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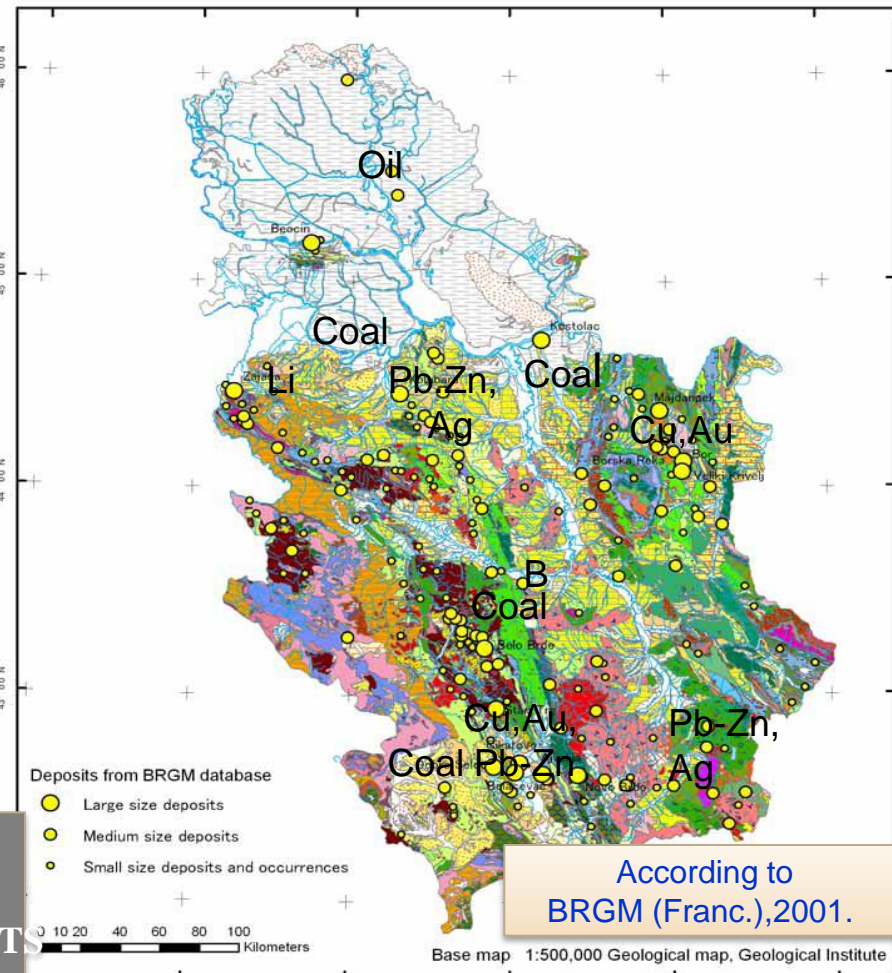
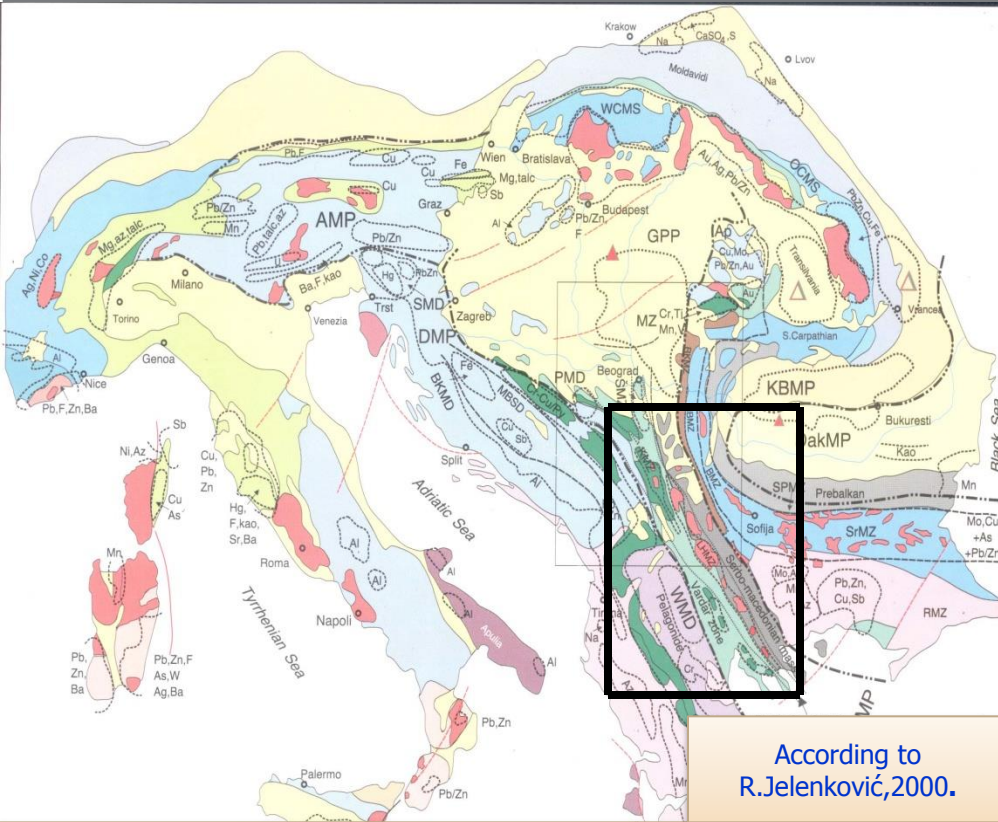
MINERAL RESOURCES/RESERVES IN THE LEGISLATION OF THE REPUBLIC OF SERBIA

**5th Session,
Expert Group on Resource Classification
29 April - 2 May 2014
Geneva**

GEOGRAPHICAL POSITION OF THE REPUBLIC OF SERBIA



GEOTECNIC POSITION



▪ MILLENNIUM TRADITION OF MINING
(Cu, Au, Ag, Pb, Zn etc.)
2000 MINERAL/ORE OCCURENCIES AND ORE DEPOSITS

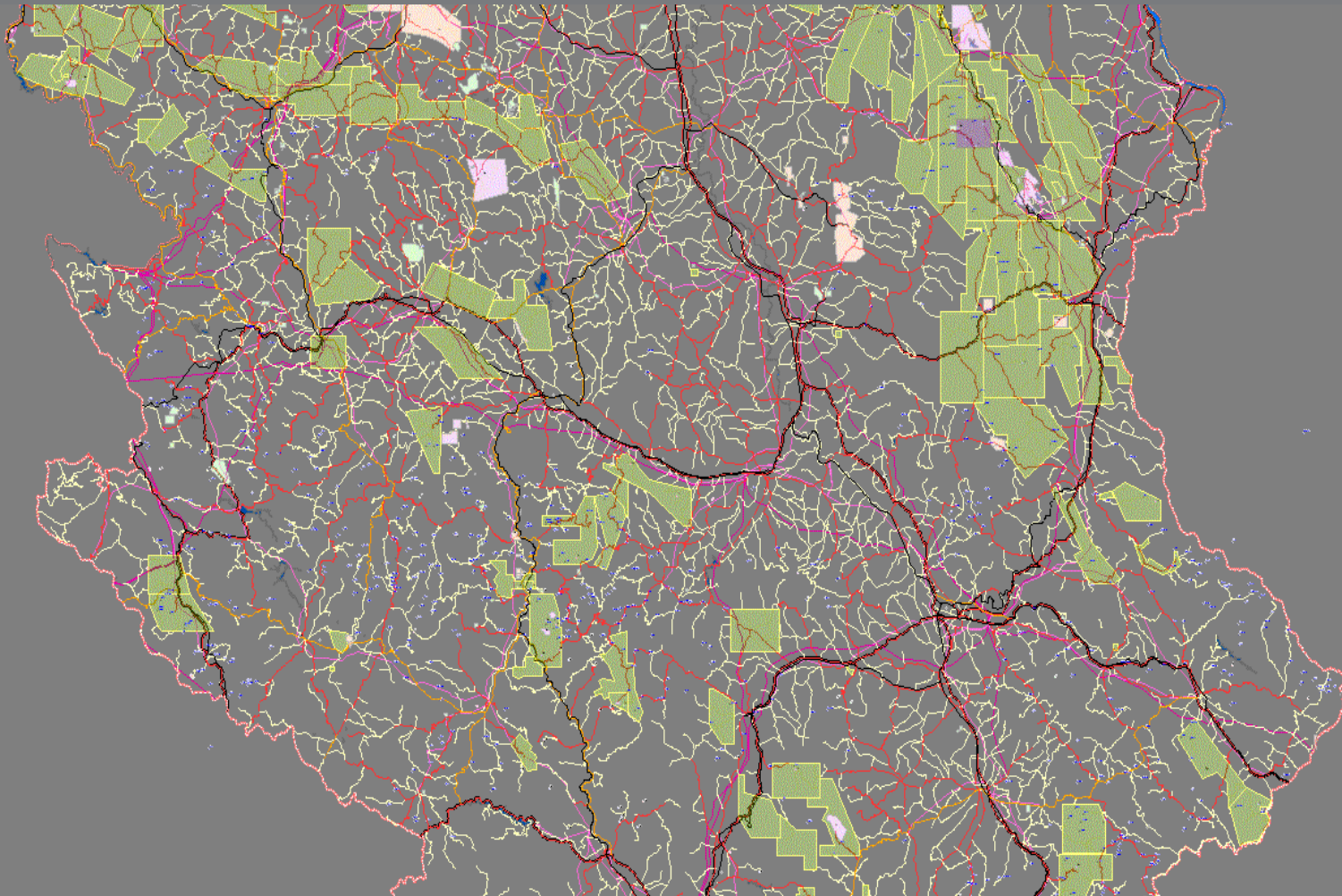
▪ APPEALING TO FOREIGN INVESTORS SINCE THE
MEDIEVAL PERIOD

▪ DEVELOPED GEOLOGICAL AND MINING PRACTICE
IN THE TIMES OF MODERN/MARKET CONDITIONS

Quaternary	Miocene	Paleocene	Eocene	Cretaceous	Jurassic	Triassic	Permian	Paleozoic	Devonian	Proterozoic
Q1, Q2, Q3, Q4	M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M41, M42, M43, M44, M45, M46, M47, M48, M49, M50, M51, M52, M53, M54, M55, M56, M57, M58, M59, M60, M61, M62, M63, M64, M65, M66, M67, M68, M69, M70, M71, M72, M73, M74, M75, M76, M77, M78, M79, M80, M81, M82, M83, M84, M85, M86, M87, M88, M89, M90, M91, M92, M93, M94, M95, M96, M97, M98, M99, M100	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35, P36, P37, P38, P39, P40, P41, P42, P43, P44, P45, P46, P47, P48, P49, P50, P51, P52, P53, P54, P55, P56, P57, P58, P59, P60, P61, P62, P63, P64, P65, P66, P67, P68, P69, P70, P71, P72, P73, P74, P75, P76, P77, P78, P79, P80, P81, P82, P83, P84, P85, P86, P87, P88, P89, P90, P91, P92, P93, P94, P95, P96, P97, P98, P99, P100	E1, E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60, E61, E62, E63, E64, E65, E66, E67, E68, E69, E70, E71, E72, E73, E74, E75, E76, E77, E78, E79, E80, E81, E82, E83, E84, E85, E86, E87, E88, E89, E90, E91, E92, E93, E94, E95, E96, E97, E98, E99, E100	C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100	J1, J2, J3, J4, J5, J6, J7, J8, J9, J10, J11, J12, J13, J14, J15, J16, J17, J18, J19, J20, J21, J22, J23, J24, J25, J26, J27, J28, J29, J30, J31, J32, J33, J34, J35, J36, J37, J38, J39, J40, J41, J42, J43, J44, J45, J46, J47, J48, J49, J50, J51, J52, J53, J54, J55, J56, J57, J58, J59, J60, J61, J62, J63, J64, J65, J66, J67, J68, J69, J70, J71, J72, J73, J74, J75, J76, J77, J78, J79, J80, J81, J82, J83, J84, J85, J86, J87, J88, J89, J90, J91, J92, J93, J94, J95, J96, J97, J98, J99, J100	T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15, T16, T17, T18, T19, T20, T21, T22, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T33, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T46, T47, T48, T49, T50, T51, T52, T53, T54, T55, T56, T57, T58, T59, T60, T61, T62, T63, T64, T65, T66, T67, T68, T69, T70, T71, T72, T73, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85, T86, T87, T88, T89, T90, T91, T92, T93, T94, T95, T96, T97, T98, T99, T100	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35, P36, P37, P38, P39, P40, P41, P42, P43, P44, P45, P46, P47, P48, P49, P50, P51, P52, P53, P54, P55, P56, P57, P58, P59, P60, P61, P62, P63, P64, P65, P66, P67, P68, P69, P70, P71, P72, P73, P74, P75, P76, P77, P78, P79, P80, P81, P82, P83, P84, P85, P86, P87, P88, P89, P90, P91, P92, P93, P94, P95, P96, P97, P98, P99, P100	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16, D17, D18, D19, D20, D21, D22, D23, D24, D25, D26, D27, D28, D29, D30, D31, D32, D33, D34, D35, D36, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48, D49, D50, D51, D52, D53, D54, D55, D56, D57, D58, D59, D60, D61, D62, D63, D64, D65, D66, D67, D68, D69, D70, D71, D72, D73, D74, D75, D76, D77, D78, D79, D80, D81, D82, D83, D84, D85, D86, D87, D88, D89, D90, D91, D92, D93, D94, D95, D96, D97, D98, D99, D100	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33, P34, P35, P36, P37, P38, P39, P40, P41, P42, P43, P44, P45, P46, P47, P48, P49, P50, P51, P52, P53, P54, P55, P56, P57, P58, P59, P60, P61, P62, P63, P64, P65, P66, P67, P68, P69, P70, P71, P72, P73, P74, P75, P76, P77, P78, P79, P80, P81, P82, P83, P84, P85, P86, P87, P88, P89, P90, P91, P92, P93, P94, P95, P96, P97, P98, P99, P100	

EXPLORATION AREAS AND EXPLOATATION FIELDS

www.mprppp.gov.rs

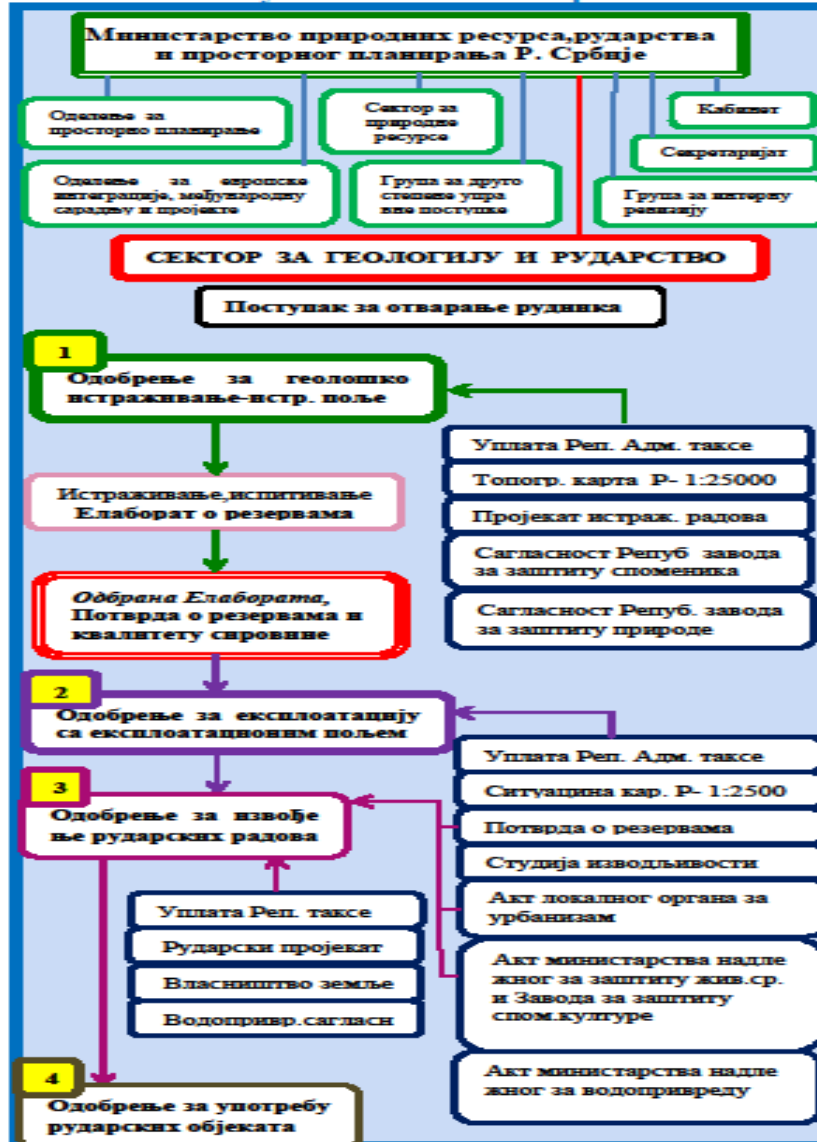


GUIDE FOR THE INVESTORS

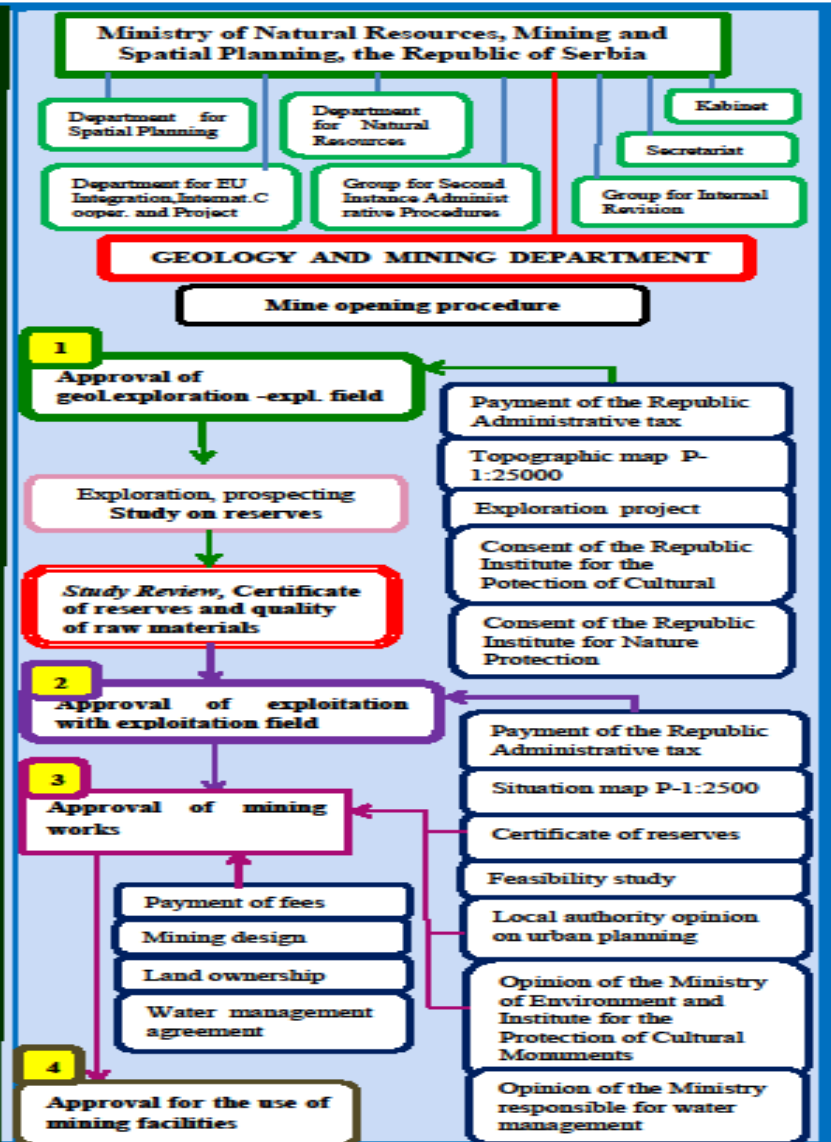
www.mprpp.gov.rs



Упутство за Инвеститоре



Guide for Investors



LEGAL FRAMEWORK – the management method

- ❑ **THE FIRST RULES RELATED TO MINING IN SERBIA DATE BACK TO 1412 (THE TIME OF DESPOT STEFAN LAZAREVIĆ)**
- ❑ ***MINING LAW BOOK FOR THE KINGDOM OF SERBIA, PASSED IN 1866.***
- **NOWADAYS, THE MANAGEMENT IS DEFINED BY THE FOLLOWING ACTS:**
 - **THE CONSTITUTION OF THE REPUBLIC OF SERBIA (2006),**
 - **THE LAW ON PUBLIC ADMINISTRATION (2011)**
 - **THE LAW ON THE MINISTRIES (2012/2013)**
 - **THE LAW ON THE GENERAL ADMINISTRATIVE PROCEDURE (2010)**
 - **THE LAW ON HEALTH AND SAFETY AT WORK (2005)**
 - **THE LAW ON THE ENVIRONMENTAL PROTECTION (2005)**
 - **THE LAW ON CULTURAL PROPERTY AND HERITAGE (2011)**
 - **THE LAW ON CONCESSIONS (2003)**
 - **THE LAW ON ADMINISTRATIVE FEES (2011/2013)**

LEGAL FRAMEWORK – THE WAY TO USE IT

➤ **THE LAW, RULE BOOKS(>20), REGULATIONS AND TECHNICAL INSTRUCTIONS:**

- **THE LAW ON MINING AND GEOLOGICAL EXPLORATION (2011),**
- **THE RULEBOOK ON CLASSIFICATION AND CATEGORIZATION OF SOLID MINERAL RAW MATERIAL RESOURCES AND ON THEIR RECORD KEEPING (1979),**
- **THE RULEBOOK ON CLASSIFICATION AND CATEGORIZATION OF THE OIL, CONDENSATES AND NATURAL GASES RESOURCES AND THEIR RECORD KEEPING (1987),**
- **THE RULEBOOK ON CLASSIFICATION AND CATEGORIZATION OF THE GROUNDWATER AND THEIR RECORD KEEPING (1979),**
- **THE REGULATION ON THE CONTENT OF GEOLOGICAL EXPLORATION PROJECTS AND ON THE CONTENT OF THEIR STUDIES (1996),**
- **THE REGULATION ON FEES PAYMENT(GEOLOGICAL AND MINING) (2012)**

APPLIED GEOLOGICAL EXPLORATIONS – in three steps:

- **THE SURVEYS WERE DIVIDED INTO (THE LAW, 2011):**
 - ❑ **BASIC – Financed from the budget**
Performed by the Geological Institute of Serbia based on the Program
 - ❑ **APPLIED – Market conditions**
- **THE INVESTORS PERFORM APPLIED SURVEYS ACCORDING TO THIS APPROVAL:**
 - ✓ **The first step - Obtain the approval / *Exploratory right***
 - ✓ **The second step – Geological exploration performance,**
 - ✓ **The third step - Reserves estimates and *certification of resources***
(The Resolution / Certificate on quantity, quality and purpose of resources)
 - ***GEOLOGICAL EXPLORATION PROJECT AND THE APPROVAL FOR IT***
 - ***ANNUAL AND FINAL REPORTS; THE STUDY ON RESERVES AND RESOURCES,***
- **THE MINISTRY**
- ✓ **THE FOLLOW UP AND THE SUPERVISORY INSPECTION.**

APPLIED GEOLOGICAL EXPLORATIONS - COMPLIANCE OF THE PROCEDURES

SERBIAN LEGISLATION

Reporting Standards
(JORC Code, Ni 43-101, PERC,...)

GEOLOGICAL EXPLORATIONS ARE PERFORMED ON THE BASIS OF THE PROJECT / PROGRAM OF THE EXPLORATION ITSELF ACCORDING TO THE LEGAL PROCEDURES AND REPORTING STANDARDS RUN BY EXPERTS - COMPETENT PERSONS

(IDENTICAL) METHODS AND TECHNIQUE OF EXPLORATION ARE APPLIED, IN REFERENCE LABORATORIES

GEOLOGICAL EXPLORATION
3 + 2 + 2 years = 7 years

On the
EXPLORATION AREA
(of the compatible structural - geological - metallogenic characteristics) are obtained

in situ

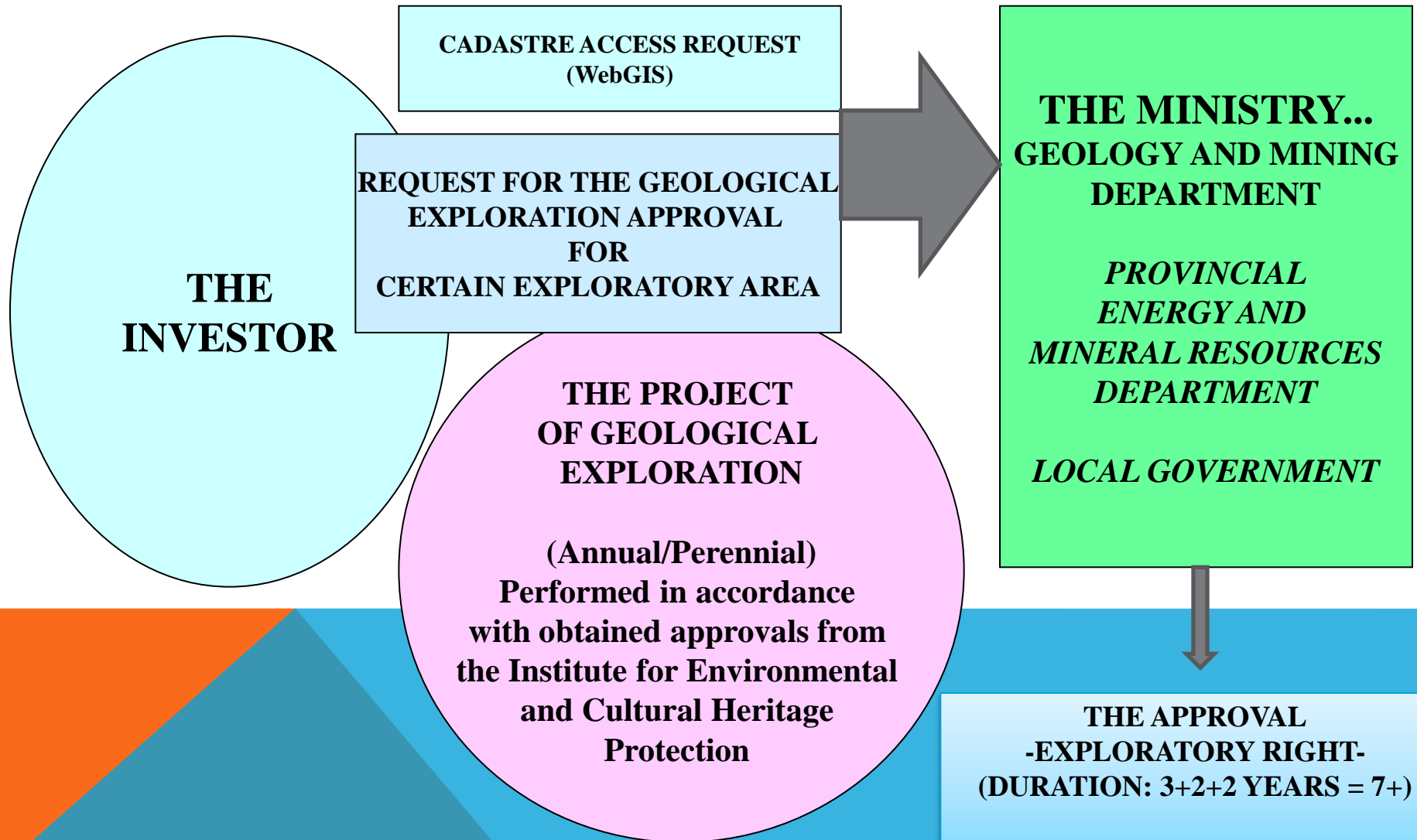
IDENTICAL AMOUNTS

Geological exploration: 8-10 + years

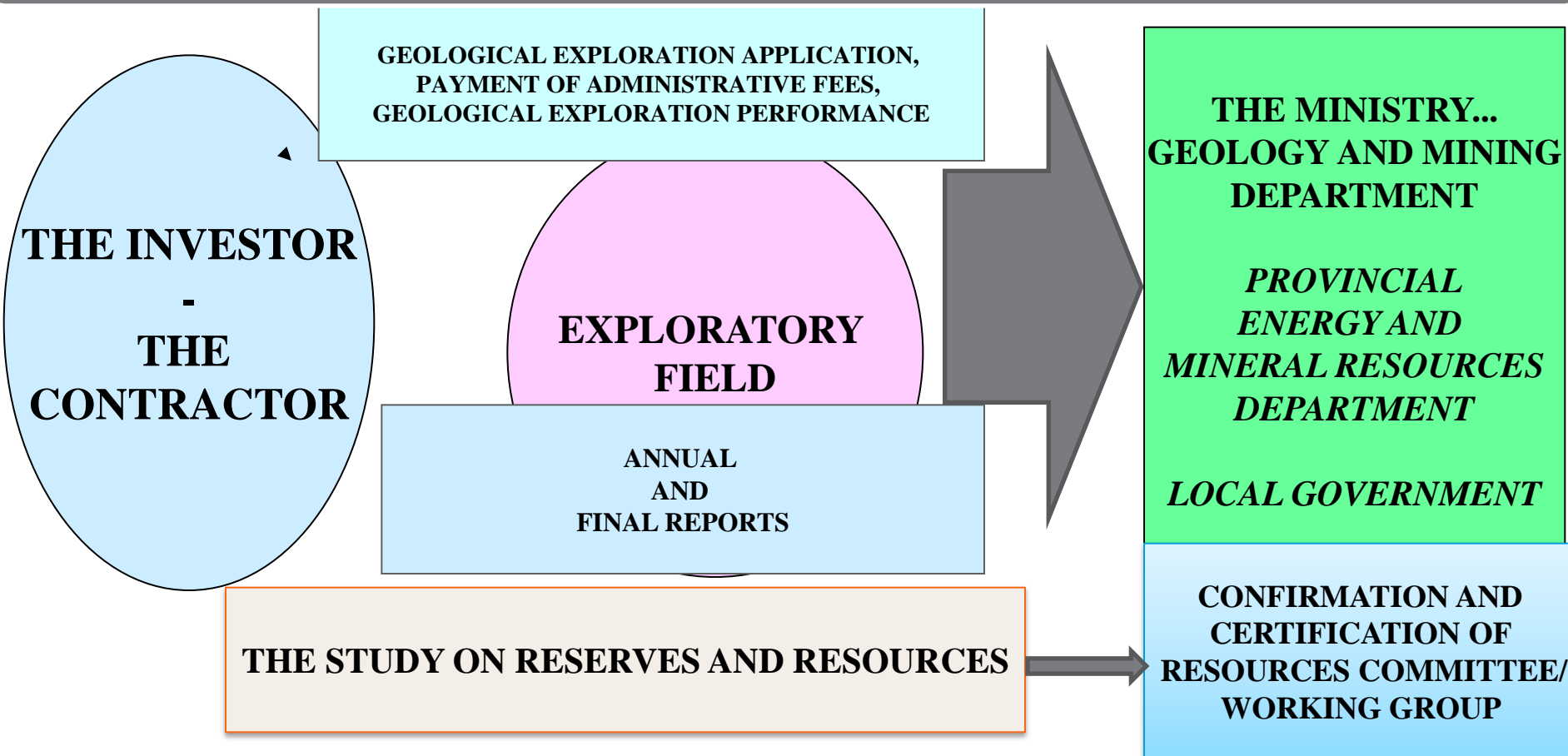
„MINERAL RESOURCES“
(since 2011)
(former term-
Geological reserves)

Mineral Resources

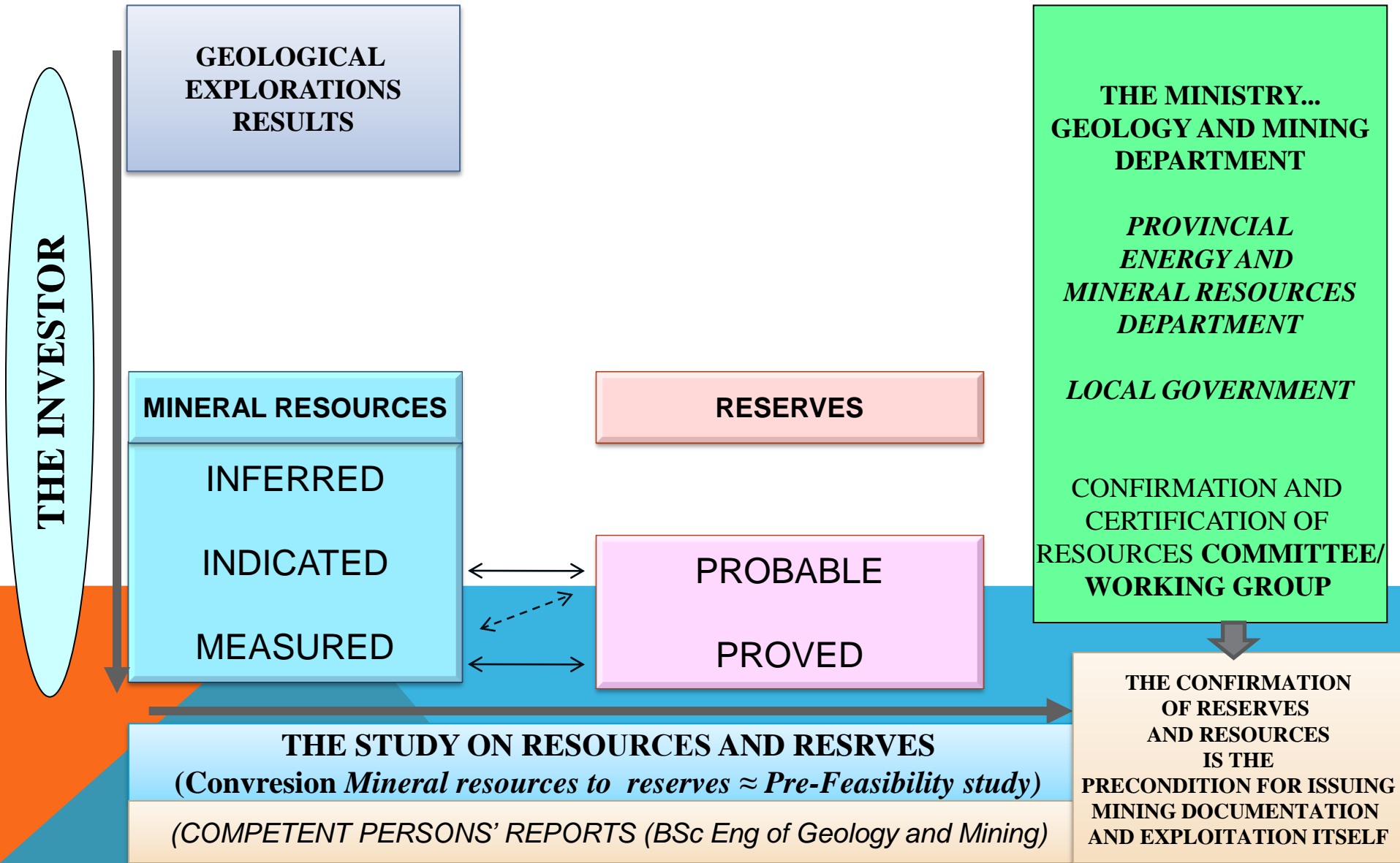
THE FIRST STEP - OBTAIN THE APPROVAL FOR THE EXPLORATION *EXPLORATORY RIGHT*



THE SECOND STEP - APPROVED GEOLOGICAL EXPLORATIONS PERFORMANCE



THE THIRD STEP - THE ESTIMATE AND CERTIFICATION OF MINERAL RESERVES/RESOURCES



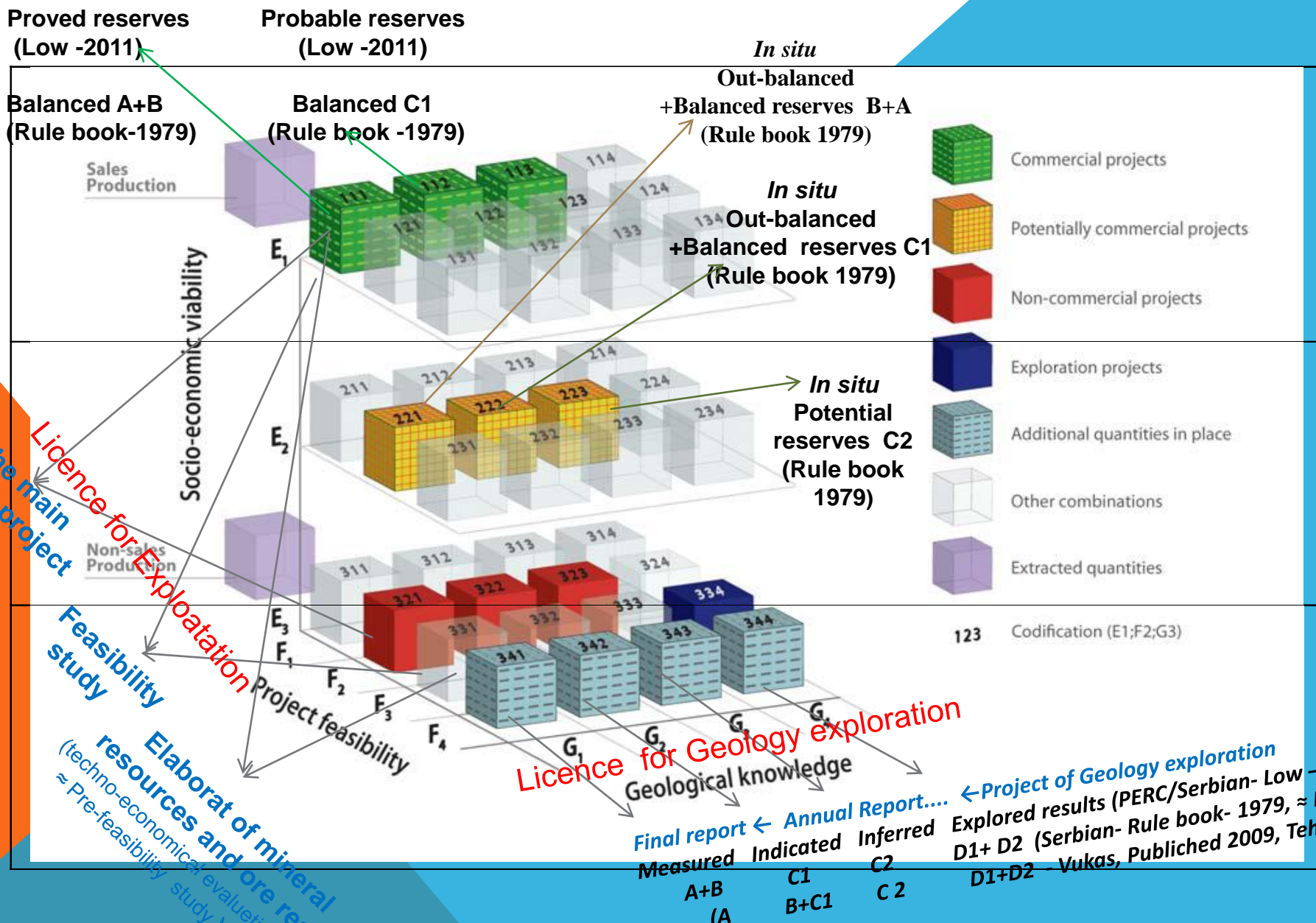
THE CONVERSION MAP PROPOSAL

(published by: M.Ilić, R.Jelenković, R.Vukas, Č.Beljić; October, 2013)

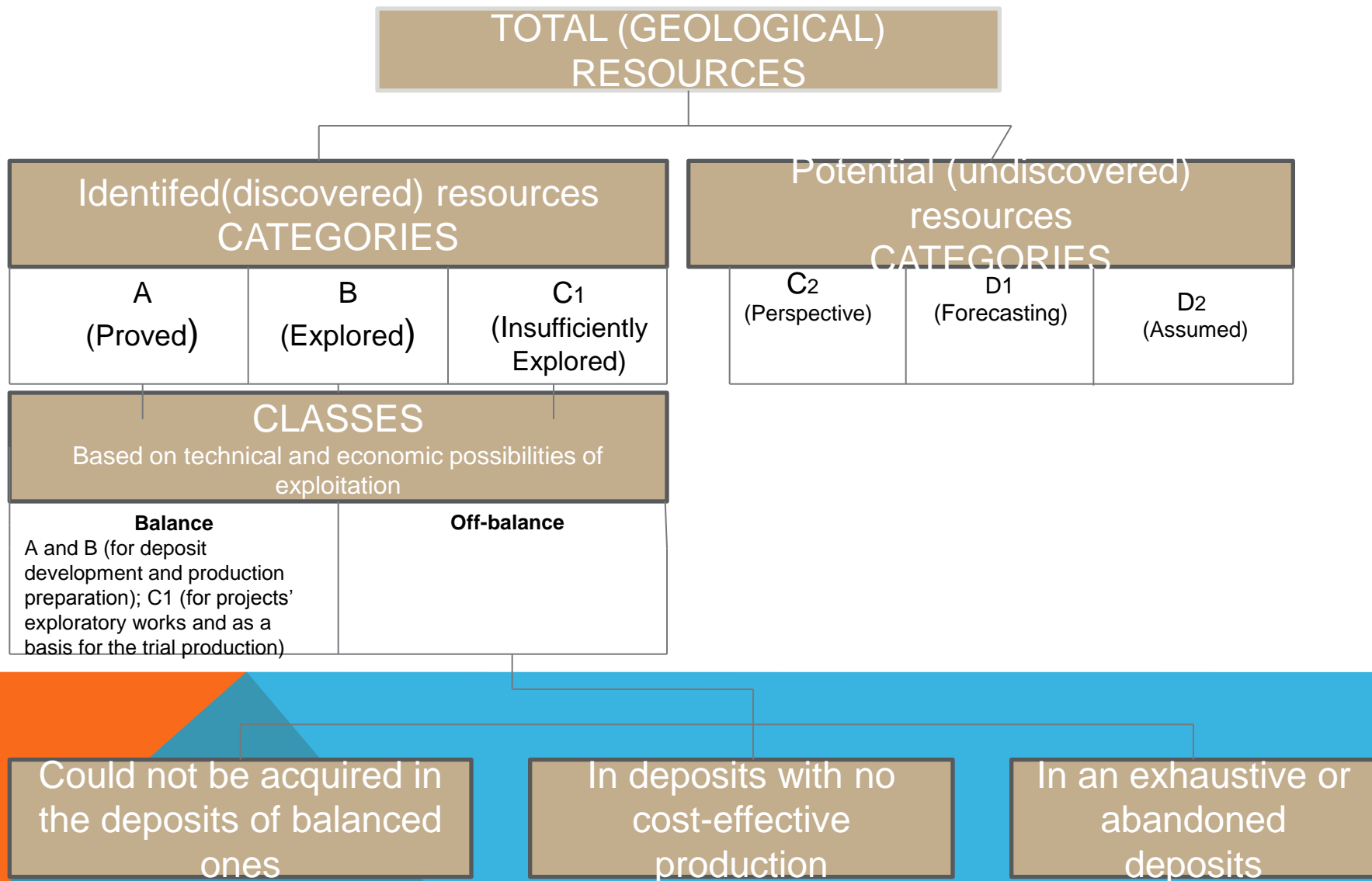
Proposed new Regulation on Solid Mineral Raw Material (2012)	The results of basic geological explorations	Mineral resources			Reserves			
		Inferred	Indicated	Measured	Probable	Proven		
Valid Regulation on Solid Mineral Raw Material (1979)	Potential D ₂ and D ₁ category	Potential C ₂ category	Reserves (old term)				C ₁ category	B and A category
			Identified off-balance and balance geological (<i>in situ</i>)		Exploitation (operating)			
			C ₁ category	B and A category				
UNFC (2009)	Mineral resources			Reserves				
	334	223	222	221	112	111		

December 2013.

The main mining project



OIL, CONDENSATES AND NATURAL GASES RESERVES/RESOURCES

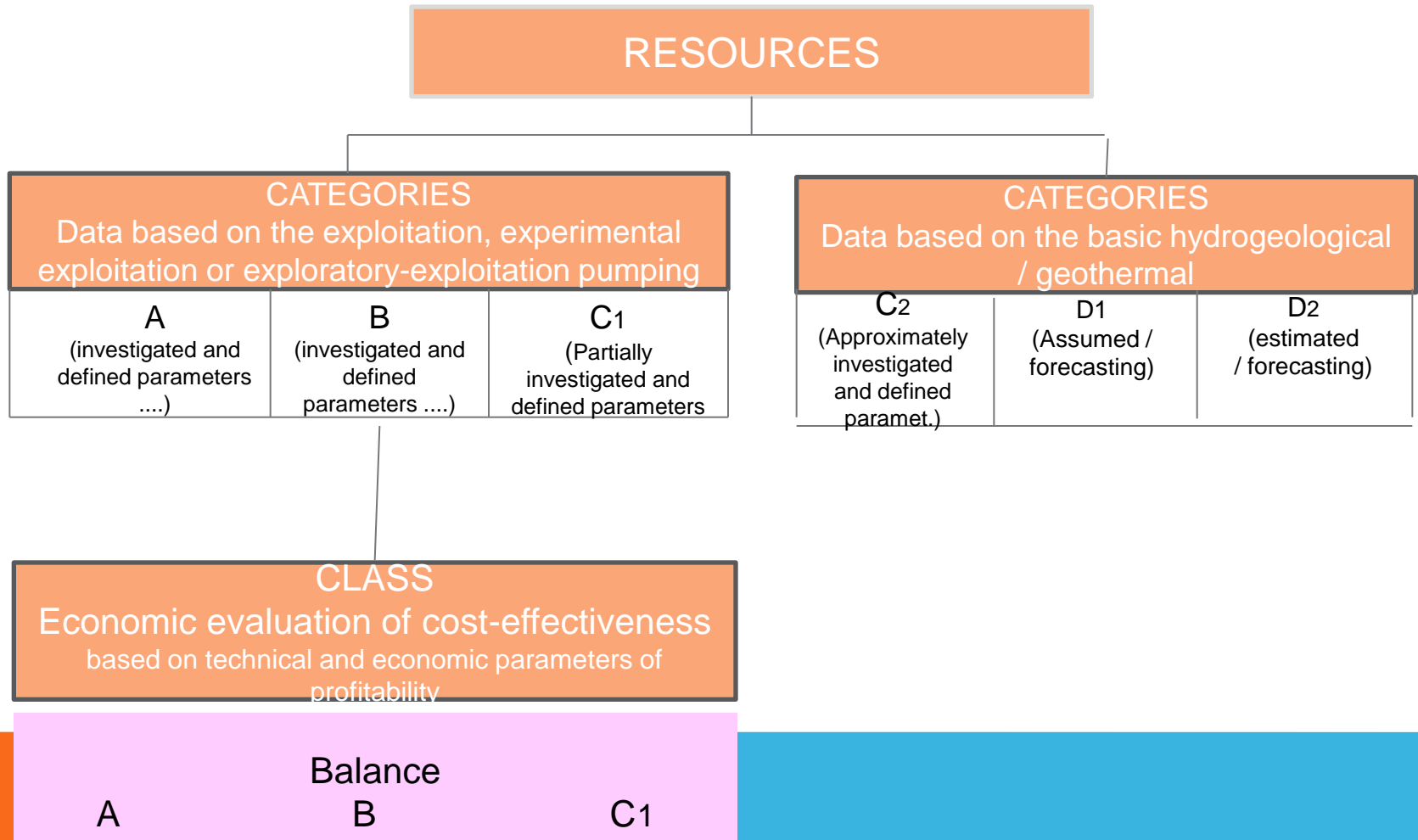


The Rule Book on Classification and Categorization..., 1987

The new Rule Book is being created...

GROUNDWATER DEPOSITS

DRINKING, MINERAL, THERMAL WATERS AND WATER VAPOR



The Rule Book on Classification and Categorization..., 1987. (Table prepared by Vukas, March 2014)

EXPLOITATION OF THE RESOURCES - in three steps

THE INVESTOR

- ✓ **ELABORATES THE INVESTMENT - TECHNICAL DOCUMENTATION, OBTAINS THE APPROVALS OF THE COMPETENT AUTHORITIES: ENVIRONMENTAL, WATER SUPPLY, URBAN PLANNING ETC.**

➤ **REQUEST FOR EXPLOITATION OF RESERVES**

- ✓ **The first step - Obtain the approval for mining / mining field,**
- ✓ **The second step - Obtain the approval for the mining works,**
- ✓ **The third step - Occupancy Permit**

THE MINISTRY

- ✓ **PERFORMS CONTROL MEASURES AND INSPECTION SUPERVISION**

THE FIRST STEP- OBTAINING EXPLOITATION PERMIT

EXPLOATATION (MINING) FIELD

**THE REQUEST SHALL INCLUDE:
SOLUTION / CERTIFICATE ON RESOURCES AND RESERVES,
FEASIBILITY STUDY,
STUDY ON ASSESSMENT OF THE ENVIRONMENTAL IMPACT,
WATER MANAGEMENT, URBANISTIC AND OTHER APPROVALS**

THE INVESTOR

**THE EXPLOATATION
(MINING) FIELD**

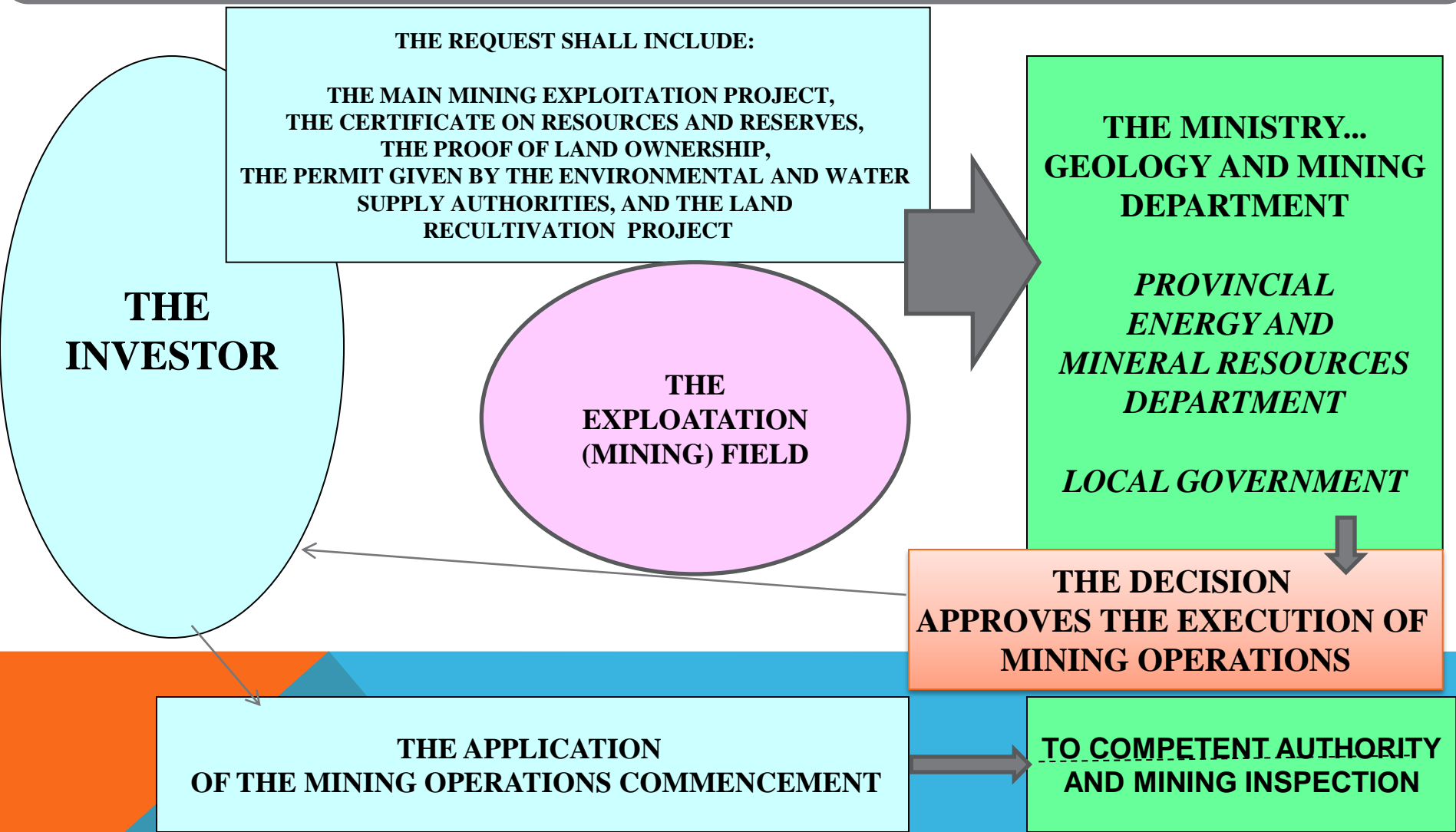
**THE MINISTRY...
GEOLOGY AND MINING
DEPARTMENT**

***PROVINCIAL
ENERGY AND
MINERAL RESOURCES
DEPARTMENT***

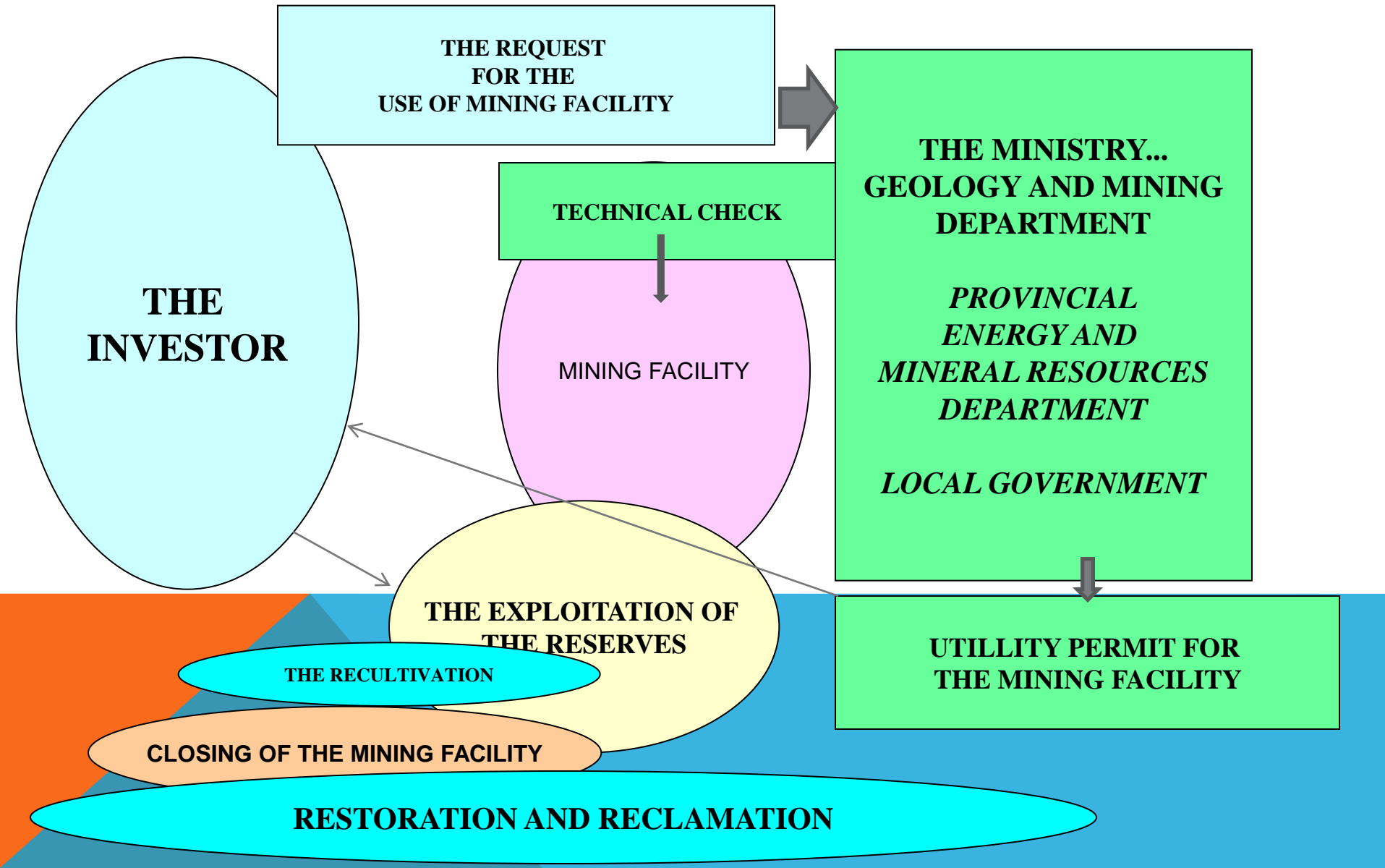
LOCAL GOVERNMENT

**THE DECISION
ABOUT THE EXPLOITATION
IN THE EXPLOITATION FIELD
(THE DURATION OF ABOUT 25 YRS.)**

THE SECOND STEP -THE PERMIT FOR THE MINING WORKS



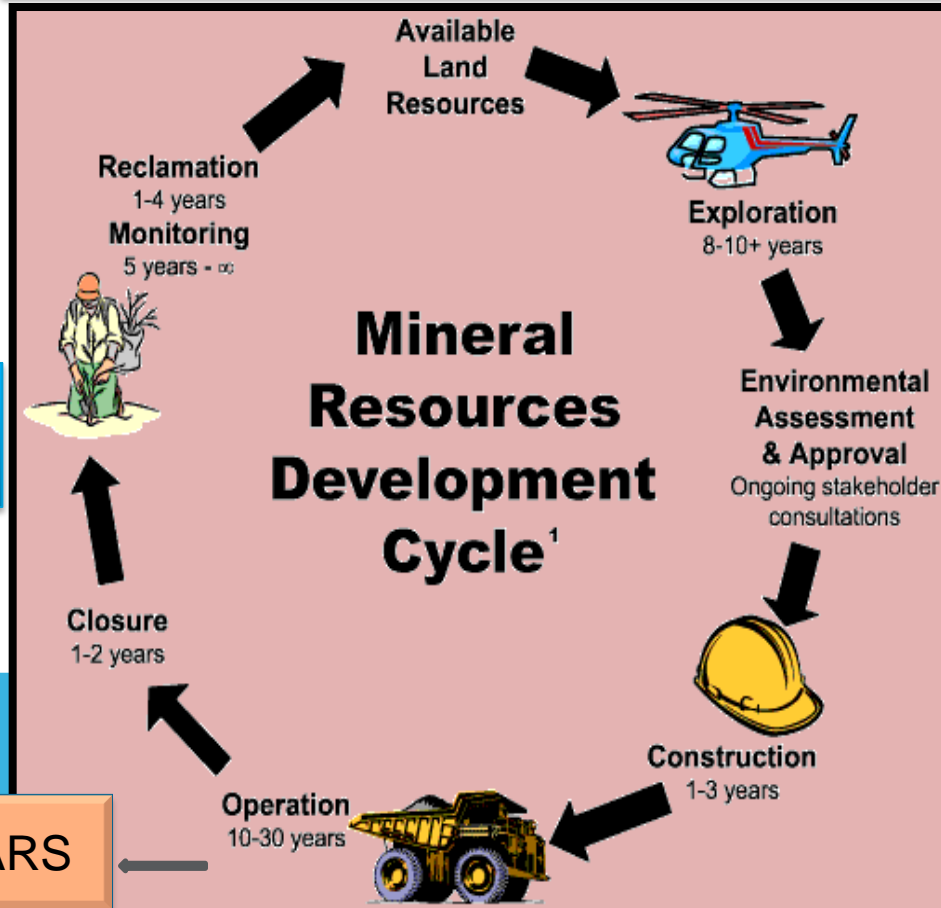
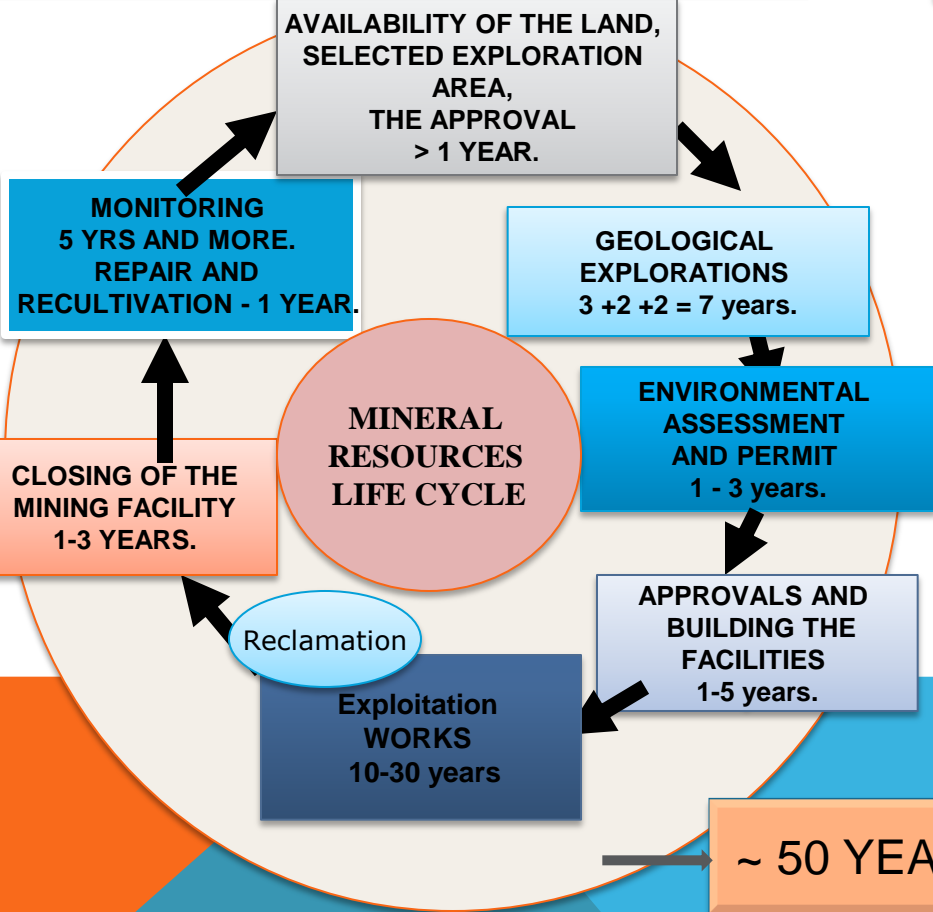
THE THIRD STEP - UTILITY PERMIT



LIFE CYCLE OF THE MINERAL RESOURCE

THE REGULATION OF THE REPUBLIC OF SERBIA

Mineral Resources Education Program of BC-Jun 2011
www.bcminerals.ca/s/MinDevCycle.asp, Vancouver, Canada



CURRENT APPLIED GEOLOGICAL EXPLORATION AND EXPLOITATION OF RESERVES

THE SUBJECT OF EXPLORATION AND THE EXPLOITATION ARE:

- ✓ metals (Cu, Au, Ag, Pb, Zn, B, Li,..) oil and gas, coal, oil shale (energy resources), industrial minerals, geothermal energy, water...;

PRESENT COMPANIES:

- ✓ RIO TINTO, FREEPORT, EUROMAX, DANDE PRECIOUS METALS, AMECO, RESERVOIR MINERALS, BETEC, GASPROMNJEFT, HOLCIM, TITAN, LA FARGE, RTB BOR, RUDNIK, FARMAKOM MB, VELIKI MAJDAN, OMYA ETC.,

WHERE ARE THE WORKS CARRIED OUT:

- ✓ IN DOZENS OF EXPLORATORY AND MINING FIELDS.

FOR THE FIRST TIME AFTER 75 YEARS THE PROCEDURE FOR AWARDING THE CONCESSIONS WAS CARRIED OUT FOR GEOLOGICAL EXPLORATION / MINING,

- IN GEOLOGICAL EXPLORATION OF METAL IT IS INVESTED ABOUT 50 MILLION U.S. DOLLARS PER YEAR,**
- VERY SIGNIFICANT PREVIOUSLY UNKNOWN DEPOSITS, CONSIDERED TO BE ECONOMIC POTENTIALS ,WERE FOUND AS FOLLOWS:**
 - ✓ **Of Lithium (new mineral – Yadarite (jadarit)), in sediments of Yadar basin (Jadar, Loznica, Western Serbia) Rio Tinto /Rio Sava exploration,**
 - ✓ **Of gold (scattered mineralization) in sediments (Žagubica, Eastern Serbia), Dundee Precious metals/ Avala Resources**
 - ✓ **Of copper and gold in the field of Timok - magmatic complex (Bor, Eastern Serbia) / Free Port**
- THE MINING SECTOR CURRENT SHARE IS APPROXIMATELY 1,5 - 1,7% (optimistic estimate is that by 2030, it will be 5%).**

GREETINGS FROM BELGRADE



THANK YOU SO MUCH FOR YOUR ATTENTION!

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