

# “FRAMEWORK FOR ESTABLISHMENT OF A REGISTRY: UKRAINE CASE STUDY ”

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# BASIC ROLE OF THE REGISTRY IN ETS

ROBUST REGISTRY DESIGN ENSURES  
ACCOUNTABILITY AND TRANSPARENCY OF AN ETS



**REGISTRIES — IT DATABASES THAT RECORD AND MONITOR CREATION, TRADING, AND SURRENDER OF ALL UNITS WITHIN A SYSTEM**

IN A REGISTRY A UNIQUE SERIAL NUMBER TO EACH UNIT IS ASSIGNED AND LATER THOSE UNITS ARE TRACKED BY THE SERIAL NUMBERS FROM THEIR ISSUANCE ONWARD. This includes information on:

- who has issued allowances
- who holds those allowances as well as other units
- when and from where units are surrendered or canceled

Market participants sign up to registry and create an account where their units are stored.

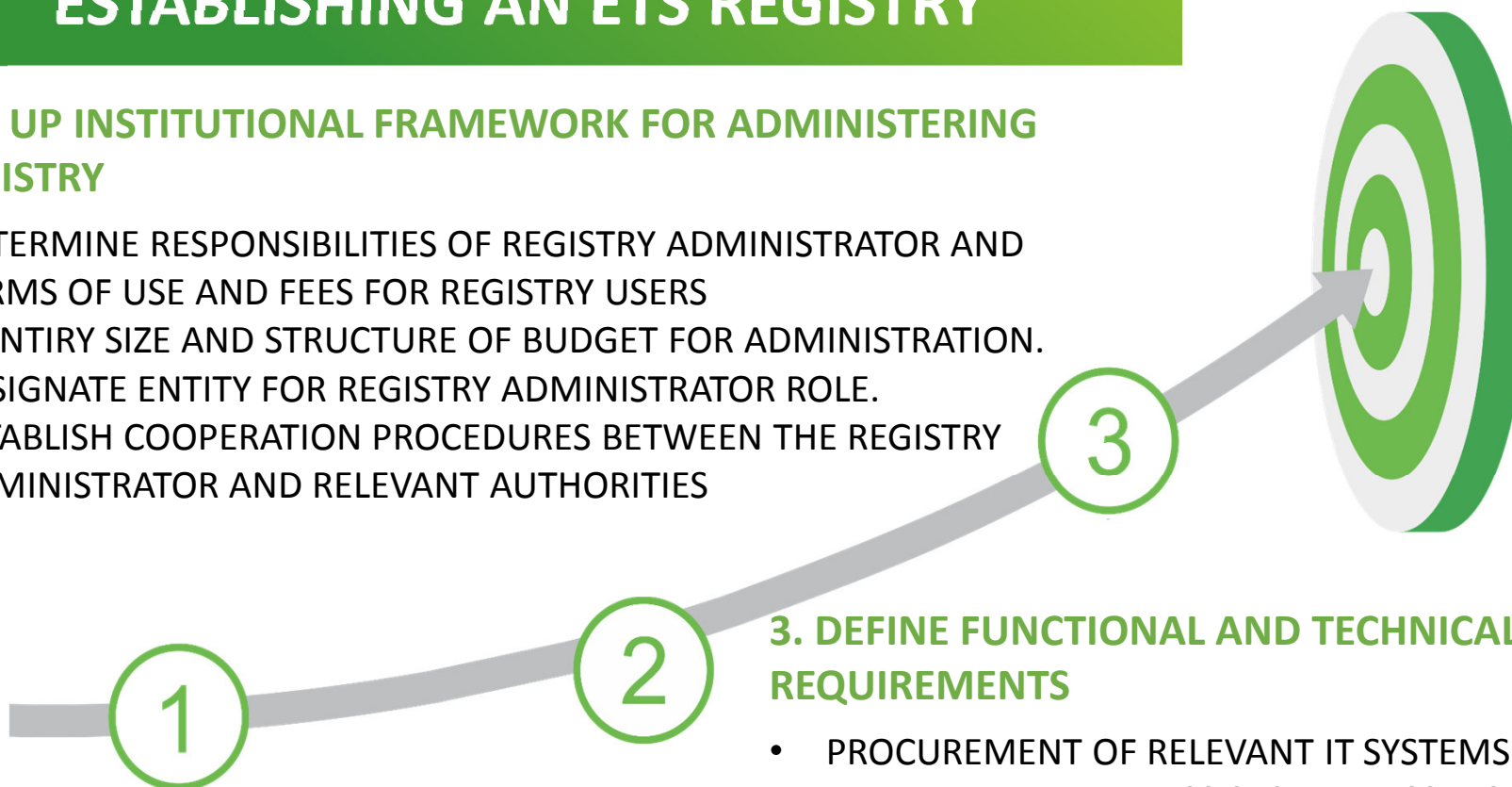
REGISTRY MAY PROVIDE DATA ON EMISSIONS, ALLOWANCE ALLOCATION AND SURRENDER, AND COMPLIANCE WHILE ENSURING THAT APPROPRIATE STANDARDS OF CONFIDENTIALITY AND SECURITY ARE MAINTAINED.

- Allows to keep track of transactions in the market and the units that have been surrendered.
- Enables regulated entities to transfer/surrender units via the registry to the ETS regulator to meet their emissions liability for the period.

# ESTABLISHING AN ETS REGISTRY

## 2. SET UP INSTITUTIONAL FRAMEWORK FOR ADMINISTERING A REGISTRY

- DETERMINE RESPONSIBILITIES OF REGISTRY ADMINISTRATOR AND TERMS OF USE AND FEES FOR REGISTRY USERS
- IDENTIFY SIZE AND STRUCTURE OF BUDGET FOR ADMINISTRATION.
- DESIGNATE ENTITY FOR REGISTRY ADMINISTRATOR ROLE.
- ESTABLISH COOPERATION PROCEDURES BETWEEN THE REGISTRY ADMINISTRATOR AND RELEVANT AUTHORITIES



## 1. CREATE LEGAL FRAMEWORK

- REFLECT NATURE, SCOPE, AND SCALE OF PROPOSED ETS.
- INDICATE ANY INTERACTIONS WITH OTHER LAWS (PROPERTY, TAX AND ACCOUNTING, FINANCES).
- IDENTIFY AND ADDRESS RESPONSIBILITIES AT AN EARLY STAGE TO AVOID LATER DISPUTES.

## 3. DEFINE FUNCTIONAL AND TECHNICAL REQUIREMENTS

- PROCUREMENT OF RELEVANT IT SYSTEMS
- IDENTIFY AND ADDRESS SECURITY ISSUES AND OPTIONS
- DEFINE DATA TO BE MANAGED
- ESTIMATE VOLUME OF DATA AND NUMBER OF TRANSACTIONS TO BE PROCESSED
- ESTABLISH TRACEABILITY PROCEDURES
- FORMULATE MAIN BUSINESS RULES AND ALERTS
- SPECIFY MAIN REPORTS TO BE PRODUCED BY THE REGISTRY
- CREATE REGISTRY WEBSITE

# OPTIONS FOR REGISTRY ESTABLISHMENT

## DEVELOP A NEW REGISTRY

CREATE LEGAL FRAMEWORK

SET UP INSTITUTIONAL FRAMEWORK  
FOR ADMINISTERING A REGISTRY

DEFINE FUNCTIONAL AND TECHNICAL  
REQUIREMENTS



## ADAPT AN EXISTING REGISTRY

MEASURES DEPENT ON COUNTRY  
READINESS AND EXISTING  
INFRASTRUCTURE NEEDED FOR A  
REGISTRY



# UKRAINE CASE STUDY



- ✓ UKRAINE IS ANNEX 1 PARTY TO UNFCCC SINCE 1996
- ✓ UKRAINE IS ANNEX B PARTY TO KYOTO PROTOCOL WITH SPECIAL STATUS OF ECONOMIES IN TRANSITION SINCE 2004

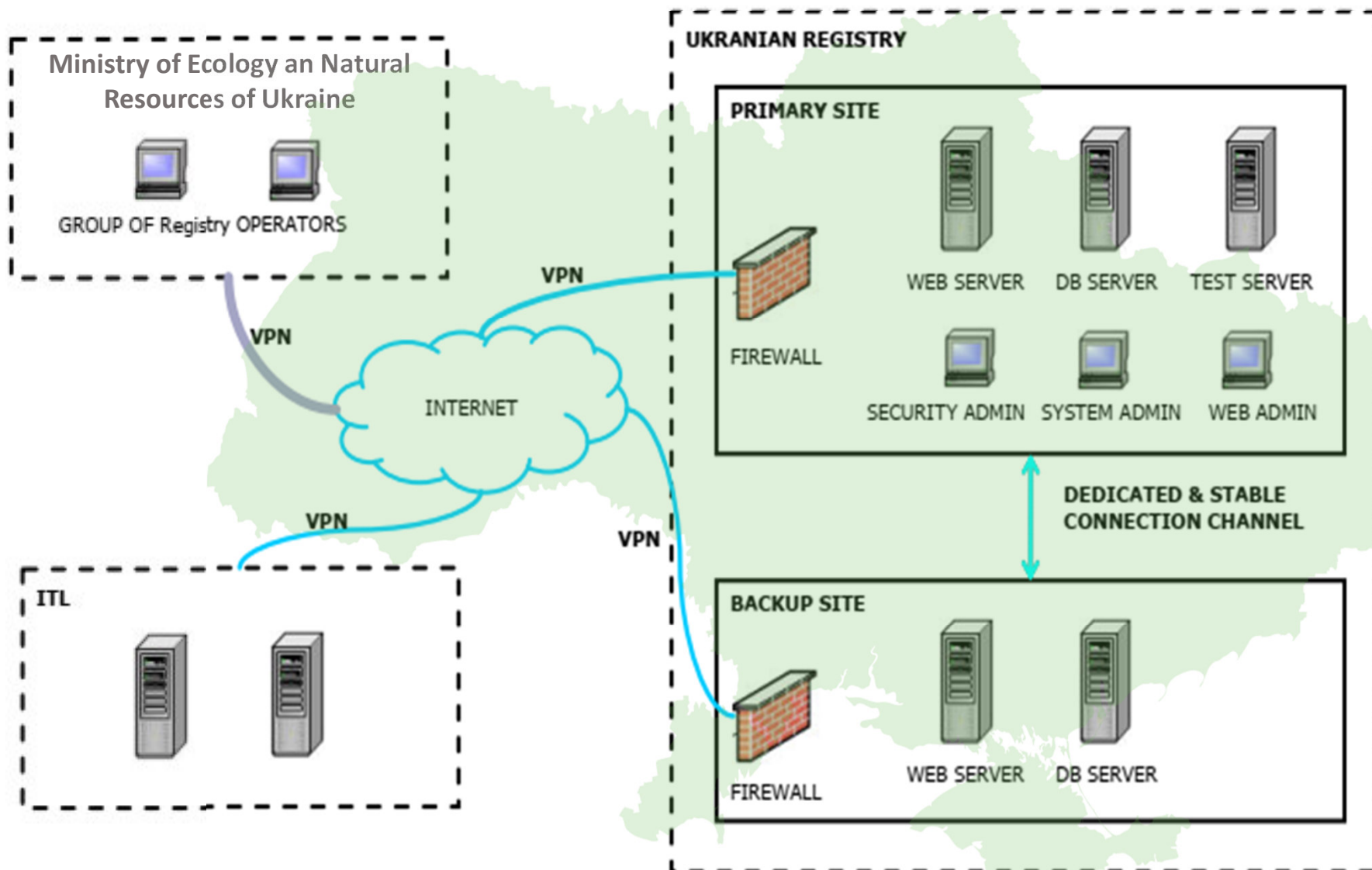
## NATIONAL ELECTRONIC REGISTRY OF ANTHROPOGENIC EMISSIONS AND ABSORPTION OF GREENHOUSE GASES OF UKRAINE (REGISTRY)

Established pursuant to Article 7, paragraph 4 of Kyoto Protocol to the UNFCCC

- ❑ **REGISTRY CONSISTS** OF HARDWARE AND SOFTWARE SYSTEM, AN INFORMATIONAL RESOURCE (PUBLIC WEBSITE) AND AN ELECTRONIC DATABASE CONTAINING DATA FROM INDIVIDUAL OR CORPORATE BODIES.
- ❑ **REGISTRY DATA** IS STATE PROPERTY, BUT PART OF THE INFORMATION DETERMINED BY THE MENR IS DISSEMINATED BY MEDIA.
- ❑ **REGISTRY ADMINISTRATOR:** MINISTRY OF ECOLOGY AND NATURAL RESOURCES (MENR) OF UKRAINE
- ❑ **INITIALIZED:** 10 DECEMBER 2007, BUT WENT LIVE CONNECTION WITH THE ITL: 28 OCTOBER 2008.
- ❑ **OPERATES** ACCORDING TO CABINET OF MINISTERS OF UKRAINE DECREE DATED 28.05.2008 #504

**NATIONAL REGISTRY IS USED FOR THE PURPOSES OF THE KYOTO PROTOCOL TO THE UNFCCC, HOWEVER ALLOWS TO INCLUDE ADDITIONAL FUNCTIONALITIES RELATED TO THE ETS.**

# UKRAINIAN REGISTRY ARCHITECTURE



# UKRAINIAN REGISTRY



COMMUNITY REGISTRY SOFTWARE  
V.1.2.2 ELABORATED BY TRASYS  
(BELGIUM) AND INNOFACTOR  
(FINLAND)



USED IN MANY EUROPEAN  
COUNTRIES AND ENABLED ETS  
FUNCTIONS.



SOFTWARE ACQUIRED BY UKRAINE  
FOR FREE ON BASIS OF  
AGREEMENT BETWEEN THE EC  
AND MENR REF. CD D(2006)



SWITZERLAND RECEIVED THE  
BASIC SYSTEM FROM EUROPEAN  
COMMISSION IN 2012

CHANGE IN EC POLICY LEAD TO CREATION OF UNION REGISTRY INSTEAD OF NATIONAL REGISTRIES OF EUROPEAN COUNTRIES.

THE COMMUNITY REGISTRY SOFTWARE REMAINED ONLY IN MONACO, SWITZERLAND AND UKRAINE. **TRASYS FINISHED ITS SUPPORT FOR REGISTRIES.**



**UKRAINE FACED A NECESSITY TO UPGRADE ITS REGISTRY SOFTWARE TO CP2 LEVEL THAT FORESEES UP TO 191 TEST CASES FROM THE NEWEST DES ANNEX H VERSION.**

# ADAPTING AN EXISTING REGISTRY

## UPGRADE ARRANGED BY ADAPTING AN EXISTING SOFTWARE WITH CP2 FUNCTIONALITY



REGISTRY SOFTWARE 'COMMUNITY REGISTRY SOFTWARE' WAS TRANSFERRED AND CUSTOMIZED COMPATIBLE WITH SUCH THAT IS USED NOW IN MONACO AND SWITZERLAND

**NEW UKRAINIAN REGISTRY SOFTWARE IS BASED ON CORE SYSTEM OF THE SWISS REGISTRY WHICH INCLUDES ADDITIONAL FUNCTIONS RELATED TO THE SWISS' NATION ETS SCHEME**



SWITZERLAND, DUE TO SCOPE OF ITS NATIONAL EMISSIONS TRADING SCHEME, WORKS CONSISTENTLY AND COHERENTLY ON FURTHER IMPROVEMENTS OF REGISTRY SYSTEM, WHICH ALWAYS MEETS A VERY HIGH SAFETY STANDARD.



# MEASURES TAKEN TO ADAPT REGISTRY

MAESURES CAN CONSIDERABLY VARY  
DEPENDING ON EXISTING INFRASTRUCTURE

ENSURE AVAILABILITY OF FUNDS  
TO EXECUTE MEASURES FOR  
ADAPTING A THE REGISTRY



INVOLVED TECHNICAL ASSISTANCE  
PROJECT, DUE STATE BUDGET  
LIMITATIONS

FIND EXPERTISE TO ACCOMPLISH  
SUCH MEASURES



ENGAGED COMPANY (GERMAN) THAT  
DEVELOPED CP2 FUNCTIONALITY FOR  
GERMAN PURPOSES

SECURE CONFIDENTIALITY OF  
REGISTRY DATA



CONCLUDED AN MOU WITH  
CONFIDENTIALITY PROVISIONS

## ACTIONS REQUIRED AFTER EXPERTISE CONTRACTED:

- ☐ TRANSFER AND CUSTOMIZATION OF THE IT SOFTWARE.
- ☐ DATA MIGRATION FROM EXISTING CP1 REGISTRY TO UPGRADED CP2 REGISTRY.
- ☐ SUCCESSFUL COMPLETION OF DATA EXCHANGE STANDARDS (DES) FOR REGISTRY SYSTEMS UNDER KYOTO PROTOCOL ANNEX H TEST TO ENSURE CP2 FUNCTIONALITY.

# ADAPTING REGISTRY CHALLENGES AND COSTS



- ❑ **TECHNICAL EXPERTISE** ON ADAPTING REGISTRIES IN THE MENR WAS LACKING
- ❑ **CONTINUOUS COORDINATION** BETWEEN REGISTRY ADMINISTRATOR, CONTRACTED EXPERTS AND THE ITL WAS REQUIRED
- ❑ **MIGRATION OF DATA** – ALL HAD TO BE MIGRATED DUE TO THE ITL RECONCILIATION PROCESS AND KYOTO REQUIREMENTS. MENR WAS BALANCING BETWEEN EXISTING WORKING CP1 REGISTRY AND NEW CP2 REGISTRY UNDER DEVELOPMENT.
- ❑ ENSURING **CONFIDENTIALITY** OF THE REGISTRY DATA TO BE MIGRATED
- ❑ CERTAIN **HARDWARE** WAS OUTDATED AND NEEDS REPLACEMENT
- ❑ ENSURE FURTHER **MAINTENANCE** DUE TO PROPERTY RIGHTS ON SOURCE CODE



- ❑ **CUSTOMIZATION AND SUPPORT FROM THE SOFTWARE DEVELOPERS.**

**IMPORTANT NOTICE 1:** SOFTWARE DEVELOPERS NEED TO ASSESS EXISTING CONDITIONS OF A COUNTRY TO FORMULATE THE PRICE.

**IMPORTANT NOTICE 2:** IN CASE OF UKRAINE SERVICES PROVIDED (AND THEREFORE THE COSTS) DID NOT INCLUDE THE INTEGRATION OF THE ETS-RELATED FUNCTIONALITIES INTO THE REGISTRY SOFTWARE

## LESSONS FOR MEXICO

- ❑ DEFINE MAIN AIM OF THE REGISTRY – IF IT'S ONLY FOR THE NATIONAL ETS OR INTERNATIONAL TRADE ALSO (EITHER UNDER ART.6 OF THE PARIS AGREEMENT OR UNDER LINKING OF ETS WITH OTHER JURISDICTION)
- ❑ CREATE STRONG LEGAL FRAMEWORK – CLEARLY IDENTIFY RESPONSIBILITIES TO ALL BODIES INVOLVED AND ADDRESS THEM AT AN EARLY STAGE TO AVOID LATER DISPUTES AND DETERMINE THE LEGAL NATURE FOR UNIT/ALLOWANCES AS IT MAY CAUSE FURTHER DIFFICULTIES WHEN TRADING
- ❑ CLEARLY DEFINE WHICH DATA CAN BE PUBLICLY AVAILABLE TO AVOID CONFIDENTIALITY DISPUTES WITH USERS
- ❑ ENSURE EXPERTISE FOR ADMINISTRATION IS AVAILABLE IN THE RESPECTIVE ENTITY
- ❑ AVOID DEVELOPING TOO COMPLICATED SYSTEM AS IT WOULD REQUIRE CONSIDERABLE COSTS FOR FURTHER REGISTRY ADMINISTRATION AND MAINTENANCE
- ❑ IF DECISION IS TO ADAPT AN EXISTING REGISTRY KEEP IN MIND OWNERSHIP RIGHTS SOURCE CODE, AS IT WOULD BE REQUIRED FOR ANY FURTHER UPGRADES OF THE REGISTRY
- ❑ ENSURE CONTINUOUS FINANCIAL SUPPORT FOR FUTURE MAINTENANCE AT AN EARLY STAGE. THE REGISTRY IS A 24/7/365 WORKING ORGANISM, ANY FINANCIAL LACK COULD INITIATE SIGNIFICANT NEGATIVE CONSEQUENCES



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