for subsoil use

- According to geologists, this is the most interesting hydrocarbon area in the last 10 years
- As a result of transparent bidding, the final cost of a license increased 8 times
- The largest domestic oil and gas companies took part in the auction

Budyschansko-Chutivska block is located in Poltava region. Oil reserves are estimated at 2,73 thousand tons, gas – 856 million cubic meters, prospective resources of oil are 2006 thousand tons, gas – 20,587 million cubic meters
The first 79 parcels with proven reserves of sand and solid minerals required for the production of crushed stone and quarry stone proposed for initiation at auctions.

The minerals meet requirements of national standards for construction of roads.

All the facilities are located within 80 km from the priority roads under construction by Ukravtodor.

Licenses are offered for production in five regions: Kharkiv, Poltava, Kirovohrad, Dnipro, Mykolaiv.
More than 40 Promising Areas with Amber Deposits Prepared

- Proposals are offered in Zhytomyr and Rivne regions
- The total area of blocks is about 300 hectares with an initial cost of over UAH 10 million
- 11 blocks were sold via auctions in 2020
- Most objects are prepared in accordance with the updated legislation: area up to 10 hectares, 5-year combined license for exploration and development
There are three prospective lithium areas in Ukraine.

- Shevchenkivske field is located in the Donetsk region. A license of 39.84 hectares is offered for production.
- Probation of previously explored reserves of lithium ores and lithium oxide.
- The estimated initial cost of the lot on Prozorro.Sales is $2 million.
New Prospective Areas for Geological Exploration

The Survey is working on creation of new proposals with deposits of gold, uranium, titanium, graphite. The blocks will be offered for exploration and pilot production for a period of 5 years.

MALYSHEVSKE placer field (North-Western – 2)
(Dnipro, Kirovohrad regions)
- 3.310 ha
- Titanium ores, zirconium; concomitant – disten, sillimanite, staurolite
- Contingent resources (thousand tons): disten + sillimanite – 1.407, staurolite – 567

Ti SADOVA license
(Mykolaiv region)
- 2.227 ha
- The thickness of ore bodies in wells is from 0.35 to 7.7 m
- Explosive and excavation works on the block not performed
Big Data

*Interactive map of minerals*

1. Geological information catalog:
   - 175 thousand digitized reports
   - 12 thousand resources and reserves reports
   - 100 thousand units of information about primary geoinformation

2. State accounting of deposits and reserves of minerals:
   - Balance of mineral reserves
   - Register of groundwater deposits
   - Register of oil and gas wells
   - Register of artesian wells

Online Calculator

*Predictability and transparency in determining the initial cost of a license*

- Objective and clear pricing
- Convenient automated calculation
- Simplifying investment decisions
Online Check-in

Since May, 2020, the registration for a consultation is possible via Google calendar

To register, please enter the following information into the form:
- subject of an application
- your question
- choose day and time